# ENVIRONMENTAL & SOCIAL CODE OF PRACTICE

FOR THE PROPOSED PILOTING OF MECHANICAL COMPOSTING IN THE ISLAND WASTE AND RESOURCE MANAGEMENT CENTRES OF R. KINOLHAS AND B. GOIDHOO





Prepared by: Ahmed Hassaan Zuhair

Prepared for: Ministry of Environment, Climate Change and Technology

# Contents

DECLARA	TION OF THE AUTHOR	2
CHAPTER	1: INTRODUCTION	3
1.1.	Purpose of the Report and the Need for an ESCP	3
1.2.	Literature Review	4
1.3.	Structure of the Report	4
1.4.	Report Preparation and Acknowledgement	5
CHAPTER	2: PROJECT DESCRIPTION AND STUDY AREA	6
2.1.	Project Schedule	10
2.2.	Construction Methodology	11
2.3.	Design of Aerobic System (composting machine)	12
The	OWC Process:	13
2.4.	Vegetation Removal	14
2.5.	Project Inputs and Outputs	14
CHAPTER	3: EXISTING SITE CONDITION AND SURROUNDING AREAS	
3.1.	Existing IWRMC Sites	17
3.2.	Island Waste Management Systems	18
CHAPTER	4: IMPACTS AND MITIGATION PLAN	20
CHAPTER	5: GRIEVANCE REDRESS MECHANISM	32
CHAPTER	6: STAKEHOLDER CONSULTATIONS	37
6.1. Su	mmary of Consultation with Kinolhas Council	37
6.2. Su	mmary of Consultation with Goidhoo Council	39
6.3. Co	onsultation Plan	41
CHAPTER	7: MONITORING PROGRAMME	42
CHAPTER	8: CONCLUSION	44
REFEREN	CES	46

# **DECLARATION OF THE AUTHOR**

I hereby declare that the information provided in this Environmental and Social Code of Practice are true, complete and accurate to the best of my knowledge and is based on the information available at the time of writing.

Ahmed Hassaan Zuhair

**Environmental and Social Safeguards Specialist** 

Maldives Clean Environment Project

Ministry of Environment, Climate Change and Technology

# **CHAPTER 1: INTRODUCTION**

This document provides the Environmental and Social Code of Practice (ESCP) that needs to be followed by the contractor and the operator when undertaking the upgrading works of Island Waste and Resource Management Centres (IWRMCs) of R. Kinolhas and B. Goidhoo. The proponent of the projects is Ministry of Environment, Climate Change and Technology (MECCT) and civil works will be implemented under the World Bank financed Maldives Clean Environment Project (MCEP). The operator will be the respective Island Councils.

Both the islands have fairly recently developed IWRMCs that are functional and in good condition. Kinolhas WRMC was developed in 2015 under the World Bank financed Maldives Environmental Management Project (MEMP), while Goidhoo WRMC was constructed in 2017 under the Public Sector Investment Programme (PSIP) of the Government of Maldives (GoM). These IWRMCs were originally designed to facilitate secondary segregation of source segregated waste, storage of inorganic waste, and composting of organic waste by open windrow composting method. The built infrastructure of both the centres are similar, primarily comprising of a collection bay, equipment room, hazardous waste storage area, composting slab with leachate collection well, groundwater well, parameter wall and gate. Although the IWRMCs are operational at present with waste being collected and inorganic waste being segregated and stored in the respective cells of the collection bays, both the islands have ceased windrow composting particularly due to the labour intensiveness of the process. Hence, piloting of mechanical in-vessel composting is proposed under the current projects to alleviate the limitations and issues faced by the operators.

The proposed projects essentially involve minimum civil works corresponding to enclosure of the existing compost slab area and undertaking the required utility connections to the structure. Once this is completed, an organic waste converter machine will be installed at the area to undertake mechanical composting of organic waste through an aerobic system. No further alterations will be brought to the existing IWRMCs.

## 1.1. Purpose of the Report and the Need for an ESCP

The Maldives national requirements for Environmental Impact Assessment are set out in the Environmental Impact Assessment (EIA) Regulations, 2012. Part III of this regulation includes a description of the Screening Process applied to development proposals. Schedule D of the Regulations provides a screening list of all development types for which full EIA is mandatory. According to Schedule D included in Amendment 2 to the EIA regulations 2012, waste management practices that require preparation of an EIA are:

- 1. Projects involving operation of large incinerators with a capacity of more than 10 tons per day.
- 2. Development of large waste management centres that treats more than 10 tons of waste per day.
- 3. Projects that involve development of a landfill by using waste.

Proposed developments that do not fall within Schedule D are subject to manual screening by the Environmental Protection Agency (EPA), for which a Screening Form must be submitted providing relevant development details. Within 10 days, the EPA will decide whether the proposed development is approved,

or needs further study, which may be required in the form of an EIA or Environmental Management Plan (EMP) (Ministry of Environment [ME], 2012).

The proposed developments are small scale and therefore is not listed under the Schedule D of the EIA Regulation. A screening process was followed for the proposed developments, where EPA has stated that no further assessments were necessary considering the small scale of the projects and the areas of impact envisaged. At the same time, World Bank, as the funding agency has also carried out screening of the project and stated that an Environmental and Social Code of Practice (ESCP) should be prepared, based on the Terms of Reference (TOR D) cleared by the World Bank on 6<sup>th</sup> August 2020. This ESCP is prepared as per the TOR D issued by World Bank, which is provided in **Annex 1**. The screening decisions from EPA are provided in **Annex 2** of this report.

## 1.2. Literature Review

A literature review was undertaken to acquire background information related to the site and the general environment of the islands, as well as to identify possible environmental impacts of projects of similar settings. In this context, the following documents were reviewed:

- ESMP for the establishment of Island Waste and Resource Management Centre in Th. Buruni (Zuhair, 2021).
- ESMP for the construction of a mechanical composting building at the existing IWRMC at Rinbudhoo, Dhaalu Atoll (LAMER, 2021).
- Maldives Clean Environment Project's Environmental and Social Assessment and Management Framework (ESAMF) & Resettlement Policy Framework (RPF) (Ministry of Environment, Climate Change and Technology [MECCT], 2016).
- Island Waste Management Plan of R. Konolhas (Kinolhas Council, n.d.).
- Island Waste Management Plan of B. Goidhoo (Goidhoo Council, n.d.).
- Environmental, Health, and Safety Guidelines for Waste Management Facilities (World Bank Group [WBG], 2007).
- Operational Environmental and Social Management Plan for RWMF Zone 2, Vandhoo, Raa Atoll (Zuhair, 2018).
- Generic EMP for Construction and Operation of Composting/Organic Waste Processing Facilities (World Bank, n.d.).

## 1.3. Structure of the Report

This report is prepared consistent to the TOR D (an introduction chapter was added in addition) and include the following chapters:

- 1. Introduction
- 2. Project Description and study area
- 3. Site Description

- 4. Impacts and Mitigation Plan
- 5. Grievance Redress Mechanism
- 6. Stakeholder Consultation
- 7. Monitoring Programme
- 8. Conclusion

# 1.4. Report Preparation and Acknowledgement

This report is prepared by Mr. Ahmed Hassaan Zuhair, the Environmental and Social Safeguards Specialist of MCEP. The curriculum vitae of the author is provided in **Annex 3**.

The author was assisted by Mr. Abdul Raheem Mohamed (Project Coordinator of MCEP) and Ms. Aishath Ajfaan Jawaad (Assistant Project Coordinator of MCEP) in undertaking stakeholder consultations and wish to acknowledge their invaluable input in preparing the report.

## CHAPTER 2: PROJECT DESCRIPTION AND STUDY AREA

The structures of the existing IWRMCs in both the project islands are similar and comprised of the following:

- A collection bay with a waste storing area and different compartments for storing segregated
  waste including metals, glass, plastics, paper and hazardous waste. The collection bay also
  includes an equipment room;
- Compost Slab which is a concrete pad of dimensions 13.5m by 6.1m with thickness of 0.1m laid at 1% slope. This concrete slab is used for simple windrow composting;
- Groundwater well with pump;
- Leachate collection well;
- Perimeter fence and wall; and
- Gate.

The proposed projects involve minimal civil works corresponding to the enclosure of the existing compost slab areas and undertaking the required utility connections (power and water) to the structures. Once this is completed, an organic waste converter machine will be installed to undertake mechanical composting of organic waste through an aerobic system.

The existing IWRMCs of Kinolhas is located on the north western side and that of Goidhoo in the eastern side of the respective islands. Kinolhas WRMC has an area of approximately 929 sqm and Goidhoo WMRC roughly 700 sqm.

The location of the existing IWRMCs are shown in Figure 1 and Figure 2.

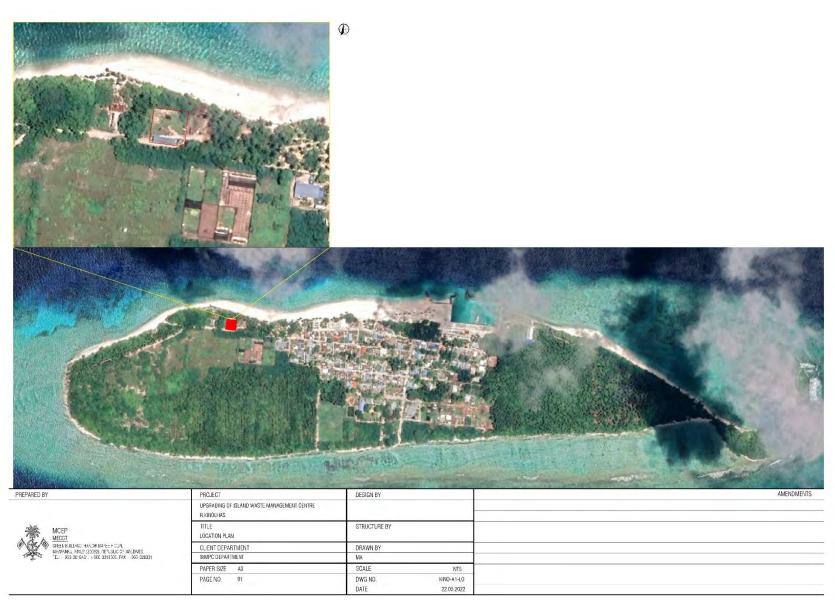


Figure 1 Location Map of Kinolhas WRMC



Figure 2 Location Map of Goidhoo WRMC

The layout of Kinolhas WRMC is provided in **Figure 3** and the Goidhoo WRMC in **Figure 4**. The layouts specify the existing infrastructures and the proposed location of the composting buildings. Detailed drawings are provided in **Annex 4** and **Annex 5** of the report.



Figure 3 Layout of Kinolhas IWRMC with proposed mechanical composting building marked

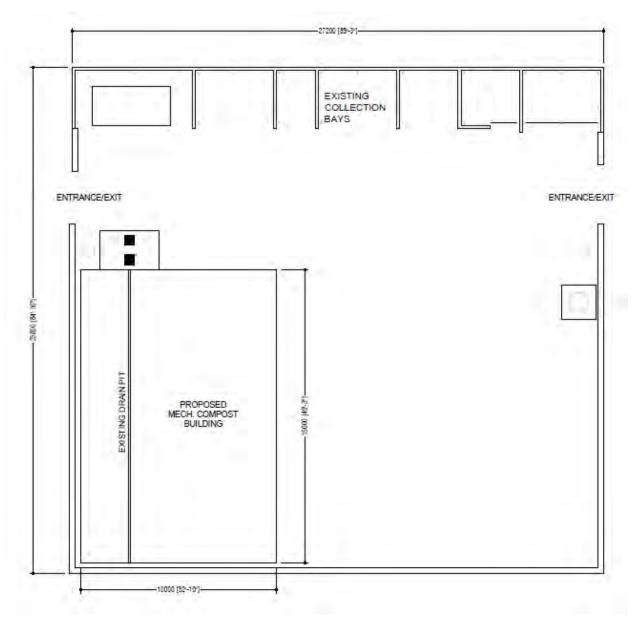


Figure 4 Layout of Goidhoo IWRMC with proposed mechanical composting building marked

# 2.1. Project Schedule

All civil works of the projects are anticipated to be completed within 3 calendar months. A rough schedule for construction is provided in the **Table 1**.

Table 1 Project Schedule

Activity	Month 1	Month 2	!	Month 3	
Mobilization and Supply of Construction Materials					
Civil Works					
Construction of Walls and Roof					
Fixing of door and windows					
Installation of water tap — internal piping via the existing GW well					
Connecting electricity — installing sockets, lights and exhaust fan					
Installation of fire-safety equipment					
Demobilization					

# 2.2. Construction Methodology

The dimensions of the mechanical composting areas are 13.5m by 6.1m in Kinolhas and 15m by 10m in Goidhoo, which are same as the areas of existing compost slabs. The clear height of the buildings will be 3.5m and 150MM thick solid masonry walls will be constructed around the compost slabs. The roofs will be placed on G.I truss. Roofing material will be Lysaught roofing sheets. Aluminium louvers will be used at the back of the buildings to provide ventilation for the aerobic process.

Water will be piped to the areas through internal pipeline using the existing water pump. Water taps will be installed in the mechanical composting areas. Power connections will be made from the existing power distribution boards at the IWRMCs.

The mechanical composting areas will be comprised of 3 compartments with approximately one third of the area reserved for the installation of the in-vessel composting machine and the rest to be used for storing finished compost and chipped wood.

The following highlights the materials and machinery proposed to be used.

#### Construction materials:

- Concrete
- Cement
- Sand
- Flood lights
- G.I. pipes
- Metal sliding doors
- Emulsion paint

- Lysaght Roofing Sheet
- 3 phase power sockets
- Ceiling fan
- Timber

#### Machinery:

- Pickups or trucks (for land transport of construction material)
- Concrete mixing machine
- Concrete supply pump and pipe

# 2.3. Design of Aerobic System (composting machine)

The in-vessel composting machine will be supplied after the completion of the civil works. The proposed technology is more advantageous and convenient than the traditional windrow-based composting, which many of the islands are struggling to effectively implement due it being highly labour intensive.

Unlike a normal windrow-based system, the technology involves initial 'in-vessel' processing of the waste in the "Organic Waste Converter [OWC]" machine. The bio-degradable waste is chopped to the desired size; moisture is adjusted to 40-45%, using an organic absorbent (typically sawdust or shredded leaves), if required, and treated with Bioculum  $OWC^{TM}$  [a formulation with 5 different Bacillus species] @ 1-2gm per kg of waste. The OWC machine has a running time of 15-30 minutes per batch, depending on unit and batch size. The treated waste is kept for composting and curing. This system has been designed for south Asian conditions as experienced in India and the Maldives.

It is claimed "that treatment, composting and curing is achieved within a short time of 10 to 12 days. Processing of waste through the OWC machine overcomes the problems of odour, leachate generation and ground water contamination associated with traditional methods of waste disposal. It converts unsightly and odorous garbage into a beneficial material devoid of foul odours and unsightly appearance. It is an innovative method for the bio-stabilization and beneficial conversion of organic waste. The organic material produced by this method not only provides nutrients to the plants, it also improves the organic carbon content and moisture retaining capacity of the soil."

Advantages claimed for the OWC include:

- Simple and convenient to operate without the need for constant attention;
- Short processing times ensures economic in use with low energy consumption;
- Requires minimal maintenance;
- Beneficial to the environment.

## The OWC Process:



Pic 1: Segregate the waste



Pic 2: Input wet waste into OWC with Bioculum and Absorbent





Pic 3: After 15 minutes collect raw compost from Pic 4: Place raw compost in the curing system for 10-day maturation cycle

The pictures give an overview of the CWC process. If required, as shown in pic 1, waste can be further sorted and segregated. The waste is then added to the OWC unit, pic 2, together with the Bioculum, which is a bacterial powder that enhances the natural aerobic process. The Bioculum is added at the rate of 1 gm/kg of raw waste. Also added at this stage, if required, is the absorbent at a rate of up to 2 kg per batch. The OWC unit is operated for a period of 15 – 30 minutes, depending on size of unit and batch size, during which the waste, Bioculum and absorbent are mixed to achieve a homogenous consistency. The raw compost is discharged into crates of 25kg capacity, pic 3. The crates are then placed in curing racks for a period of 10 to 12 days, pic 4. The curing racks are equipped with an automatic fogging device that maintains moisture content at the correct level thereby ensuring curing is completed.

At the end of the curing period, the crates can be emptied with the cured compost ready for use; however, after emptying the crate, leaving the cured compost for a further seven days enhances the composts maturity, providing a higher quality product. Typically, the cured compost amounts to some 25 – 35%, by weight, of the raw waste input.

It is worth noting that the amount of waste that can be processed through the OWC each day is determined by the operating hours. This provides flexibility during times of unexpectedly high inputs or following unanticipated outages. It also allows increasing throughputs to be accommodated at minimal cost. The critical sizing and potential pinch point are the curing system; however, additional racks and/or crates require only small areas of land and modest capital expenditure.

# 2.4. Vegetation Removal

The project does not involve removal of any significant vegetation other than plucking of grass.

# 2.5. Project Inputs and Outputs

The **tables 2** and **table 3** below provide summaries of the major project inputs and outputs proposed for the construction and operational phase.

Table 2 Project Inputs

	Input Resource	Type and Amount	Means of obtaining the resource
N PHASE	Workers	8	Around 8 workers. Contractor is encouraged to use local or regional workers as much as possible. If expatriate workers are used, they must carry valid work permits. Construction workers are expected to be accommodated in local houses and / or guesthouses. No temporary site setup is required for this project. Contractor will make arrangements with the local council regarding accommodation arrangements.
	Site Supervisor	1	The site supervisor should ideally be local as he/she should be able to regularly communicate with the island council and the community over matters related to the project. It is important for the supervisor to have a fairly good undertesting of social and cultural norms of the society.
JCTIG	Water for Construction	150 litres per day	Existing groundwater well in the IWRMCs.
CONSTRUCTION PHASE	Construction Materials	Concrete, sand, cement, flood lights, G.I. pipes, metal sliding doors, emulsion paint, Lysaght Roofing Sheet, 3 phase power sockets, ceiling fan and Timber	Imported or purchased where available locally. Contractor will make arrangements to import or purchase these materials and transport to the island.  Sand bags will be purchased from Male' from reputable sources and transferred to the island.
	Construction Machinery	Pickups, trucks or wheelbarrows (for land transport of construction material), transfer vessel, cement mixing machine.	Responsibility of the contractor. Local resources such as pickups for hire will be utilized as much as possible. If not available locally the contractor will import these machineries.
	Portable Fire Extinguisher	1 Extinguisher	Responsibility of the contractor. Imported or purchased locally and to be brought to the site during mobilization.

	Equipment	1 In-vessel composting machine including crates and racks.	Responsibility of the Proponent (Capital Investment) and Island Councils (O&M). Purchased locally or imported.			
OPERATIONAL PHASE	Firefighting Equipment	<ul> <li>50KG DCP Trolley for collection bay (nos 2)</li> <li>50LTR Foam Trolley for collection bay (nos 1)</li> <li>Wet Chemical 6Ltr with Cabinet for hazardous waste area (nos 1)</li> <li>Water 9Ltr with Cabinet for Office Area – Outside (nos 1)</li> <li>CO2 2KG with Cabinet for Office Area – Outside (nos 1)</li> </ul>	Responsibility of the Proponent (Capital Investment) and Island Councils (O&M). Purchased locally or imported.			
	Water for non- portal use	Groundwater	Groundwater well within the IWRMCs.			
	Power	3-phase power for operation of in-vessel compost machine (OWC machine)	From power sockets at the composting area. To provide electricity to the composting area a cable will be laid from the existing electric distribution board of the IWRMCs.			
OPERAT	Labour	Around 5 IWRMC staff to provide household collection services and manage the waste at the IWRMC	The existing staff of the IWRMC will be utilised. No additional staff are required as both the islands have well organised centralised collection systems. The staff of the IWMRCs will be trained to handle, operate and maintain the OWC system.			
	Waste	Organic waste generated within the island. Approximately 349 KG and 269.3 KG of waste per day, for Kinolhas and Goidhoo respectively.	Organic waste collected daily from households and businesses within the islands through existing centralised set-ups.  The organic waste brought to the IWRMCs will be sorted, segregated and copped and processed in the OWC machine. The raw compost will then be placed in the crates and racks for the required duration. The finished compost will be sold to local farmers and nearby resorts based on demand.			

	Output Resource	Туре	Amount	Means of managing
	General Construction and Demolition Waste	Construction works	Minute amount of construction waste	Construction and demolition waste generated will be reused as much as possible. Any remaining waste will be transferred to the nearest regional facility by the contractor.
ASE	Municipal Waste	General waste produced by the workers	648kg (estimated for 3 months at 0.8kg/day per person)	Managed as per the existing arrangements.
ЮРН/	Dust	Cement mixing and excavation	Moderate amount	Wet the construction site regularly.
CONSTRUCTIOPHASE	Waste oil, diesel and Hazardous waste	From machinery used (if oil change is required)	Small quantity	Materials slightly hazardous in nature such as used thinners and paint cartons maybe generated, which will be properly sealed and stored at the existing bay for hazardous waste storage at the IWRMC for further treatment and or disposal via exiting arrangements.
	Greenhouse Gas Emissions	Emissions from construction material transporting vehicles and construction machinery.	Small quantity	All vehicles and machinery must be well tuned.
	I			
OPERATIONAL PHASE	Compost	In-vessel composting.	15.6 m3 of compost per full batch	The organic waste brought to the IWRMC will be sorted, segregated, copped and processed in the OWC machine. The raw compost will then be placed in the crates and racks for the required duration. The finished compost will be sold to local farmers and nearby resorts based on demand. Any unsold excessive material will be disposed at the forest area of the island as a mean to enrich soil.
	Greenhouse Gas Emissions	Electricity usage.	Minute quantity.	N/A

## CHAPTER 3: EXISTING SITE CONDITION AND SURROUNDING AREAS

The condition of the existing IWRMCs and the surrounding environments were analysed using site photographs, areal imagery and by consulting the Island Councils.

## 3.1. Existing IWRMC Sites

The existing IWRMCs of both the islands are in good condition. There are no signs of damage or major cracks observed at the boundary fences surrounding the centres. The gates and the light posts are functioning, while the structure of the collection bays and the equipment rooms comprised of walls, dividers, concrete slabs and roofs are intact. The compost slabs are also in good condition.

Waste or compost piles are not kept on top of the existing slabs of either of the islands. However, some metal pipes are kept at one side of the Kinolhas WRMC slab, which can potentially be reused for construction or sold to construction businesses at the island for a reasonable price.

Both collection bays have certain stored segregated waste such as plastic bottles and used aluminium cans.



Figure 5 Existing IWRMC of Kinolhas



Figure 6 Existing IWRMC of Goidhoo

# 3.2. Island Waste Management Systems

The existing Island Waste Management Systems are summarised and described separately for both the islands.

## R. Kinolhas

The present population of Kinolhas is 661 and there are 121 households.

Based on the Zone 2 waste audit undertaken in January 2011 and the present population, total waste generated in Kinolhas is approximately 528.8 KG per day, corresponding to 349 KG of organic waste (66% as per the audit), 68.7 KG of inorganic waste (13% as per the audit), 42 KG of infectious waste (8% as per waste audit) and 68.7 KG of other waste (13% as per waste audit). All other types of waste except infectious waste and C&D waste are expected to be managed at the IWRMC. The island council manages the waste generated in Kinolhas through a centralised collection system, where waste segregated at household level is collected daily and brought to the IWRMC for further processing.

The council's vehicle is used for collection; however, the vehicle is not in a good condition and island pickups are hired when the vehicle is not functioning.

To support islands of Zone 2 in the operations of the respective IWRMCs and the subsequent implementation of the Island Waste Management Plans (IWMPs), MECCT provided grants to Island Councils in December 2021 towards procuring new collection vehicles. In this regard, MVR 400,000 was provided to Kinolhas Council, whereby the council has initiated the procurement process for a 1.5 tonnage pickup by utilising these funds, which is currently at the shipment stage.

A collection fee of MVR 100 is taken from the households. Currently organic waste is not composted due to high cost and labour intensiveness of windrow composting. The food waste is currently disposed into the sea beyond the reef while some of the organic waste is buried in the ground and green waste is used to layer in the buffer zone.

The existing IWRMC is registered in the Utility Regulatory Authority (URA). Kinolhas is also registered in WAMCO for regional collection and transfer of unmanageable waste to the RWMF.

#### B. Goidhoo

The registered population of the island is 822 but the resident population is currently 510. There are 118 households in the island.

Based on the Zone 2 waste audit undertaken in January 2011 and the present population, total waste generated in Goidhoo is estimated to be 408 KG per day, corresponding to 269.3 KG of organic waste (66% as per the audit), 53 KG of inorganic waste (13% as per the audit), 32.6 KG of infectious waste (8% as per waste audit) and 53 KG of other waste (13% as per waste audit). All types of waste except infectious waste and C&D waste are expected to be managed at the IWRMC.

The monthly household collection fee is set at MVR 100. The waste management service is outsourced to a third party on a monthly payment basis. Waste is segregated from households and collected regularly. The contractor's vehicle is used for collection. The food waste is currently disposed into the sea beyond the reef while green waste is burnt in the island.

To support islands of Zone 2 in the operations of the respective IWRMCs and the subsequent implementation of the Island Waste Management Plans (IWMPs), MECCT provided grants to Island Councils in December 2021 towards procuring new collection vehicles. In this regard, MVR 400,000 was provided to Goidhoo Council. The council has completed procurement process and customs clearance for a 1.5 tonnage pickup by utilising these funds and the vehicle is currently on the verge of being delivered to the island.

The existing IWRMC is registered in the Utility Regulatory Authority (URA). Goidhoo is registered with WAMCO for regional waste collection and transfer to Zone II RWMF at R. Vandhoo.

## CHAPTER 4: IMPACTS AND MITIGATION PLAN

The negative impacts for the proposed projects are envisaged to be minor due to the small scale of the civil works involved. Yet, any development, however minor it is, will be associated with certain degree of unavoidable impacts. Similarly, for the proposed projects, occupational health and safety and socio-cultural impacts due to arrival the workforce with potential expatriate staff do exit, although no irreversible and permanent impacts are foreseen. Such impacts are temporary and reversable that can be effectively mitigated by applying good codes of practices.

Impacts due to the proposed projects based on the assessment principles followed for projects of similar settings are foreseen to be low to moderately negative for the construction phase and moderate to highly positive for the operational phase.

The primary responsibility of implementation for the construction phase mitigation measures will be by the contractor and the island councils will assume this responsibility for operational and decommissioning phase. During project period MECCT will ensure that these actions are implemented by the contractor and operators through regular supervision and monitoring activities.

**Table 4** and **table 5** provides the mitigation measures that has to be followed by the contractor and the operators during construction and operational phases of the proposed projects.

# **Construction Phase Impacts and Mitigation Measures**

The table below provides the mitigation plan for the construction phase that the contractor should implement while carrying out the intended civil works of the projects.

Table 4 Construction Phase Mitigation Plan

Environmental M	anagement Plan		
Impact	Mitigation Measure	Responsible	Cost of
past		Party	Mitigation
	Management of Impacts during Construction Phase		
1. Physical			
Note: All constru	ction activities should be undertaken in the presence of an experienced supervisor.		
	Hazardous waste such as waste oil and diesel should be stored in sealed containers and placed on top of an		Cost
Contamination	impermeable surface or within the hazardous waste storage room of the existing IWRMC. It should be transferred	P:	associated
of groundwater	to the nearest regional waste management facility for final disposal during the decommissioning phase.	Contractor	with
and soil due to			purchasing
chemical	Stored containers should be regularly inspected to identify any leakages. Conspicuous warning signs (e.g. 'No	S: Island	of containers
spillage and	Smoking') should also be posted around hazardous waste storage and handling areas.	Council	and
seepage			transport to RWMF
Noise pollution due to construction activities and use of machinery	Ensure construction activities occur between 8 am and 6 pm.  Construction workers should wear ear muffs when using machinery that produce significant noise and while undertaking welding and drilling activities.	P: Contractor	Cost associated with purchasing ear muffs
Negative impact on air quality during transfer of construction materials and progression of works	During transport of construction materials from the harbour to the site, all sand and aggregate should be transported in covered vehicles or wheelbarrows and vehicle movement should be via roots that are well away from community roads where possible. Transportation should be at low vehicular speeds and loading and unloading should be conducted within the site.  All vehicles used in the project should have an up-to-date road worthiness certificate.  All vehicles and machinery should be well tuned. Machines should be switched off when not in use.	P: Contractor	No cost involved.
<u> </u>	Ensure that construction site is regularly wetted to minimize impact of dust as a result of the project.		

Coastal erosion and loss of beach aesthetics due to sand mining	Materials that are stockpiled at the location for long period of time should be covered to minimize impact of dust generation due to windy conditions.  The contractor should not burn any waste.  Ensure that all construction materials including sand are sourced in compliance with the national laws and regulation.  Sand should not be sourced from the beach or lagoon of an inhabited island, tourist resort, or any protected island. This includes the area of the island designated by EPA for sand mining of local public use.	P: Contractor	Cost associated with purchasing sand from a reputable source (hardware shops) and transporting to the island.
Waste Management	A significant amount of construction and demolition waste is not expected to be produced due to the small scale of the project, and as the project does not involve demolition of any existing infrastructures.  However, if any construction waste is produced, it should be reused for the construction of the IWRMC as much as possible. The remaining reusable materials such as (metal bars and roofing sheets) should be given to the island community or the island council free of cost.	P: Contractor S: Island Council	Cost associated with transport to RWMF
Littering and general waste generated by construction workers	Place a bin at the site to dispose general waste generated by the workers.  Establish procedures for general waste disposal which should include actions to be taken if the procedures are breached.	P: Contractor	Cost associated with purchasing a bin
2. Biologica			
Impacts from site clearing and earthworks (terrestrial pollution)	Vegetation clearance is not required as the project involves minor civil works in an already existing and operational IWRMC. If waste is kept on top of the compost pad, relocating of such waste within the centre might be required to accommodate for construction. Such waste is recommended to be relocated to the existing collection bays of the centre.	P: Contractor	N/A
Negative impacts to	Workers will be informed to avoid damaging trees and disturbances to animals and to generally avoid engaging in destructive activities to the environment intentional or unintentional.	P: Contractor	N/A

vegetation due to improper handling and driving during material transportation.	Avoid roads with significant vegetation during transportation within the island.  Avoid bringing heavy vehicles to the island.  Workers will be informed to avoid damaging trees and disturbances to animals and to generally avoid engaging in		
Negative impact on fauna during material transport	destructive activities to the environment intentional or unintentional.  Materials shall be obtained from the closest source.  The materials shall be brought in bulk and transported to the island within a single trip where possible.  The materials shall be stored at the project site or in a close proximity to avoid unnecessary movement of vehicles within the island through the construction phase.  Ensure that all construction materials imported to the island are free of any alien species or pests.  Ensure that oils and paints are properly sealed prior to transportation.  Ensure that materials are not kept beyond the height of the sides of the vessels and are properly covered, when transporting via sea.	P: Contractor	Cost associated with purchasing of containers designed for storing hazardous substances.
3. Health a	nd Safety		
Occupational Health and Safety	All workers should be provided with safety gear and should ensure that safety gear is utilized at all times. This includes: safety hats, boots, glasses, masks and gloves.  Ear muffs shall be provided where equipment or machinery that emit significant amount of noise is used (welding, drilling etc.).  Chemical-Liquid protective gloves should be used when handling any chemicals, waste oil or other liquid waste.  First aid kit must be purchased and kept on site at all times  No open electrical wiring or cables should be kept on site.  Health and Safety briefing should be given to all construction workers.	P: Contractor	Cost associated with purchasing PPEs.

	A safety inspection checklist should be prepared taking into consideration what the workers are supposed to be wearing and monitored monthly and recorded in the monitoring.		
	The maximum working hours of all construction workers should be 48 hours per week as per the Employment Act of Maldives.		
	Meals should be provided to construction workers 3 times a day.		
	Safe drinking water should be supplied to construction workers and must be made available at the work site and the labour camp.		
Working Conditions and	Appropriate sleeping arrangements shall be made for the construction workers.	P:	Included in project cost.
Labour	Accessibility of workers to water and sanitary must be ensured the contractor. As such, a toilet accessible to the workers within 5 minutes from the site must be identified and facilitated through renting a toilet from a nearby area (such as a utility office building / a house), installing a portable toilet at the site, making transport readily available to the accommodation building (via providing a vehicle) etc.	Contractor	
	Onsite resting area shall be provided for the workers, where they can rest between breaks and have snacks. This can be achieved by constructing a temporary shed and provide chair.		
	All the workers must have completed 2 doses of COVID19 vaccination. Proof of vaccination shall be provided to the proponent and the island council prior to mobilization.		
	Workers must be briefed about the safety protocols and social distancing measures.		Cost
	The workers must perform frequent hand hygiene.		associated with purchasing
Management of COVID19	All workers are encouraged to wear face masks.	P: Contractor	soap, hand
oi covib19	If a worker is having symptoms of COVID19 that person must not report to work and should be self-isolated and respective authorities notified.	Contractor	etc. and printing of awareness
	Handwashing or hand sanitizing facilities must be established at the work site and the labour camp.		materials.
	Labour camp should facilitate social distancing. The beds should be kept at least 3 – 6 fts apart.		

	COVID19 awareness materials should be displayed in the worksite and the labour camp.		
	Demarcate the site boundary through taping, hoarding or fencing.		
Health and safety of public	Place sign boards to indicate that only authorized personnel are allowed entry.  Make sure that the general public do not have access to the site and its vicinity. Regularly monitor for entrance of residents.  Make sure that public chairs are not found at the vicinity of the site.	P: Contractor S: Island Council	Cost associated with designing and printing sign boards.
Fire hazard	Ensure that electrical wires are installed properly by a certified person.  Ensure that portable extinguishers are readily available in case of an emergency fire.  Flammable hazardous waste such as used oil and diesel must be labelled with hazardous waste and fire hazard signage and regularly inspected to identify any leakages. Conspicuous warning signs (e.g. 'No Smoking') should also be posted around hazardous waste storage and handling facilities.	P: Contractor	Cost associated with hiring an expert electrician and purchasing of fire extinguishers
4. 30Cl0l0g	icai aliu Culturai	D.	Work Permit
Legal Issues	All expatriate workers must hold valid work permits.	P: Contractor	fees
Handling Environmental and Social Issues during Construction	The contractor will appoint a suitably qualified Environmental Officer following the award of the contract. The Environmental Officer will be the primary point of contact for assistance with all environmental issues during the pre-construction and construction phases. He/ She shall be responsible for ensuring the implementation of ESMP.  The contractor shall appoint a person responsible for community liaison and to handle public complaints regarding environmental/social related matters. All public complaints will be entered into the Complaints Register. The Environmental Officer will promptly investigate and review environmental complaints and implement the appropriate corrective actions to arrest or mitigate the cause of the complaints. A register of all complaints is to be passed to the Engineer within 24 hrs. They are received, with the action taken by the Environmental Officer on complains thereof; and  The site supervisor may assume the on-site responsibility of the environment officer and community liaison officer, subject to being adequately trained and having thorough knowledge of the ESMP.  Contractor shall prepare detailed Environmental Method Statement (EMS) clearly stating the approach, actions and manner in which the ESCP is implemented.	P: Contractor	Cost associated with hiring of staff.

Sociocultural conflict due to arrival of expatriate workers	Ensure that local workers are used as much as possible. If expatriate workers are used ensure that they respect the local culture.  The contractor in collaboration with the Island Council shall undertake a training to sensitize the labour to the local context and customs. This training should also cover topics related to Gender-based violence.  To mitigate conflict that may arise due to the arrival of expatriate workers, the consultant should develop a "Code of Conduct" outlining the set of rules that that the workers have to follow to persevere the social norms and religious values of the society. The Code of Conduct should also specify penalties for breaching these rules and should be thoroughly communicated to workers prior to mobilization.  A sample code of conduct that the contractor can customise and adopt is provided in <b>Annex 6</b> .	P: Contractor S: Island Council	Cost associated with hiring staff
Code of Conduct and Communication	The "Code of Conduct" developed should also cover good environmental governance and responsibilities workers have to follow to safeguard the environment. Though the number may be minimal, code of conduct and awareness in HIV related issues need to be considered.  The contractor should ensure that all communications to the workers are presented in the local language. If expatriate workers are employed communications should be made in a language that they understand.  Information on the project and the GRM should be displayed in the project site board, council noticed board as well as other communal place as much as possible.  A sample code of conduct that the contractor can customise and adopt is provided in <b>Annex 6</b> .	P: Contractor P: Island Council S: MCEP	Cost associated with developing materials.
Loss of source of sand for local public use due to sand mining from the area of the lagoon permitted for local public sand mining	Ensure that sand is not taken from the lagoon of the island.	P: Contractor	Cost associated with purchasing sand from a reputable source (hardware shops) and transporting to the island.

Grievance Redress Mechanism	The GRM established by the proponent should be implemented at the construction phase. Contact details of focal points of the contactor, Island Council and the proponent should be displayed at the project site in the project board, the Council Office and common places frequented by the public (such as schools, health centre etc.). In addition, the GRM details and project progress with photographs are to be shared with the island community via the council social media platforms and viber groups to keep the communities posted, to engage them and respond to any feedback/queries they may have.  It is recommended to change the first point of contact to the contractor, followed by Island Council and the proponent. The community liaison officer of the contractor must maintain log records of the complains received and subsequent actions taken.  Refer to Section 6.10 for further details of the GRM and focal points identified for each tier.	P: Contractor S: Island Council T: Proponent	Cost associated with printing of the GRM board and posters.
5. Economi	ic		
Benefit to local economy	Ensure that construction materials are purchased from the island as much as possible. Preference shall be given to hire local construction workers from the island and the atoll or region.	P: Contractor	Cost associated with material purchase

# **Operational Phase Impacts and Mitigation Measures**

The recommended mitigation plan for the operational phases is provided below.

Table 5 Operational Phase Mitigation Plan

Environmental Management Plan				
Impact	Mitigation Measure	Responsible Party	Cost of Mitigation	
	Management of Impacts during Operational Phase			
1. Physical / Chemical /	Biological			
Impacts due to waste spillage during transfer of waste from households to the centre	Identify correct way in which waste should be left for collection (properly closed bags with no leakage).  Ensure transport vessel carrying the waste carries only a set load.			
	Vessels should be enclosed on all sides to prevent spills.	IWRMC Operator	Cost associated training and purchasing of items such as bins.	
	Setup of appropriate bins at identified locations.	/ Island Council		
	Provision of proper and complete training to IWRMC operators (in all aspects of operations).		Such as bins.	
	Operational plan should be prepared and IWRMC should be registered and licensed by URA/EPA as per Waste Management Regulation.			
	Provision of proper and complete training to IWRMC operators (in all aspects of operations and machine maintenance).		Cost associated	
Impacts due to machine malfunction	Undertake routine maintenance of machinery as per the manual.	IWRMC Operator / Island Council	with purchasing bioculum and servicing	
	Ensure that stock of bioculum is maintained to cover for a period of 1 year.		equipment.	
Impact on groundwater	Ensure drains are cleaned regularly to prevent clogs.			
resource due to leachate and wastewater	Ensure that waste is not being kept in the open areas of the IWRMC.	IWRMC Operator / Island Council	N/A	
processing	Ensure that the composting machine is being operated daily.			

Litter, odour and vectors	Organic waste brought to the IWRMC must be prepared for composting / composted on a regular schedule.  Ensure that stock pile of raw organic waste is kept low and is not left untreated for longer durations.  Ensure that staff involved in sorting of received waste and operations of the compost machine are wearing appropriate PPE including masks to mitigate any undesirable impacts of foul smell coming from raw organic waste.  Undertake volume reduction via glass crushing, metal can baling, plastic shredding, wood chipping etc.  Arrange regular disposal of inorganic waste through transportation to the RWMF.	IWRMC Operator / Island Council	Cost associated with purchasing of PPEs.
Impacts due to Resource Consumption	It is strongly encouraged to install solar panels on the IWRMC roof to generate required power for the IWRMC.  Use solar lights in the premises.  Work shall be planned to be carried out during day times.  Ensure that the curing system is purchased along with the compost machine.  Ensure that stock of bioculum is maintained to cover for a period of 1 year.  Ensure that all equipment is serviced and kept clean daily, to reduce the amount of water required for cleaning.  Prepare a plan to switch on the compactors and shredders depending on the incoming waste stream to conserve electricity.  Make sure all equipment are properly serviced and maintained.	P: IWRMC Operator / Island Council S: MECCT (for potential Installation of Solar)	Cost associated with purchasing bioculum and servicing equipment.  Cost associated with installation of solar panels.
2. Sociological and Cultur	ral		
Occupational Health and Safety Impacts	The IWRMC operator shall be required to develop occupational safety management plan, and safety guidelines shall be displayed in the work site at all times.  • Provide clear instructions to the workers on:  • The possible risks;	P: Island Council	Cost of purchasing PPEs and safety materials

	<ul> <li>Measures in place to control risks; and         <ul> <li>Follow emergency procedures.</li> </ul> </li> <li>Provide proper training including manufacturer's safety instructions to employees on how to operate machinery.</li> <li>Conduct proper and regular maintenance of machinery used.</li> <li>Prior to maintenance, make sure the equipment is made safe and prevent access to dangerous parts. Make sure others are aware that maintenance is being carried out.</li> <li>Machinery and vehicles should only be handled by employees with the proper credentials and training.</li> <li>Proper PPEs should be provided at work. PPE should be used after all possible risks have been eliminated as much as possible and to manage any remaining risks.</li> <li>Protective clothing, gloves, respiratory face masks and slip-resistant shoes are recommended for waste transport workers and hard-soled safety shoes for all workers to avoid puncture wounds to the feet.</li> <li>For workers near loud equipment, include noise protection such as ear muffs.</li> <li>For workers near heavy mobile equipment, and at the discharge location for collection trucks, include provision of hard hats.</li> </ul>		
Fire hazard	Burning of waste at the IWRMC should never be practiced under any circumstances. Naked flames shall not be allowed at the IWRMC.  Smoking should be prohibited inside the premise of the IWRMC, placing awareness signs in the premise.  Adequate firefighting equipment shall be provided at the IWRMC, and placed at locations easy to access. Firefighting equipment will be provided through the proposed project.  Dispose excessive compost in forested areas, if production exceeds demand and storage capacity.  Highly flammable areas such as those area allocated for the storage of paper, wood and cardboards, should be clearly marked with appropriate sign boards indicating the flammable nature of the waste.	P: IWRMC Operator / Island Council S: MECCT (for firefighting equipment and sign boards)	Cost of purchasing equipment  Cost of printing and placing sign boards included with the overall project budget.

	Ensure that waste management staffs are briefed of fire hazard management.  Fire safety training on how to use the installed equipment and act in case of an emergency fire should be provided to the security guard and all the waste management staffs of the IWRMC.		
Sociocultural conflict	Ensure that waste handling staffs are selected from the local community as much as possible. If expatriate workers are used ensure that they respect the local culture.  Conduct a training to sensitize the labour to the local context and customs. This training should also cover topics related to Gender-based violence.  Develop a "Code of Conduct" outlining the set of rules that that the workers have to follow to persevere the social norms and religious values of the society. The Code of Conduct should also specify penalties for breaching these rules and should be thoroughly communicated to workers prior to mobilization.	IWRMC Operator / Island Council	Cost associated with hiring staffs
Grievance Redress Mechanism	The Island Council should device a GRM for the operational phase. The contact details (email and phone number) of the council's focal point shall be displayed in the IWRMC as well as the council notice board and other public places.  If the complaints are not resolved to at Island level, the aggrieved party may submit complaints to the Utility Regulatory Authority (URA) and the EPA.  In addition, the GRM details and operational progress with photographs are to be shared with the island community via the council social media platforms and viber groups to keep the communities posted, to engage them and respond to any feedback/queries they may have.	P: Island Council S: URA / EPA	Cost of printing GRM board and posters
3. Economic			
Collection Fee	Ensure that the collection fees are feasible for the community through continuous public consultations.	Island Council	Cost associated with conducing stakeholder sessions
Employment Opportunities	Ensure that waste handling staffs are selected from the local community as much as possible.	Island Council	Cost associated with hiring staffs

## CHAPTER 5: GRIEVANCE REDRESS MECHANISM

MCEP has formulated a Grievance Redress Mechanism (GRM) for these projects as per the ESAMF, which would facilitate receiving and addressing any grievances which may arise during both the construction and operational phases of the project. The mechanism has two tiers, whereby Tier 1 will be facilitated by the Island Councils and Tier 2 by the MCEP.

The Island Councils of Kinolhas and Goidhoo were briefed about the mechanism during the respective stakeholder consultation meetings held with them regarding the proposed projects and operations of the subject IWRMCs. The councils have also been requested to identify a focal point for managing the GRM at Tier 1. Details of focal points identified by the Councils are provided below.

#### **Kinolhas**

Name: Wafir Ahmed

Designation: Council Vice President

Phone: 91995696

Email: kinolhashuoffice@gmail.com / wafir4hmed@gmail.com

#### Goidhoo

Name: Ilyas Ibrahim

Designation: Council Member

Phone: 7756195

Email: info@baagoidhoo.gov.mv / ilyasib786@gmail.com

Tier 2 will be managed by the MCEP, with the Environmental and Social Safeguards Specialist as the focal point.

**Table 6** below gives the details of the GRM formulated by MCEP.

Table 6 GRM

Tier of Grievance Mechanism	Nodal Person for Contact	Contact Communication and other facilitation by the project	Timeframe to address grievance
First Tier: Island Council	Island Council will be the first point of contact for any grievances.  The staff designated as the waste management focal point by the island council will	GRM should be publicly displayed in the construction site as well as the council office. GRM should also be outlined in official website and/or social media pages of Council, MECCT (and/or the project), including contact details of the nodal person in each tier.	15 working days

manage grievances on behalf of the council.

Grievances can be addressed informally by contacting the council through email / telephone / in person.

If the grievance cannot be resolved informally, an aggrieved party must submit a complaint on the Tier I Complaint Form. A copy of the form (with the council seal) should be provided to the aggrieved party as evidence of receipt.

Electronic version of the complaint form should be available from the websites and/or social media pages of MEE and the council. Physical copies of the form should be available from the council front office.

Council will provide assistance to fill the form for those who cannot write.

The council should keep separate registries for informal and formal complaints and maintain records of all complaints received.

The council will discuss the matter with the Women's Development Committee and other relevant stakeholders (Farmers, Fishermen, School, Health Center etc.), where deemed necessary and attain views of them. If such meetings are arranged, the date, time, location or venue, list of participants (with contact details) and a summary of the main outcome of the consultation must be annexed to the written decision issued by the council.

If the complaint is resolved within 15 working days, the council must communicate the decision to the aggrieved party in writing.

The aggrieved party must acknowledge the receipt of decision and submit their agreement or disagreement with the decision within 10 working days.

	T		<u> </u>
		If no acknowledgement is submitted from the aggrieved party within this period, then the decision will be considered as accepted.  If a complaint requires more time to address, this requirement must be communicated to the aggrieved party in writing and the aggrieved party must consent and sign-off the request for the extension to take effect. An extension can be made to an additional 15 working days.  The staff designated as the waste management focal point by the island council will manage and provide feedback for grievances submitted to the council.	
Second Tier: Ministry of Environment and Energy (MEE)	Environmental and Social Safeguards officer at the Project Management Unit (PMU) will be the focal point.	If the grievance cannot be resolved through Tier 1 to the satisfaction of the aggrieved party or if the issue is outside the jurisdiction of the council (issues related to RWMF), an aggrieved party may submit a complaint on the Tier 2 Complaint Form.  A copy of the form (with MECCT seal) should be provided to the aggrieved party as evidence of receipt. Electronic version of the complaint form should be available from the websites and/or social media pages of MECCT and the council. Physical copies of the form should be available from the council and MECCT front office.  A copy of the Tier 1 Complaint Form should be submitted with the Tier 2 Complaint Form.  MECCT will forward the grievance to PMU.  PMU screens the grievance and determine if its related to MCEP. If it is unrelated, the aggrieved party must be notified in writing and the way forward must be outlined to them including the necessary government institutions to follow up.	15 working days

Environment and Social Safeguards Specialist at the PMU will be the contact person in processing a grievance through the Second Tier. PMU will discuss the matter with EPA and other relevant institutions, where deemed necessary and attains views of them. PMU will also arrange site visits and hold onsite discussions and meetings if necessary. The PMU will be responsible to ensure that there is no cost imposed on the aggrieved person, due to the grievance mechanism at the second tier. If the complaint is resolved within 15 working days, the PMU must communicate the decision to the aggrieved party in writing. The aggrieved party must acknowledge the receipt of decision and submit their agreement or disagreement with the decision within 10 working days. If no acknowledgement is submitted from the aggrieved party, then the decision will be considered as accepted. If a complaint requires more time to address, this requirement must be communicated to the aggrieved party in writing and the aggrieved party must consent and sign-off the request for the extension to take effect. An extension can be made to an additional 15 working days. If the grievance is not resolved to the satisfaction of the aggrieved party within 15 working days of submission of the grievance to tier 2 then the aggrieved party may notify the MECCTT, in writing, of the intention to move to tier 3. Third Tier: Judiciary system is an option The legal system is accessible to all As per **Judiciary** established for an aggrieved person aggrieved persons.

Power /	and/or community in case		Judicial
Assistance to	that the other tiers have not	Assistance from the PMU of MCEP is	Procedure
Vulnerable	been effective	available only for vulnerable person(s)* as	
Persons		per this grievance mechanism.	
beyond the			
Project's		In cases where vulnerable person(s) are	
Grievance		unable to access the legal system, the	
Redress		Attorney General's office will provide legal	
Mechanism		support to the vulnerable person(s). The	
		PMU must assist the vulnerable person(s) in	
		getting this support from Attorney	
		General's Office. PMU must also ensure that	
		there is no cost imposed on the aggrieved	
		person if the person belongs to the	
		vulnerable groups. The list of vulnerable	
		groups is as defined in the footnote but may	
		be further defined by MECCT.	
		The verdict of the Courts will be final.	

<sup>\*</sup>Vulnerable person(s): A vulnerable person(s) for the purpose of this project is a person who is poor, physically or mentally disabled/handicapped, destitute, and disadvantaged for ethnic or social reasons, an orphan, a widow, a person above sixty years of age, or a woman heading a household.

Tier 1 and 2 GRM forms will be made accessible from the respective council office and MECCT front office and is published in MECCT website. Below are the links.

#### English page:

http://www.environment.gov.mv/v2/en/download/7189

#### Dhivehi page:

http://www.environment.gov.mv/v2/dv/download/7191

#### **CHAPTER 6: STAKEHOLDER CONSULTATIONS**

Stakeholder consultations were held with Kinolhas and Goidhoo councils to assess their respective perception regarding the proposed projects. They were informed about the proposed design of the composting building, and the technology that is intended to be used to carryout mechanical composting. Furthermore, the project's social aspects, objectives, and the GRM were presented. The stakeholders in general expressed satisfaction towards the projects and appreciated the perceived benefits that can be attained through the projects.

The outcomes and major discussion points of the consultations are summarised in the following subsections.

#### 6.1. Summary of Consultation with Kinolhas Council

Consultation with the Kinolhas Council was held via Google meet on 13 June 2021. Details of meeting attendees and major discussion points are presented in **table 7**.

Table 7 Summary of Consultation with Kinbidhoo Council

Item	Description		
Date of Consultation	13 June 2021		
Venue	Virtual (Google Meet)		
	Kinolhas Council		
	Wafir Ahmed, Council Vice President		
Meeting Attendees	MCEP		
(Stakeholders)	<ul> <li>Ahmed Hassaan Zuhair, Environmental and Social Safeguards Specialist</li> </ul>		
	Abdul Raheem Mohamed, Project Coordinator		
	<ul> <li>Aishath Ajfaan Jawaadh, Assistant Project Coordinator</li> </ul>		
Language of	Dhivehi		
communication			
Summary	<ul> <li>An overview of the pilot mechanical composting system and the planned civil works to install the system was given by Mr. Abdul Raheem Mohamed. A composting building will be constructed on the existing composting pad, composting racks and composting machine will be installed in the building along with water and electricity connections. The proposed mechanical composting requires less maintenance, labour and time unlike windrow composting that was practiced previously in R. Kinolhas. Training on the mechanical composting machine will be conducted for the staffs in IWRMC. Composting can reduce the volume of organic waste by 20 to 40 percent.</li> <li>Mr. Hassan Zuhair briefed the council on the grievance redress mechanism (GRM) developed for the project. Island Council will be</li> </ul>		

responsible to resolve the grievances received in the first tier. Informal grievances received should be documented (date, details of complaint and corrective actions taken). The focal point assigned from Council to manage grievances at Tier 1 will be Mr. Wafir Ahmed, Council Vice President. Information on GRM will be made posted in Council's notice board and communicated through Council Facebook page and community viber group. Printed copies of the GRM poster will be sent to island council.

- Waste is segregated from households and collected regularly. The council's vehicle is used for collection; however, the vehicle is not in a good condition and island pickups are hired when the vehicle is not functioning. A collection fee of MVR 100 is taken from the households. Currently organic waste is not composted due to high cost and labour intensiveness of windrow composting. The food waste is currently disposed into the sea beyond the reef while some of the organic waste is buried in the ground and green waste is used to layer in the buffer zone.
- The design of the proposed upgrading works is completed and tendering process will be initiated soon. Island Council recommended to give preference to local contractors given the limited scope of the project and the current COVID19 situation. Due to the travel and quarantine measures imposed by HPA, it will be speedier if the civil works are contracted to a local party. This recommendation from Council will be taken into consideration and will be discussed internally in the PMU.
- The GRM and design of the proposed upgrading works will be shared with Council prior to tender processes.

# 6.2. Summary of Consultation with Goidhoo Council

Consultation with Goidhoo Council was held via Google meet on 13 June 2021. Details of meeting attendees and major discussion points are presented in **table 8**.

Table 8 Summary of Consultation with Goidhoo Council

Item	Description
Date of Consultation	13 June 2021
Venue	Virtual (Google Meet)
Meeting Attendees (Stakeholders)	<ul> <li>Goidhoo Council</li> <li>Mohamed Siyan, Council President</li> <li>Ilyas Ibrahim, Council Member</li> <li>Athira Ibrahim, Council Member</li> <li>Rishvaana Abobakuru, Council Member</li> <li>Ahmed Niyaaz, Municipal Service Officer</li> </ul> MCEP <ul> <li>Ahmed Hassaan Zuhair, Environmental and Social Safeguards Specialist</li> <li>Abdul Raheem Mohamed, Project Coordinator</li> </ul>
	Aishath Ajfaan Jawaadh, Assistant Project Coordinator
Language of communication	Dhivehi
Summary	<ul> <li>An overview of the pilot mechanical composting system and the planned civil works to install the system was given by Mr. Abdul Raheem Mohamed. A composting building will be constructed on the existing composting pad, composting racks and composting machine will be installed in the building along with water and electricity connections. The proposed mechanical composting requires less maintenance, labour and time unlike windrow composting that was practiced previously. Since Goidhoo is an agricultural island, the compost can be used effectively by the farmers and can reduce the volume of organic waste by 20 to 40 percent.</li> <li>Council raised the electricity issue in the IWRMC and inquired if this issue will be resolved during the electricity connection works in the composting building. In response, Mr. Abdul Raheem noted that this issue was brought to PMU's attention and it has been decided that the issue electricity connection in the IWRMC will be resolved during the civil works of composting building.</li> <li>Mr. Hassaan Zuhair briefed the council on the grievance redress mechanism (GRM) developed for the project. Island Council will be responsible to resolve the grievances received in the first tier. Informal grievances received should be documented (date, details of complaint and corrective actions taken). The focal point assigned from Council to manage grievances at Tier 1 will be Mr. Ilyas Ibrahim, Council Member.</li> </ul>

- Information on GRM will be made posted in Council's notice board and communicated through other online media platforms.
- The waste management service is outsourced to a third party on a
  monthly payment basis. Waste is segregated from households and
  collected regularly. The contractor's vehicle is used for collection. The
  food waste is currently disposed into the sea beyond the reef, while
  green waste is burnt in the island.
- The design of the proposed upgrading works is completed and tendering process will be initiated soon. Island Council recommended to give preference to local contractors given the limited scope of the project and the current COVID19 situation. Due to the travel and quarantine measures imposed by HPA, it will be speedier if the civil work is contracted to a local party. This recommendation from Council will be taken into consideration and will be discussed internally in the PMU.
- The GRM and design of the proposed upgrading works will be shared with Council prior to tender processes.

#### 6.3. Consultation Plan

The brief plan below provides a guidance on how consultations can be carried out during the construction and operation of the proposed projects to ensure the concerns and feedback from the councils are addressed throughout the project. Consultation meetings can be carried out at each phase of the project.

Table 9 Consultation plan for council

Project Phase	Discussion Points	No. of Meetings
	Discuss the workplan and support required from the	
Mobilisation	council/proponent.	1
	Discuss the progress, concerns and feedbacks.	2
Construction Phase	Discuss about how the training of staff to operate the machinery will be carried out.	1
	Discuss about implementation of the Island Waste Management Plan and/or any revisions that are recommended.	1
	Meeting to handover the operations to island council.	
Operational and	Signing of handover agreement between the proponent and the island council.	
Maintenance	Set operations and maintenance criteria/guidelines for the OWC machine and other equipment.	1
	Discuss IWRMC registration process at URA.	

In addition to the above meetings, meetings shall be arranged on request if need be from both sides; the council and the proponent to ensure the whole process is carried out in a participatory manner.

#### **CHAPTER 7: MONITORING PROGRAMME**

Monitoring is the systematic collection of information over a long period of time. It involves measuring and recording of environmental and social variables associated with the development impacts.

#### 7.1. Environmental and Social Monitoring Plan

The Environmental and Social Monitoring Plan has the following objectives;

- To ensure that the environmental and social mitigation and enhancement schemes are well understood and communicated to all involved parties.
- To evaluate the effectiveness of environmental and social remedial measures and procedures.
- To evaluate if the intended benefit of the project is realised.

The intended positive impacts of the project can only be accurately determined by the post-project monitoring scheme. In order to ensure effectiveness of the proposed project it is essential to monitor, collect information, evaluate the information collected and information disseminated. The monitoring plan for the ESCP is presented in **Table 10**. Monitoring results shall be documented with preventive/corrective actions to be implemented.

Table 10 Environmental and Social Monitoring Plan

Aspect	Parameter	Measurements	Frequency	Responsible Party	Cost of Monitoring (MVR)	
	Construction Phase					
Implementation of mitigation measures during construction	General health and wellbeing of workforce  Spill Event  Other mitigation measures (refer to table 4)	Logs of successful implementation of mitigation measures.  Contractors monitoring reports.  Proponent's monitoring reports.	Monthly during construction period	Contractor	18,000 cost of traveling to the island	
Grievance	Monitor grievances by the community, construction	Log records of number of complaints received and	Throughout the construction phase	Island Council	9,000	

	workers and other personnel	actions taken during construction phase.			
		Operational	Phase		
Monitor spills during the	Spill assessments during collection, transfer, with IWMRC and	Logs of spills and type.	Spill logs after every incident.	Island Council	Included in
waste collection and disposal process	transfer to RWMF.  Littering around the island.	Logs of littering incidents (date, location and type of waste).	Littering monitoring every 3 months.	/ IWRMC Operator	Operational Cost
Monitor IWRMC operations	Waste generated and disposed quantities.	Daily logs of waste generated.  Composting logs with details of input/output quantities.  Logs of disposal of inorganic waste.	Daily / for every incidence of disposal of inorganic waste.	Island Council / IWRMC Operator	Included in Operational Cost
Grievance	Monitor grievances by the community, IWRMC staff and other personnel.	Log of grievances filed and how these were handled.	Throughout the operational phase.	Island Council / MCEP	Included in Operational Cost

#### 7.2. Monitoring Report

The contractor is required to submit monthly monitoring reports depicting the level of implementation of mitigation measures. The interim payments to be made to the contractors are tied to the timely submission of these reports and payments will be withheld until major non-compliance issues are resolved.

These reports will be further verified by periodic monitoring undertaken by the Island Council/PMU using the reporting platform developed by MCEP on KoBo Toolbox. Monitoring reports generated through the KoBo Toolbox platform will be submitted to the World Bank.

#### **CHAPTER 8: CONCLUSION**

This report presents the findings of the assessment undertaken for the formulation of an Environmental and Social Code of Practice for the proposed projects to pilot in-vessel composting in the existing IWRMCs of R. Kinolhas and B. Goidhoo. The proponent of the project is MECCT and will be implemented by MCEP. The findings of the assessment show that overall, the project has low negative impacts on social and environmental front.

The proposed projects involve minimum civil works corresponding to enclosure of the existing compost slab area to accommodate for the installation of a mechanical in-vessel composting machine, along with undertaking the required utility connections to the structure. The introduction of this composting technique is perceived to expedite the compost production time considerably, while alleviating the labour intensiveness of the traditional open windrow composting method.

Although the project is perceived to yield significant environmental and human health benefits and contribute towards achieving sustainable development goals, it should be understood that these benefits as outcomes would depend on smooth operations of the waste management system as a whole. In order for the system to function sustainably, adequate resources, in particular financial resources, shall be made available. Part of the required funding could be obtained through introducing a fee structure for the service and sale of metals and compost. However, these revenue sources are not likely to suffice for the entire operations. Hence, support from the government will be critical to maintain the functionality of the system.

The construction and operational impacts that might arise from the project should be managed, mitigated and monitored on a continuous basis. Strict considerations are to be given to the pollution control as well as health and safety measures.

The consultant's recommendations for the project include:

- Adherence to all relevant legislations, regulations, guidelines and standards during construction and operation phase;
- Establish environmental and occupational health and safety procedures for all relevant components;
- Installation of renewable energy sources at IWRMC, such as solar panels to source power for operations;
- Carryout regular consultations with the island council during construction and operation stage of the project;
- Carryout awareness raising campaigns to increase awareness of the general public regarding proposed work;
- Ensure adequate training is given to IWRMC staff in operations and maintenance of the compost machine so as to ensure proper implementation of the project at all phases;
- Encourage continued participation of women, especially during operational stage; and

• Ensure proper supervision and inspection of the IWRMC at regular intervals.

The study also found that through the implementation of the proposed practical and cost-effective mitigation measures almost all identified impacts can be brought to an acceptable level. The study found no evidence of the project resulting in loss of endangered or protected species or habitat.

Thus, based on the findings, it is concluded that the benefits on the environment and human health greatly outweighs the any negative effects resulting from the implementation of the project.

#### REFERENCES

- Department of Environment and Conservation [NSW] (2004). Environmental Guidelines: Composting and related organics processing facilities.
- Environmental Protection Agency [EPA]. (2017). Environmental Guidelines for Site Selection of Waste Management Centers (2017). Male', Maldives: EPA.
- Goidhoo Council (n.d.). Island Waste Management Plan of Baa Goidhoo. Goidhoo, Maldives.
- Herr, C. E. W., A. zur Nieden, N. I. Stilianakis, and T. F.Eikmann (2004). Health Effects Associated With Exposure to Residential Organic Dust. American Journal of Industrial Medicine. 46:381-385.
- Kinolhas Counci (n.d.). Island Waste Management Plan of Raa Kinolhas. Kinolhas, Maldives.
- Land and Marine Resource Ground [LAMER] (2021). Environmental and Social Code of Practice for the Construction of a mechanical composting building at the existing IWRMC at Rinbudhoo, Dhaal Atoll.
- Ministry of Environment, Climate Change and Technology [MECCT] (2012). *Environmental Impact Assessment Regulations*. Male', Maldives: Ministry of Environment.
- Ministry of Environment, Climate Change and Technology [MECCT] (2015). *National Policy on Waste Management*. Male', Maldives: Ministry of Environment.
- Ministry of Environment, Climate Change and Technology [MECCT] (2016). Maldives Clean Environment Project Environmental and Social Assessment and Management Framework (ESAMF) & Resettlement Policy Framework (RPF). Male', Maldives: Ministry of Environment.
- Mohamed, H., (2021). Updated Environment and Social Management Plan for Establishment of Island Waste and Resource Management centre (IWRMC) in M. Mulah
- Muller, T., R. A. Jorres, E. M. Scharrer, H. Hessel, D. Nowak, and K. Radon. 2006. Acute Blood Neutrophilia Induced by Short-Term Compost Dust Exposure in Previously Unexposed Healthy Individuals. International Archives of Occupational and Environmental Health. 79:477-482.
- National Bureau of Statistics [NBS] (2014). *Maldives Population and Housing Census 2014: Statistical Release 1 Population and Households.* Male', Maldives: National Bureau of Statistics.
- National Bureau of Statistics [NBS] (2006). *Population and Housing Census of Maldives 2006: Summary Tables.* Male', Maldives: National Bureau of Statistics.
- Peterson, C. (2013). Assessment of solid waste management practices and its vulnerability to climate risks in Maldives Tourism Sector. *Report submitted to Ministry of Tourism, Arts and Culture*.

- Ranasinghe, C. S. & Thimothias, K. S., (2012). Estimation of carbon sequestration potential in coconut plantations under different agro-ecological regions and land suitability classes. J.Natn.Sci.Foundation Sri Lanka, 40(1), pp. 77-93.
- Rynk R (2000). Fires at composting facilities: causes and conditions, Biocycle, January pp 55-58.
- United States Environmental Protection Agency (2020). Types of Composting and Understanding the Process. Washington, D.C., United States
- Wheeler, P. A., I. Stewart, P. Dumitrean, and B. Donavan. (2001). Health Effects of Composting A Study of Three Compost Sites and Review of Past Data. Technical Report P1-315. UK Environment Agency.
- World Bank Group [WBG] (2007). Environmental, Health, and Safety Guidelines for Waste Management Facilities. Washington, D.C., United States
- World Bank Group [WBG] (n.d.). Generic EMP for Construction and Operation of Composting/Organic Waste Processing Facilities.
- Wouters, I. M., S. Spaan, J. Douwes, G. Doekes, and D.Heederik. (2006). Overview of Personal Occupational Exposure Levels to Inhalable Dust, Endotoxin,  $\beta(1-3)$ -Glucan and Fungal Extracellular Polysaccharides in the Waste Management Chain. Annuals of Occupational Hygiene. 50(1):39-53.
- Zuhair, A.H., (2021). Environmental and Social Management Plan for the proposed establishment of Island Waste and Resource Management Centre in Th. Buruni. Male', Maldives: Ministry of Environment.
- Zuhair, A.H., (2019a). Environmental and Social Management Plan for the proposed upgrading of Island Waste Management Center in N. Holhudhoo. Male', Maldives: Ministry of Environment.
- Zuhair, A.H., (2017). Operational Environmental and Social Management Plan for Regional Waste Management Facility Zone 2, Vandhoo, Raa Atoll. Male', Maldives: Ministry of Environment.

## **ANNEXES**

# ANNEX 1: Terms of Reference (TOR E)

# TOR E: Environmental and Social Code of Practice for projects involving minimal civil works

1. **Project Description:** Describe the project in terms of civil works required for the installation of the composting machine. This will only include enclosing the existing compost slab with four walls and a roof, and connecting electricity and water (via installation of a water tap from the existing groundwater well) to this building. A concept design of this building indicating its proposed location within the existing IWRMC shall be provided.

Provide details of the composting machine, which shall include the following.

- Concept design and process flow diagram of the composting machine.
- Type and amount of waste that it can treat (food waste, green waste, paper etc. in mixed form or separated) and details of any products required for activation (such as bioculum) including its corresponding quantities to operate for a period of 1 year.
- Solid and liquid bi-products and output of the process (wet / dry compost) including the method for their potential use and/or disposal.
- **2. Existing Site Condition:** Undertake a visual analysis of the existing IWRMC via a site visit. Information related to the types of waste currently stored at the IWRMC (if any) and their respective quantities, and the condition of the existing compost slab and groundwater well shall be provided.

Indicate if there are any apparent alarming concerns or threats towards long term sustainability of the IWRMC due to natural causes (such as coastal erosion and inundation) and human interventions (such as vibrations from planned nearby construction actives).

Note: visual inspection either via video or photographs should only be done if physical travel is not possible owing to COVID19 restrictions.

**3. Mitigation Plan:** Provide mitigation plans separate for construction and operational phase by taking into account findings of the site condition analysis and potential impacts associated with the installation of the compost machine.

Mitigation measures proposed for construction phase should be focused in particular on occupational health and safety, public safety, labor code of conduct, dust management, noise, fire-safety and waste management. Adequate consideration shall be given to manage the COVID19 situation during

construction phase via daily temperature checks, cleaning procedures, shift roaster, arrangement for social distancing in labor camps, establishment of handwashing facilities at work site and labor camp etc.

Mitigation measures proposed for the operational should include the following in particular.

- **Odor Management:** Assess if the technology has an inbuilt odor management system and managed odors automatically.
- **Fluid and Discharges:** Will there be any fluid discharges from the proposed technology, will the machines require any extra piping space or water discharge systems or expansion of the existing leachate management system provided via the design, the consultants should propose suitable design requirements if so in the ESMP.
- Waste Inputs: Assess if the technology requires additional segregation of pre management of the
  incoming organic waste. Indicate specifically under the section on operational aspects of the
  ESMP what steps need to be taken specifically by the IWRMC operators in handling in coming
  waste to ensure it can be efficiently used in line with the proposed technology.
- **Energy Requirements and Efficiency:** The energy requirement to run the machinery and the status of energy efficiency of the machinery proposed should be assessed.
- Sludge and Residuals: The nature and amount of all residual material produced, solid and liquid should be assessed and recommend means by which it can be re-used and/or managed in the ESMP. If reuse is recommended the consultant should also recommend the requirements for routine monitoring of quality of the digestate and liquid residue for instance if it is recommended to be used in agricultural processes.
- Safety features on the machinery: such as presence of emergency stop buttons, emergency lights and/or alarms for emergency use are equipped to ensure the best level of safety should be present and the consultants should assess if the proposed technology, especially machinery include these in addition to proposing other safety features in the ESMP.

Cost the mitigation measures, equipment and resources required to implement those measures. An Environmental and Social Management Plan for the proposed project, identifying responsible persons, their duties and commitments shall also be given. The environmental and social management plan should be presented in matrix format, clearly indicting the responsible person, cost, equipment and resources required for each proposed action. In cases where impacts are unavoidable arrangements to compensate for the environmental and / or social effect shall be given.

Mitigation measures should be presented as a matrix consistent to the format provided below.

Proposed Mitigation Measures	Institutional Responsibilities (Implementation and Supervision)	Estimated Quantities Required and Material Specifications Recommended	Cost Estimates	Comments (e.g. secondary impacts)
Detailed design and plan	nning Phase			
<b>Pre-Construction Phase</b>	-Site Preparation			
Construction Phase				
Operation and Mainten	ance Phase			

The confirmation of commitment of the developer to implement the proposed mitigation measures shall also be included. The proposed ESMP matrix shall be translated to Dhivehi language and provided as an Annex to the report.

- **4. Grievance Redress Mechanism (GRM):** Describe the proposed grievance redress mechanism of the project developed by the PMU and offer suggested improvements (if any). The focal point from the council for managing grievances shall be identified and his / her contact details provided. Describe how the GRM details will be publicly made available by displaying the details/contacts on a visibility board.
- 5. Consultation with the Island Council: Undertake consultation with the Island Council (via telephone or online means) to provided information regarding the proposed composting machine. The operations and maintains (O/M) requirements of the machine shall be specifically highlighted, since the council will be responsible for operating the machine. A summary of the major discussion and outputs of this consultation shall be provided.

Provide a brief consultations plan to recommend how the Island Council should be consulted further throughout the process from design, installation and O/M stage, so that their inputs/feedback are taken into consideration during the process.

**6. Monitoring Program:** The monitoring program should be brief and non-exhaustive, mostly limited to visual checks. Identify the critical issues requiring monitoring to ensure compliance to the proposed mitigation measures. Detail of the monitoring program including the physical and biological parameters for monitoring, cost commitment from responsible person to conduct monitoring in the form of a

commitment letter, detailed reporting scheduling, costs and methods of undertaking the monitoring program must be provided.

The monitoring program should give details of the following;

- Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc.).
- Monitoring mechanisms and methodologies
- Monitoring frequency
- Monitoring locations
- Cost of monitoring
- Responsible party

The recommended format for presenting the monitoring program is given below.

Proposed Mitigation Measure	Parameters to be monitored	Location	Measurements (Incl. methods & equipment)	Frequency of Measurement	Responsibilities (Incl. review and reporting)	Cost (equipment & Individuals)
Detailed design an	d planning Phase	•				
Pre-Construction	Phase					
Construction Phas	Construction Phase					
Operation and Maintenance Phase						
		· ·				

**Presentation-** The ESCP report, to be presented in digital format, will be concise and focus on mitigating significant environmental and social issues. The report shall include Dhivehi translations of the ESMP matrix. All raw data collected, should also be submitted in Raw form to the client in digital format.

# ANNEX 2: Screening Decisions from EPA

Environmental Protection Agency





سَرُسُرَةُ ثَرُ: 203-ECA/438/2021/107

# مراعوس معروم وراد سرسروی

#### **Screening Decision**

This is an official document issued to **Ministry of Environment**, **Climate change and Technology** for communicating the decision made after screening of the project: : **Construction of mechanical composting building at the existing IWRMC of Kinolhas, Raa Atoll, Maldives.** 

ر وَ مُعَرِّدُونَ وَ مُوَادُعُونَ مُرَوَّدُ وَ مُوَادُعُونَ مُرَوَّدُ وَ مُوَادُعُونَ وَ مُوَادُعُونَ وَمُوادُو مُرَّسُونُ مُرَّدُونُ مُوادُونُ وَالْمُوادُونِ مُوادُونُ وَالْمُوادُونِ وَالْمُوادُ وَالْمُوادُ وَالْمُوادُون This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	
ج وَ مُعْتِرْدُوْ وَسَهُ مُرَامُونُ مُوفَّ مِوَّ وَمِرَّا وَمُوفَوْ وَمِرَّاسُورُو وَمِرَّامُونُو وَمِرَّامُونُ Submit an Initial Environmental Examination for this project.	
رِ وَ مُعْرِدُونَ وَ سَهُوْمُومُونَ وَ وَسَعُوهُ وَ وَسَعُوهُ وَ وَمَعْرِدُونَ وَ سَعُومُ وَ وَسَعُوهُ وَ وَمُعْرَدُونَ وَ وَاللَّهُ وَاللَّالِي وَاللَّهُ وَاللَّالِمُ وَاللَّهُ وَاللّلَّا وَاللَّهُ وَاللَّالِمُ وَاللَّهُ وَاللَّالِمُ وَاللَّهُ وَاللَّهُ وَاللَّالِمُ وَاللَّهُ وَاللَّالُولُولُولُولُولُولُولُولُولُولُولُولُول	
و وَ مَعْ ثِرْدُو مَهُ مُوْفَ مُو مُوْفِرُدُو مُرَافِو مُوسِوَفِ مُوسِوَفِ مُوفَوَ مُوسِوَفِ مُوسِوَفِ مُوسِوَفِي مُوسِوَفِ مُوسِوَفِ مُوسِوَف This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	٧
رِ وَ مَعْمَدُرُو یَ مَعْمُدُو مِوَّوَدُهُو کَرُوسُ مِرْوَدُهُ کَرُوسُ مِرْوَدُهُ کَرُوسُ وَ مَرْدُو کُورُورُ و کَیْرُورُسُورُورُ وَرَسُورُورُورُورُ The measures stipulated by this agency shall be used to mitigate the negative environmental impac project.	ts of the

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Screening Institution: Environmental Protection Agency of Maldives

Date of issue: 17<sup>th</sup> June 2021
Date of Expiry: 17<sup>th</sup> June 2022

Name: **Mr. Ibrahim Naeem**Designation: **Director General** 

ئى ئىرىد ئىر دۇرگە: ئىدۇ ئەركۇنىڭ ئۇرخى ئاستىد ئىلى ئىرسى، مۇرگىرىڭ ئۇرۇر گىرى ئىز 17 ئىد 2021 قىرىر ئىرى ئىز ئىز 17 ئىد 2022

> برس : مروق منوف مرفير و مردو مردو دَوْدَ: ٤ مُرْفِع مَعْ مُرُو

Signature:

No hy Bhy X

شور:



Environmental Protection Agency





سَرَسُرَةُ ثَنْ 203-ECA/438/2021/108

# בים את לאלים לל תחלכם

#### **Screening Decision**

This is an official document issued to **Ministry of Environment**, **Climate change and Technology** for communicating the decision made after screening of the project: **Construction of mechanical composting building at the existing IWRMC of Goidhoo**, **Baa Atoll**, **Maldives**.

ر و کری مرد کری مرد کری	
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
Submit an Initial Environmental Examination for this project.	
י הרבו ה'	
Submit an Environmental Management Plan for this project.	
$\frac{1}{2}$ $\frac{1}$	
) 0 כם ) 0 ) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	$  \cdot  $
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	ر ت
כ כ' בי	
נ) מ) ניום נים ניון) מהקפיל מדית באינית פרפי	
The measures stipulated by this agency shall be used to mitigate the negative environmental impact project.	ts of the

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Screening Institution: Environmental Protection Agency of Maldives

Date of issue: 17<sup>th</sup> June 2021
Date of Expiry: 17<sup>th</sup> June 2022

Name: **Mr. Ibrahim Naeem**Designation: **Director General** 

ئى ئىرىد ئىر دۇرگە: ئىدۇ ئەركۇنىڭ ئۇرخى ئاستىد ئىلى ئىرسى، مۇرگىرىڭ ئۇرۇر گىرى ئىزد 17 ئىد 2021 قىرىر ئىرى ئىزد 17 ئىد 2022

> برس : مروق منوف مرفير و مردو مردو دَوَدَ: ٤ مُرْفِع مَعْ مُرُو

Signature:

MohyBhy





# ANNEX 3: CV of Author

## **CURRICULUM VITAE** Ahmed Hassaan Zuhair

#### PERSONAL DETAILS

• Full name: Ahmed Hassaan Zuhair

Date of birth: 02 Aug 1985

Mailing address: H. Maaniga (5th Floor), Sikka Goalh, Male' 20082, Maldives

Residential address: G.Vehi, Male', Maldives

Mobile telephone number: (+960)7886707

• Email address: hassaan.zuhair@gmail.com

#### WORK EXPERIENCE

#### **ENVIRONMENTAL AND SOCIAL SAFEGUARDS SPECIALIST**

• Name of Employer: Maldives Clean Environmental Project (MCEP)

World Bank

Ministry of Environment and Energy, Male', Maldives

- Position title: Environmental and Social Safeguards Specialist
- Period of work: July 2018 to present
- Major Responsibilities:
  - Ensure environmental and social safeguard measures are adequately implemented in MCEP administered by the MCEP PMU/MEE.
  - Educate project affected families on the relevant environmental and social safeguards issues and relevant policies.
  - Where applicable, develop information, education and communication (IEC) materials and facilitate workshops on good environmental and social practices relevant to all projects administered by the PMU/MEE.

- Co-ordinate with the various island administration offices on periodic basis on environmental issues.
- Assist GoM in ensuring environmental responsibilities of the project, such as compliance with the environmental protection laws and regulations of the country.
- Assist GoM in ensuring social responsibilities of the project, such as compliance with the labour laws, prohibition of child labour, HIV/AIDS and gender issues.
- Ensure safeguard measures are adequately implemented.
- Establish a grievance redress system and assist community in the redress of their grievances through the system.'

#### ENVIRONMENTAL AND SOCIAL SAFEGUARDS OFFICER

• Name of Employer: Maldives Clean Environmental Project (MCEP)

World Bank

Ministry of Environment and Energy, Male', Maldives

- Position title: Environmental and Social Safeguards Officer
- Period of work: June 2017 to June 2018
- Major Responsibilities:
  - Ensure environmental and social safeguard measures are adequately implemented in MCEP administered by the MCEP PMU/MEE.
  - Educate project affected families on the relevant environmental and social safeguards issues and relevant policies.
  - Where applicable, develop information, education and communication (IEC) materials and facilitate workshops on good environmental and social practices relevant to all projects administered by the PMU/MEE.
  - Co-ordinate with the various island administration offices on periodic basis on environmental issues.
  - Assist GoM in ensuring environmental responsibilities of the project, such as compliance with the environmental protection laws and regulations of the country.
  - Assist GoM in ensuring social responsibilities of the project, such as compliance with the labour laws, prohibition of child labour, HIV/AIDS and genderissues.
  - Ensure safeguard measures are adequately implemented.
  - Establish a grievance redress system and assist community in the redress of their grievances through the system.

#### **ENVIRONMENT ANALYST**

- Name of Employer: Ministry of Environment and Energy, Male', Maldives
- Position title: Environment Analyst (Coastal Unit)
- Period of work: March 2016 to May 2017
- Major Responsibilities:
  - Managing Coastal PSIP projects and donor assisted projects (ORIO and KAFED).
  - Ensuring the implementation of the project components are in line with the government policies and/or donor requirements.
  - Interacting with the financial, procurement and technical staff of the Ministry and EPA to enable smooth implementation of the project components.
  - Coordination among the stakeholders including the atoll/island councils, contractors and engineers in resolving various issues that come up during the implementation.
  - Processing bills raised by contractors.
  - Preparing and compilation of the project progress reports, quarterly reports and updates in a timely manner.
  - Providing information, monthly progress reports and other documentation requested by the Project Director for review and/or for presentation to Steering/Technical committees, donor review missions or by other relevant authorities of the Government in a timely manner.
  - Preparation of Terms of Reference, Tender Documents and Evaluation of Bids and Proposals.
  - Preparing Contract Documents and Contract Amendments.
  - Monitoring the progress of project activities on a regular basis.
  - Visiting project sites periodically and reporting back on the status of on-site activities to the management.
  - Participating in EIA scoping meetings related to the project and guiding contractors in the EIA application process.
  - Ensuring that the projects are formulated in an environmentally friendly and sustainable manner by consulting EPA and other relevant parties.

#### **ENVIRONMENT ANALYST**

- Name of Employer: Ministry of Environment and Energy, Male', Maldives
- Position title: Environment Analyst (Awareness Unit)
- Period of work: July 2010 to December 2013
- Major Responsibilities:
  - Conducting regional environmental awareness sessions in different atolls.
  - Conducting waste management workshops in different regions of Maldives.
  - Organizing and celebrating major environmental significant days at national level.
  - Preparing booklets, broachers and newsletters in view to increase public knowledge on existing environmental issues in Maldives.
  - Creating Environmental Awareness through Media.
  - Provided assistance to legal unit in drafting sold waste management regulation, standards on biodegradable plastic bags and Environmental impact assessment regulation.

#### **ENVRIONMENT OFFICER (T)**

- Name of Employer: Ministry of Environment, Energy and Water, Male', Maldives
- Position held: Environment Officer (Trainee)
- Period of work: February 2005 July 2007
- Major Responsibilities:
  - Provide assistance in facilitating and carrying out various works in relation to environmental awareness and community mobilization.
  - Writing and publishing 2005 World Environment Day Awarenesshandbook.
  - Conducting a weekly environmental awareness raising radio program on national radio.

## **Additional Experience**

•	Registered EIA Reviewer in EPA (since April 2016)	
•	Software and Service Training of P2000 Continuous	4 November 2021
	Emissions Monitoring Equipment (Protea Ltd.)	R. Vandhoo, Maldives
•	The Environmental and Social Framework in Practice	22 – 26 March 2021
	(Sir Lanka/Maldives CMU Training)	virtual
•	Environmental and Social Framework – ESF Fundamentals	March 2021
	(The World Bank's E-learning Course)	virtual
•	Safeguards Application Training	23 - 24 Jan 2020
		Colombo, Sri Lanka
•	ISWA Beacon Conference	13 – 15 Dec 2019 Singapore
•	Training on Geo- Enabling Method for Monitoring and Supervision (GEMS)	15 – 20 Sept 2019 Chennai, India
•	TESTO Mobile Stack Emissions Monitoring Training	6 Feb 2019 Male', Maldives
•	Introduction to Mapping with Drones	10 - 14 Sept 2018
	Geoinformatics Center, Asian Institute of Technology (AIT)	Pathumthani, Thailand
•	World Bank Procurement Training	2-4 Oct 2017
		Colombo, Sri Lanka
•	Training Program for Environmental Regulators	19-30 Nov 2012
		New Delhi, India
•	Consultation for the Asia-Pacific Region in preparation for session of the intergovernmental negotiating committee on mercury	31 Oct - 1 Nov 2012 the fifth Bangkok, Thailand
•	Tbilisi+35: Intergovernmental conference on Environmental Education for Sustainable Development	6-7 Sept 2012 Tbilisi, Georgia

Third Asia Pacific Regional Meeting on SAICM 8-9 Sep 2011 Beijing, China UNITAR Regional Workshop on Nanotechnology and 6-7 Sep 2011 Manufactured Nanomaterials Beijing, China UNEP/OECD Workshop on Perfluorinated Chemicals 5 Sep 2011 and transition to safer alternatives Beijing, China Seminar on Integrated Coastal Management Oct/Nov 2010 for **Developing Countries** Xiamen, China Capacity building in ecosystem-based management 18 - 20 June 2007 approaches for the Coastal areas in the Maldives The University of Queensland Training on preparation and interpretation of 20 - 21 Feb 2006 Climate Risk profile for the Maldives Ministry of Environment,

#### ACADEMIC RECORD

Name and address of institution	Degree obtained (Master and	Study period from - to	Medium of
	Bachelor only)		instruction
Griffith University	Master of Urban and	2 March 2014 - 15	English
170 Kessels Rd, Nathan QLD 4122,	Environmental Planning	December 2015	
Australia			
University of Mysore	Bachelor of Science	1 Jul 2007 - 30 Jun 2010	English
Mysore, Karnataka, India			
Centre for Higher Secondary Education	London GCE Advanced Level	1 Jun 2002 -30 Jun 2004	English
Male', Maldives			
Majeediyya School	London GCE Ordinary Level	1 Jan 1999 – 31 Jan	English
Male', Maldives		2002	

#### **AWARDS / HONOURS/ COMMENDATIONS**

- PIA (Planning Institute of Australia) Awards for Planning Excellence 2015 Commendation for Outstanding Student Project "Connected with Water: Integrated and Adaptive Water Management Framework" – University Sponsored by Queensland Government.
- Griffith Award for Academic Excellence 2015.
- Griffith Award for Academic Excellence 2014.

- Australia Awards Scholarship 2014.
- Certificate of Acknowledgement in recognition of outstanding contribution to Earth Hour campaign 2013.
- Certificate of Achievement (Discipline Prize), Majeediyya School.
- Certificate of Achievement (Passed in all curriculum subjects), Majeediyya School.

#### RESEARCH EXPERIENCE AND PUBLICATIONS

- Author of Construction Phase Monitoring Report under the ESIA for upgrading of Zone II RWMF at R. Vandhoo (November 2021).
- Author of ESMP Monitoring Report for the Establishment of IWRMC in N. Holhudhoo (September 2021).
- Author of ESMP Monitoring Report for the Establishment of IWRMC in R. Maakurathu (September 2021).
- Author of Environmental and Social Management Plan for the proposed establishment of Island Waste and Resources Management Centre in Th. Buruni (March 2021).
- Author of Environmental and Social Management Plan for the proposed establishment of Island Waste and Resources Management Centre in Th. Madifushi (January 2021).
- Author of ESMP Monitoring Report for the Establishment of IWMC in R. Ungoofaaru (June 2020).
- Co-Author of Environmental and Social Management Framework (ESMF) of Maldives COVID19 Emergency Response and Health Systems Preparedness Project (April, 2020).
- Author of ESMP Monitoring Report for the Establishment of IWMC in B. Dhonfanu (March 2020).
- Author of ESMP Monitoring Report for the Establishment of IWMC in B. Hithaadhoo (January 2020).
- Author of Environmental and Social Management Plan for the proposed upgrading of Island Waste Management Centre in R. Maakurathu (December 2019).
- Author of Environmental and Social Management Plan for the proposed upgrading of Island Waste Management Centre in N. Holhudhoo (October 2019).
- Author of Environmental and Social Management Plan for the proposed upgrading of Island Waste Management Centre in R. Ungoofaaru (February 2019).
- Author of Environmental and Social Management Plan for the proposed upgrading of Island Waste Management Centre in Lh. Kurendhoo (November 2018).
- Author of Operational Environmental and Social Management Plan for Regional Waste Management Facility
   -Zone 2, Vandhoo, Raa Atoll (September 2018).

- Coauthor of Environmental Impact Assessment Report for the proposed tourist jetty at Hulhumale' (June 2018).
- Author of Environmental Management Plan for the proposed development of Island Waste Management Centre in Dh. Rinbudhoo (January 2018).
- Author of Environmental Management Plan for the proposed development of Island Waste Management Centre in F. Magoodhoo (December 2017).
- Author of Environmental Management Plan for the proposed development of Island Waste Management Center in Th. Vandhoo (September 2017).
- Coauthor of Environmental Impact Assessment Report for the proposed agricultural project at R. Ungulu.
- Coauthor of Environmental Impact Assessment Report for the proposed 10 storey residential development at
   H. Sandhaleege.
- Connected with Water: Integrated and Adaptive Water Management Framework for South East Queensland (Studio Project, Griffith University).
- Urban Analysis of Brisbane CBD Case Study (Studio Project, Griffith University).
- Feasibility Study for Low Density Residential Development in Park Ridge Queensland (Studio Project, Griffith University).
- Effects of leachates on the quality of ground water (Bachelor of Science Dissertation, University of Mysore).
- Pemphis Newsletter Issue number 22 40 (Publication of Ministry of Environment and Energy).
- Environment Impact Assessment Regulations 2012 (Publication of Ministry of Environment and Energy).
- Standards on Biodegradable Plastic Bags 2012 (Publication of Ministry of Environment and Energy).
- State of the Environment of Maldives 2011 (Publication of Ministry of Environment and Energy).

#### REFEREES

Professor Darryl LOW CHOY
 Professor – Environment and Landscape Planning
 Urban Research Program

Head of Discipline (Planning) School of Environment Griffith University Brisbane, QLD 4111 Australia

Program Co-Leader Program B: Waster Sensitive Urbanism Cooperative Research Centre for Water Sensitive Cities E: d.lowchoy@griffith.edu.au

- Dr Tooran Alizadeh
  Lecturer, Urban & Environmental Planning
  Griffith School of Environment
  Griffith University
  Brisbane, QLD 4111 Australia E:
  t.alizadeh@griffith.edu.au
- Mokshana Wijeyeratne, Senior Environmental Specialist, The World Bank Group Contact: +94-11-2448070 Email: mwijeyeratne@worldbank.org Ahmed Murthaza
- Ahmed Murthaza

Director General, Waste and Pollution Control Department Ministry of Environment & Energy, Male', Maldives Work: (+960) 3004315 / Mobile: (+960)7771504

Sincerely,

Ahmed Hassaan Zuhair

ANNEX 4: Detailed Drawing of Proposed Mechanical Composting Building of R. Kinolhas WRMC

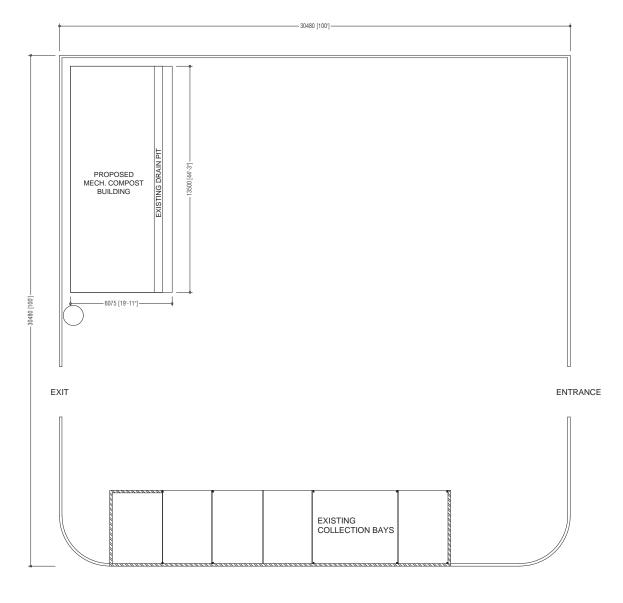
# UPGRADING OF R.KINOLHAS ISLAND WASTE AND RESOURCE MANAGEMENT CENTRE



PREPARED BY:

MALDIVES CLEAN ENVIRONMENT PROJECT
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY

MAY 2021



PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY GREEN BUILDING, HANDHUYAREF HIGUN, MAAFANUN, MAJE (2003), REPUBLIC OF MALDIVES, TEL: +960-3018431, +960-3018300, FAX: +960-328301	UPGRADING OF IWRMC R. KINOLHAS	AFRAZ	
	TITLE Existing IWMC Plan	STRUCTURE BY  AFRAZ	
	CLIENT DEPARTMENT WMPC DEPARTMENT	DRAWN BY AFRAZ	
	PAPER SIZE A3	SCALE 1:150	
	PAGE NO. 01	DWG NO. KINO-A1-01	
		DATE 18.05.2021	

MECHANICAL
COMPOSTING AREA

CHIPPED
WOOD
STORAGE
FINISHED
COMPOST
STORAGE

3325
6050
FLOOR PLAN

EXISTING SLAB

EXISTING SLAB

NEW SLAB

(RAMP)

575

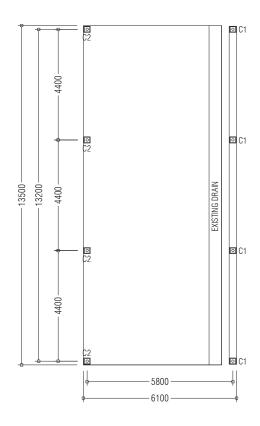
SLAB PLAN

NOTE:

1500mm HEIGHT WALL

1500mm HEIGHT WALL
2500mm HEIGHT MASONRY WALLS + LOUVER ON TOP

PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC	AFRAZ	
	R. KINOLHAS		
MCEP MCEP	TITLE	STRUCTURE BY	
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	PROPOSED MECH. COMPOSTING BUILDING PLAN	AFRAZ	
GREEN BUILDING, HANDHUVAREE HIGUN. MAAFANUI, MAAF (2032), FEVEUILC OF MALDIVES. TEL. +960-3018431, +960-3018300, FAX: +960-328301	CLIENT DEPARTMENT	DRAWN BY	
	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE 1:150	
	PAGE NO. 02	DWG NO. KINO-A1-02	
		DATE 18.05.2021	



PREPARED BY		PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC	AFRAZ		
	L	R.KINOLHAS		
MCEP MCEP		TITLE	STRUCTURE BY	
	Y OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	FOUNDATION / COLUMNS PLAN	AFRAZ	
	ILDING, HANDHUVAREE HIGUN, U, MALE' (20392), REPUBLIC OF MALDIVES,	CLIENT DEPARTMENT	DRAWN BY	
TEL: +960-	0-3018431, +960-3018300, FAX: +960-328301	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE 1:100		
	PAGE NO. 03	DWG NO. KINO-A1-03		
		DATE 18.05.2021		

	400
400	
13300	5° SLOPE
400	

DESIGN BY

STRUCTURE BY

NTS

KINO-A1-04

18.05.2021

AFRAZ

AFRAZ

AFRAZ

SCALE

DWG NO.

DATE

DRAWN BY

AMENDMENTS

		L
*	MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	
	MALE HIGH ALE HIGHN, MALE HIGHN, MALE HIGH ALE HIGHN, MALE HIGHN, MALE (20392), REPUBLIC OF MALDIVES, TEL: +960-3018431, +960-3018300, FAX: +960-328301	ŀ
		t

PROJECT

R.KINOLHAS TITLE

ROOF PLAN

PAGE NO.

UPGRADING OF IWRMC

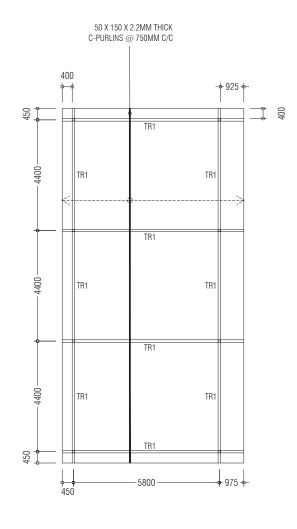
CLIENT DEPARTMENT

WMPC DEPARTMENT

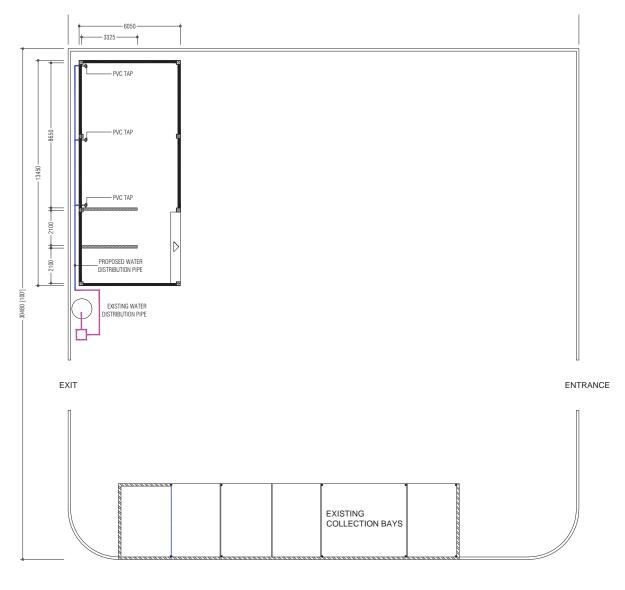
PAPER SIZE A3

04

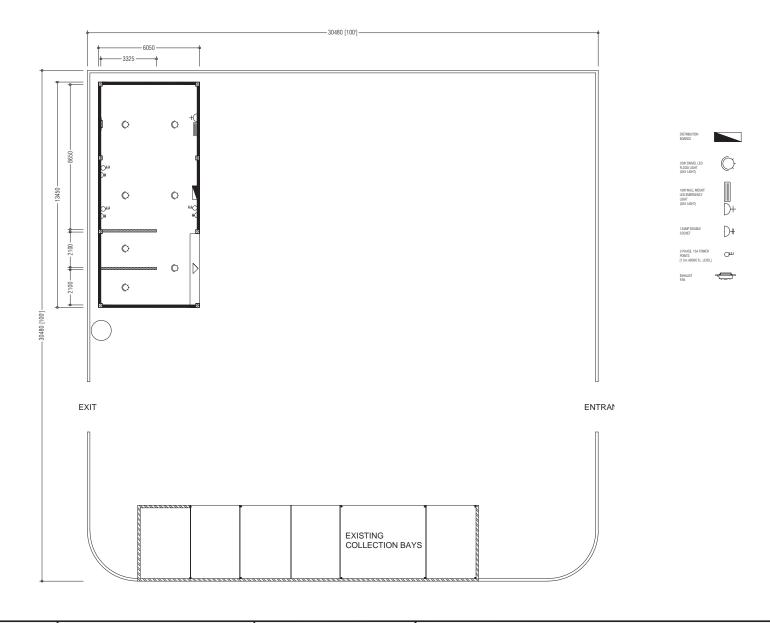
PREPARED BY



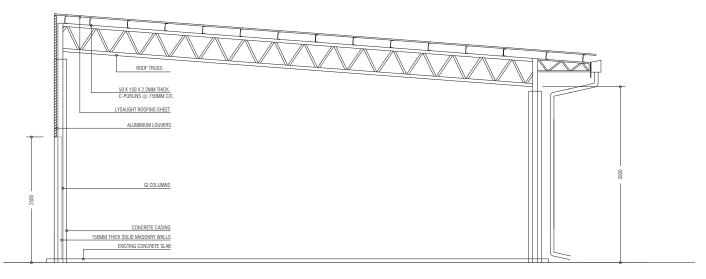
PREPARED BY	PROJECT	DESIGN BY	AMEN
	UPGRADING OF IWRMC	AFRAZ	
	R.KINOLHAS		
MCEP MCEP	TITLE	STRUCTURE BY	
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	ROOF STRUCTURE PLAN	AFRAZ	
GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNII MAI F (20302), REPURI IC DE MAI DIVES	CLIENT DEPARTMENT	DRAWN BY	
MAAFANNU, MALE' (20392), REPUBLIC OF MALDIVES, TEL: +960-3018431, +960-3018300, FAX: +960-328301	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE NTS	
	PAGE NO. 05	DWG NO. KINO-A1-05	
		DATE 18.05.2021	



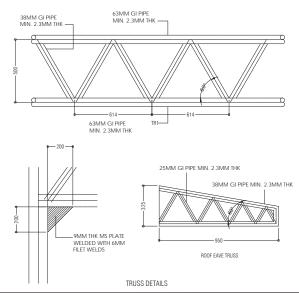
PREPARED	BY	PROJECT	DESIGN BY	
	UPGRADING OF IWRMC	AFRAZ		
		R.KINOLHAS		
*	MCEP	TITLE	STRUCTURE BY	
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	PLUMBING PLAN	AFRAZ		
	GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE' (20392), REPUBLIC OF MALDIVES,	CLIENT DEPARTMENT	DRAWN BY	
TEL: +960-3018431, +960-3018300, FAX: +960-328301	WMPC DEPARTMENT	AFRAZ		
	PAPER SIZE A3	SCALE	NTS	
	PAGE NO. 06	DWG NO.	KINO-A1-06	
			DATE	18.05.2021



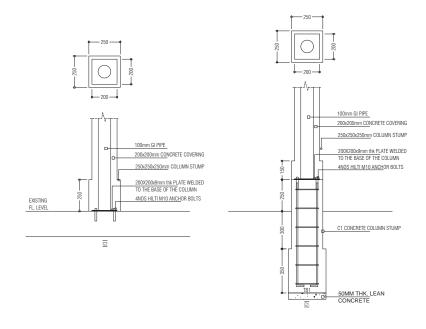
PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC R.KINOLHAS	AFRAZ	
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	TITLE ELECTRICAL PLAN	STRUCTURE BY  AFRAZ	
GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES, TEL: +960-3018431, +960-3018300, FAX: +960-328301	CLIENT DEPARTMENT WMPC DEPARTMENT	DRAWN BY AFRAZ	
	PAPER SIZE A3	SCALE NTS	
	PAGE NO. 07	DWG NO. KINO-A1-07	
		DATE 18.05.2021	

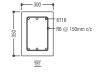


#### COMPOSTING BUILDING SECTION



PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC R.KINOLHAS	AFRAZ	
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	TITLE ELEVATIONS AND SECTIONS	STRUCTURE BY AFRAZ	
GREEN BUILDING. HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES, TEL. +960-3018431, +960-3018300, FAX: +960-328301	CLIENT DEPARTMENT WMPC DEPARTMENT	DRAWN BY AFRAZ	
	PAPER SIZE A3	SCALE NTS	
	PAGE NO. 08	DWG NO. KINO-A2-08	
		DATE 18.05.2021	





5112 5112 Fig HoUK @ 150mm c/c
--------------------------------------

PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC R.KINOLHAS	AFRAZ	
MCEP MCEP	TITLE	STRUCTURE BY	
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY GREEN BUILDING, HANDHUVAREE HIGIUN MAFANIU, MALE (2039), FEPUBLIC OF MALDIVES, TEL: +960-3018431, +960-3018300, FAX: +960-328301	FOOTING AND COLUMN DETAILS	AFRAZ	
	CLIENT DEPARTMENT	DRAWN BY	
	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE 1:50	
	PAGE NO. 09	DWG NO. KINO-D1-9	
		DATE 18.05.2021	

ANNEX 5: Detailed Drawing of Proposed Mechanical Composting Building of B. Goidhoo WRMC

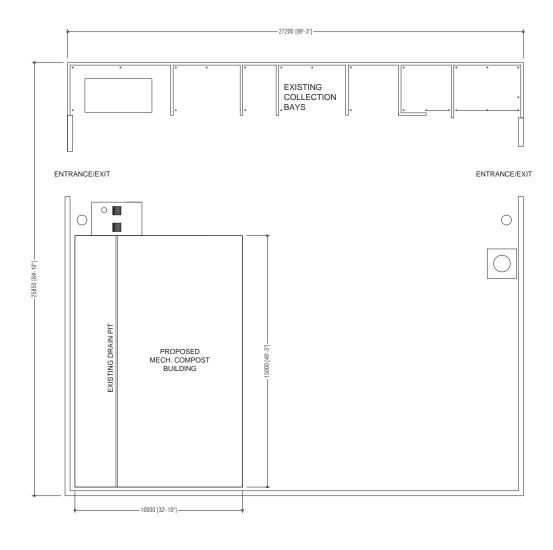
### UPGRADING OF B.GOIDHOO ISLAND WASTE AND RESOURCE MANAGEMENT CENTRE



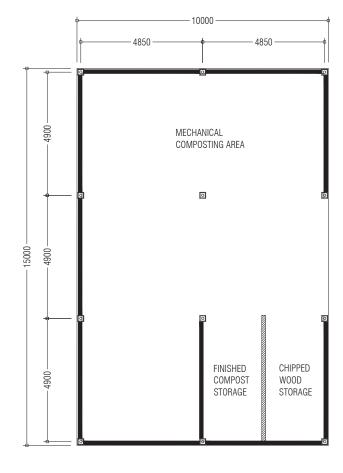
PREPARED BY:

MALDIVES CLEAN ENVIRONMENT PROJECT
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY

MAY 2021



PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC B.GOIDHOO	AFRAZ	
MCEP MCEP	TITLE	STRUCTURE BY	
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	EXISTING IWMC PLAN	AFRAZ	
GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE' (20392), REPUBLIC OF MALDIVES,	CLIENT DEPARTMENT	DRAWN BY	
TEL: +960-3018431, +960-3018300, FAX: +960-328301	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE 1:150	
	PAGE NO. 01	DWG NO. GOID-A1-01	
	·	DATE 18.05.2021	

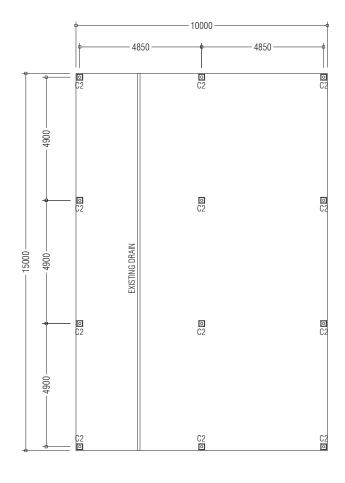


NOTE:

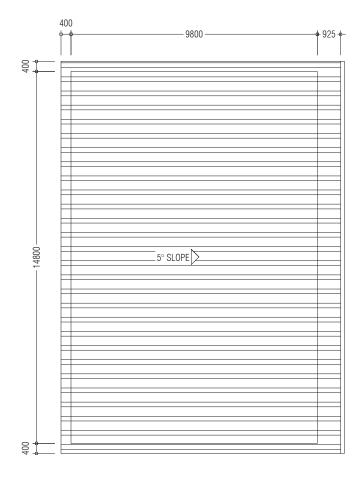
1500mm HEIGHT WALL

2500mm HEIGHT MASONRY WALLS + LOUVER ON TOP

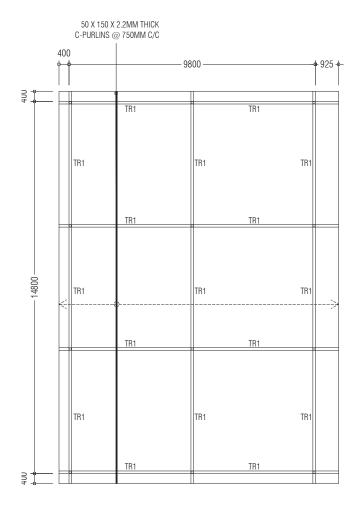
PREPARED E	YY	PROJECT	DESIGN BY	AMENDMENTS
	UPGRADING OF IWRMC B.GOIDHOO	AFRAZ		
*	MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	TITLE PROPOSED MECH. COMPOSTING BUILDING PLAN	STRUCTURE BY  AFRAZ	
	GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES,	CLIENT DEPARTMENT WMPC DEPARTMENT	DRAWN BY AFRAZ	
		PAPER SIZE A3	SCALE 1:150	
	PAGE NO. 02	DWG NO. GOID-A1-02		
			DATE 18.05.2021	



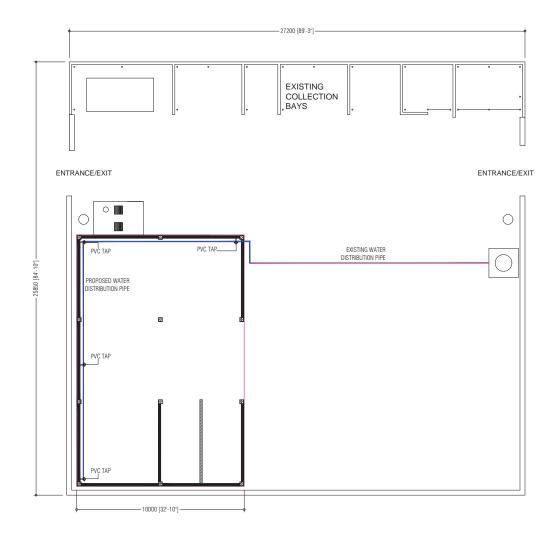
PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	UPGRADING OF IWRMC	AFRAZ	
	B.GOIDHOO		
	TITLE	STRUCTURE BY	
	FOUNDATION / COLUMNS PLAN	AFRAZ	
GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES,	CLIENT DEPARTMENT	DRAWN BY	
TEL: +960-3018431, +960-3018300, FAX: +960-328301	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE 1:100	
	PAGE NO. 03	DWG NO. OLHU-A1-03	
		DATE 18.05.2021	



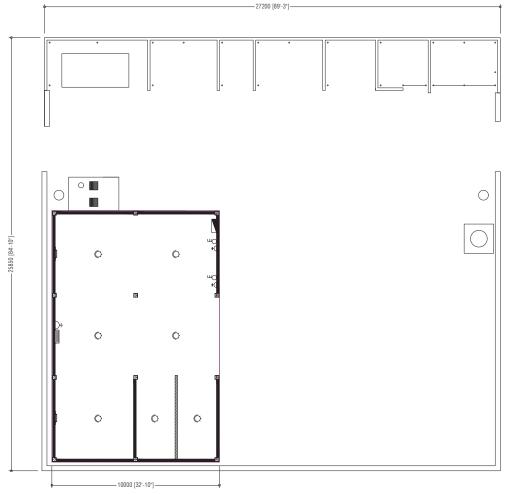
PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY GREEN BUILDING, HANDHUVAREE HIGIUN, MAAFANDHU, MALP (2083), REPUBLIC OF MALDIVES. TEL: +960-3018431, +960-3018300, FAX: +960-328301	UPGRADING OF IWRMC	AFRAZ	
	B.GOIDHOO		
	TITLE	STRUCTURE BY	
	ROOF PLAN	AFRAZ	
	CLIENT DEPARTMENT	DRAWN BY	
	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE NTS	
	PAGE NO. 04	DWG NO. GOID-A1-04	
		DATE 18.05.2021	



PREPARED BY	PROJECT	DESIGN BY	AME
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES, TEL: +960-3018431, +960-3018300, FAX: +960-328301	UPGRADING OF IWRMC B.GOIDHOO	AFRAZ	
	TITLE ROOF STRUCTURE PLAN	STRUCTURE BY AFRAZ	
	CLIENT DEPARTMENT WMPC DEPARTMENT	DRAWN BY  AFRAZ	
	PAPER SIZE A3 PAGE NO. 05	SCALE NTS DWG NO. G0ID-A1-05	
	TAGE NO.	DATE 18.05.2021	



PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES, TEL. +960-3018431, +960-3018300, FAX: +960-328301	UPGRADING OF IWRMC B.GOIDHOO	AFRAZ	
	TITLE	STRUCTURE BY	
	PLUMBING PLAN	AFRAZ	
	CLIENT DEPARTMENT	DRAWN BY	
	WMPC DEPARTMENT	AFRAZ	
	PAPER SIZE A3	SCALE NTS	
	PAGE NO. 06	DWG NO. GOID-A1-06	
		DATE 18.05.2021	



AFRAZ

AFRAZ

AFRAZ SCALE

DWG NO.

DATE

PREPARED BY

MCEP
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY
GREN BUILDING, HANDHUVAREE HIGUN,
MAFANNU, MALE (20392), REPUBLIC OF MALDIVES,
TEL: +960-3018431, +960-3018300, FAX: +960-328301

PROJECT

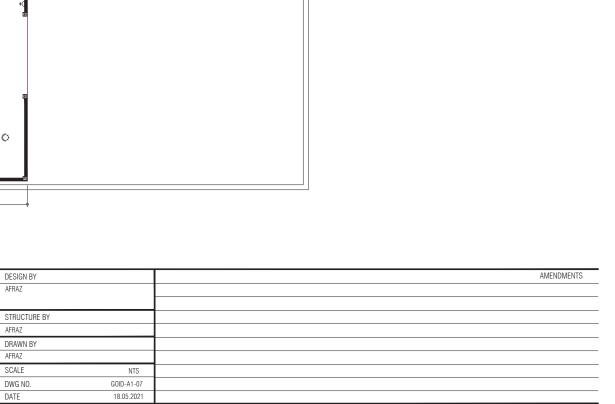
UPGRADING OF IWRMC B.GOIDHOO TITLE

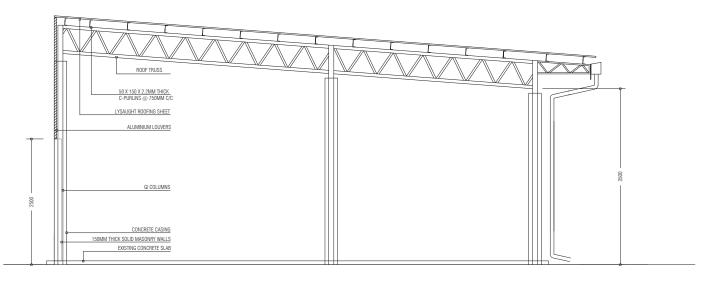
ELECTRICAL PLAN

CLIENT DEPARTMENT

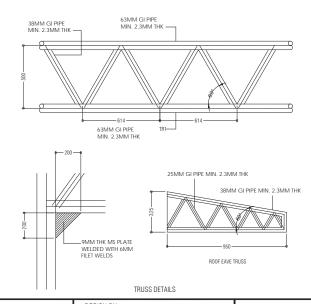
WMPC DEPARTMENT

PAPER SIZE A3

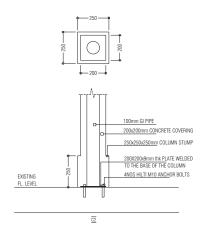




#### COMPOSTING BUILDING SECTION



PREPARED BY	PROJECT	DESIGN BY	AMENDMENTS
MCEP MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE (20392), REPUBLIC OF MALDIVES. TEL: +805-301830, FAX: +960-328301	UPGRADING OF IWRMC B.GOIDHOO	AFRAZ	
	TITLE ELEVATIONS AND SECTIONS	STRUCTURE BY AFRAZ	
	CLIENT DEPARTMENT WMPC DEPARTMENT	DRAWN BY AFRAZ	
	PAPER SIZE A3	SCALE NTS	
	PAGE NO. 08	DWG NO. GOID-A2-08	
		DATE 18.05.2021	



PREPARED BY	,	PROJECT	DESIGN BY	AMENDMENTS
		UPGRADING OF IWRMC B.GOIDHOO	AFRAZ	
26	MCEP	TITLE	STRUCTURE BY	
	MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY	FOOTING AND COLUMN DETAILS	AFRAZ	
, A ,	GREEN BUILDING, HANDHUVAREE HIGUN, MAAFANNU, MALE' (20392), REPUBLIC OF MALDIVES,	CLIENT DEPARTMENT	DRAWN BY	
E TO	TEL: +960-3018431, +960-3018300, FAX: +960-328301	WMPC DEPARTMENT	AFRAZ	
		PAPER SIZE A3	SCALE 1:50	
		PAGE NO. 09	DWG NO. GOID-D1-9	
			DATE 18.05.2021	

### ANNEX 6: Sample Code of Practices

#### CODES OF CONDUCT

Codes of Conduct	••••	1
Company Code of Conduct	••••	2
Manager's Code of Conduct		
Individual Code of Conduct		

#### **Codes of Conduct**

Three Codes of Conduct are presented below:

- i. Company Code of Conduct: Commits the company to addressing EHSH, OHS and GBV issues;
- ii. **Manager's Code of Conduct:** Commits managers to implementing the Company Code of Conduct, as well as those signed by individuals; and,
- iii. **Individual Code of Conduct:** Code of Conduct for everyone working on the project, including managers.

## Company Code of Conduct Implementing ESHS and OHS Standards Preventing Gender Based Violence

The company is committed to ensuring that the project is implemented in such a way which minimizes any negative impacts on the local environment, communities, and its workers. This will be done by respecting the environmental, social, health and safety (ESHS) standards, and ensuring appropriate occupational health and safety (OHS) standards are met. The company is also committed to creating and maintaining an environment where children under the age of 18 will be protected, and where Sexual Exploitation and Abuse (SEA) and sexual harassment have no place. Improper actions towards children, SEA and sexual harassment are acts of Gender Based Violence (GBV) and as such will not be tolerated by any employee, sub-contractors, supplier, associate, or representative of the company.

Therefore, to ensure that all those engaged in the project are aware of this commitment, the company commits to the following core principles and minimum standards of behavior that will apply to all company employees, associates, and representatives, including sub-contractors and suppliers, without exception:

#### General

- 1. The company—and therefore all employees, associates, representatives, sub-contractors and suppliers—commits to complying with all relevant national laws, rules and regulations.
- 2. The company commits to full implementing its 'Contractors Environmental and Social Management Plan' (C-ESMP) as approved by the client.
- 3. The company commits to treating women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. Acts of GBV are in violation of this commitment.
- 4. The company shall ensure that interactions with local community members are done with respect and non-discrimination.
- 5. Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all company employees, associates, and its representatives, including sub-contractors and suppliers.
- 6. The company will follow all reasonable work instructions (including regarding environmental and social norms).
- 7. The company will protect and ensure proper use of property (for example, to prohibit theft, carelessness or waste).

#### **Health and Safety**

- 8. The company will ensure that the project's OHS Management Plan is effectively implemented by company's staff, as well as sub-contractors and suppliers.
- 9. The company will ensure that all persons on-site wear prescribed and appropriate personal protective equipment, preventing avoidable accidents, and reporting conditions or practices that pose a safety hazard or threaten the environment.
- 10. The company will:
  - i. prohibit the use of alcohol during work activities.
  - ii. prohibit the use of narcotics or other substances which can impair faculties at all times.
- 11. The company will ensure that adequate sanitation facilities are available on site and at any worker accommodations provided to those working on the project.

12. The company will not hire children under the age of 18 for construction work, or allow them on the work site, due to the hazardous nature of construction sites.

#### **Gender Based Violence**

- 13. Acts of GBV constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment and, if appropriate, referral to the Police for further action.
- 14. All forms of GBV, are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or within the local community.
- 15. Sexual harassment of work personnel and staff (e.g. making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature) are acts of GBV and are prohibited.
- 16. Sexual favors (e.g. making promises of favorable treatment such as promotions, threats of unfavorable treatment such as losing a job, payments in kind or in cash dependent on sexual acts) and any form of humiliating, degrading or exploitative behavior are prohibited.
- 17. The use of prostitution in any form at any time is strictly prohibited.
- 18. Sexual contact or activity with children under 18—including through digital media—is prohibited. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
- 19. Unless there is full consent by all parties involved in the sexual act, sexual interactions between the company's employees (at any level) and members of the communities surrounding the work place are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex (including prostitution). Such sexual activity is considered "non-consensual" within the scope of this Code.
- 20. In addition to company sanctions, legal prosecution of those who commit acts of GBV will be pursued if appropriate.
- 21. All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of GBV by a fellow worker, whether in the same company or not. Reports must be made in accordance with project's GBV Allegation Procedures.
- 22. Managers are required to report and act to address suspected or actual acts of GBV as they have a responsibility to uphold company commitments and hold their direct reports responsible.

#### **Implementation**

To ensure that the above principles are implemented effectively the company commits to:

23. Ensuring that all managers sign the project's 'Manager's Code of Conduct' detailing their responsibilities for implementing the company's commitments and enforcing the responsibilities in the 'Individual Code of Conduct'.

<sup>&</sup>lt;sup>1</sup> Consent: refers to when an adult makes an informed choice to agree freely and voluntarily to do something. There is **no** consent when agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, manipulation, deception, or misrepresentation; the use of a threat to withhold a benefit to which the person is already entitled, or; a promise made to the person to provide a benefit. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

- 24. Ensuring that all employees sign the project's 'Individual Code of Conduct' confirming their agreement to comply with ESHS and OHS standards, and not to engage in activities resulting in GBV, child endangerment or abuse, or sexual harassment.
- 25. Displaying the Company and Individual Codes of Conduct prominently and in clear view at workers' camps, offices, and in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
- 26. Ensuring that posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
- 27. Ensuring that an appropriate person is nominated as the company's 'Focal Point' for addressing GBV issues, including representing the company on the GBV Complaints Team (GCT) which is comprised of representatives from the client, contractor(s), the supervision consultant, and local GBV Service Provider.
- 28. Ensuring that an effective GBV Action Plan is developed in consultation with the GCT which includes as a minimum:
  - i. **GBV Allegation Procedure** to report GBV issues through the project Grievance Redress Mechanism (Section 4.3 Action Plan);
  - ii. **Accountability Measures** to protect confidentiality of all involved (Section 4.4 Action Plan); and.
  - iii. **Response Protocol** applicable to GBV survivors and perpetrators (Section 4.7 Action Plan).
- 29. Ensuring that the company effectively implements the agreed final GBV Action Plan, providing feedback to the GCT for improvements and updates as appropriate.
- 30. Ensuring that all employees attend an induction training course prior to commencing work on site to ensure they are familiar with the company's commitments to ESHS and OHS standards, and the project's GBV Codes of Conduct.
- 31. Ensuring that all employees attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the project's ESHS and OHS standards and the GBV Code of Conduct.

I do hereby acknowledge that I have read the foregoing Company Code of Conduct, and on behalf of the company agree to comply with the standards contained therein. I understand my role and responsibilities to support the project's OHS and ESHS standards, and to prevent and respond to GBV. I understand that any action inconsistent with this Company Code of Conduct or failure to act mandated by this Company Code of Conduct may result in disciplinary action.

Company name:	
Signature:	
Printed Name:	
Title:	
Date:	

16 May 2018 4

#### Manager's Code of Conduct Implementing ESHS and OHS Standards Preventing Gender Based Violence

The company is committed to ensuring that the project is implemented in such a way which minimizes any negative impacts on the local environment, communities, and its workers. This will be done by respecting the environmental, social, health and safety (ESHS) standards, and ensuring appropriate occupational health and safety (OHS) standards are met. The company is also committed to creating and maintaining an environment where children under the age of 18 will be protected, and where Sexual Exploitation and Abuse (SEA) and sexual harassment have no place. Improper actions towards children, SEA and sexual harassment are acts of Gender Based Violence (GBV) and as such will not be tolerated by any employee, sub-contractors, supplier, associate, or representative of the company.

Managers at all levels have a responsibility to uphold the company's commitment. Managers need to support and promote the implementation of the Company Code of Conduct. To that end, managers must adhere to this Manager's Code of Conduct and also to sign the Individual Code of Conduct. This commits them to supporting the implementation of the Contractor's Environmental and Social Management Plan (C-ESMP), the OHS Management Plan, and developing systems that facilitate the implementation of the GBV Action Plan.

Managers need to maintain a safe workplace, as well as a GBV-free environment at the workplace and in the local community. Their responsibilities to achieve this include but are not limited to:

#### **Implementation**

- 1. To ensure maximum effectiveness of the Company and Individual Codes of Conduct:
  - i. Prominently displaying the Company and Individual Codes of Conduct in clear view at workers' camps, offices, and in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
  - ii. Ensuring all posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
- 2. Verbally and in writing explain the Company and Individual Codes of Conduct to all staff.
- 3. Ensure that:
  - i. All direct reports sign the 'Individual Code of Conduct', including acknowledgment that they have read and agree with the Code of Conduct.
  - ii. Staff lists and signed copies of the Individual Code of Conduct are provided to the OHS Manager, the GBV Complaints Team (GCT), and the client.
  - iii. Participate in training and ensure that staff also participate as outlined below.
  - iv. Put in place a mechanism for staff to:
    - (a) report concerns on ESHS or OHS compliance; and,
    - (b) confidentially report GBV incidents through the Grievance Redress Mechanism (GRM)
  - v. Staff are encouraged to report suspected or actual ESHS, OHS, GBV issues, emphasizing the staff's responsibility to the Company and the country hosting their employment, and emphasizing the respect for confidentiality.
- 4. In compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual

16 May 2018 5

- exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees nor ordinarily resident in the country where the works are taking place.
- 5. Ensure that when engaging in partnership, sub-contractor, supplier or similar agreements, these agreements:
  - i. Incorporate the ESHS, OHS, GBV Codes of Conduct as an attachment.
  - ii. Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Individual Codes of Conduct.
  - iii. Expressly state that the failure of those entities or individuals, as appropriate, to ensure compliance with the ESHS and OHS standards, take preventive measures against GBV, to investigate allegations thereof, or to take corrective actions when GBV has occurred, shall not only constitute grounds for sanctions and penalties in accordance with the Individual Codes of Conduct but also termination of agreements to work on or supply the project.
- 6. Provide support and resources to the GCT to create and disseminate internal sensitization initiatives through the awareness-raising strategy under the GBV Action Plan.
- 7. Ensure that any GBV complaint warranting Police action is reported to the Police, the client and the World Bank immediately.
- 8. Report and act in accordance with the agreed response protocol any suspected or actual acts of GBV.
- 9. Ensure that any major ESHS or OHS incidents are reported to the client and the supervision engineer immediately, non-major issues in accordance with the agreed reporting protocol.
- 10. Ensure that children under the age of 18 are not present at the construction site, or engaged in any hazardous activities.

#### **Training**

- 11. The managers are responsible to:
  - i. Ensure that the OHS Management Plan is implemented, with suitable training required for all staff, including sub-contractors and suppliers; and,
  - ii. Ensure that staff have a suitable understanding of the C-ESMP and are trained as appropriate to implement the C-ESMP requirements.
- 12. All managers are required to attend an induction manager training course prior to commencing work on site to ensure that they are familiar with their roles and responsibilities in upholding the GBV elements of these Codes of Conduct. This training will be separate from the induction training course required of all employees and will provide managers with the necessary understanding and technical support needed to begin to develop the GBV Action Plan for addressing GBV issues.
- 13. Managers are required to attend and assist with the project facilitated monthly training courses for all employees. Managers will be required to introduce the trainings and announce the self-evaluations, including collecting satisfaction surveys to evaluate training experiences and provide advice on improving the effectiveness of training.
- 14. Ensure that time is provided during work hours and that staff prior to commencing work on site attend the mandatory project facilitated induction training on:
  - i. OHS and ESHS; and,
  - ii. GBV required of all employees.
- 15. During civil works, ensure that staff attend ongoing OHS and ESHS training, as well as the monthly mandatory refresher training course required of all employees to on GBV.

#### Response

- 16. Managers will be required to take appropriate actions to address any ESHS or OHS incidents.
- 17. Regarding GBV:
  - i. Provide input to the GBV Allegation Procedures and Response Protocol developed by the GCT as part of the final cleared GBV Action Plan.

- ii. Once adopted by the Company, managers will uphold the Accountability Measures set forth in the GBV Action Plan to maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).
- iii. If a manager develops concerns or suspicions regarding any form of GBV by one of his/her direct reports, or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM.
- iv. Once a sanction has been determined, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of 14 days from the date on which the decision to sanction was made by the GCT.
- v. If a Manager has a conflict of interest due to personal or familial relationships with the survivor and/or perpetrator, he/she must notify the Company and the GCT. The Company will be required to appoint another manager without a conflict of interest to respond to complaints.
- vi. Ensure that any GBV issue warranting Police action is reported to the Police, the client and the World Bank immediately
- 18. Managers failing address ESHS or OHS incidents, or failing to report or comply with the GBV provisions may be subject to disciplinary measures, to be determined and enacted by the cCmpany's CEO, Managing Director or equivalent highest-ranking manager. Those measures may include:
  - i. Informal warning.
  - ii. Formal warning.
  - iii. Additional Training.
  - iv. Loss of up to one week's salary.
  - v. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
  - vi. Termination of employment.
- 19. Ultimately, failure to effectively respond to ESHS, OHS, and GBV cases on the work site by the company's managers or CEO may provide grounds for legal actions by authorities.

I do hereby acknowledge that I have read the foregoing Manager's Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, and GBV requirements. I understand that any action inconsistent with this Manager's Code of Conduct or failure to act mandated by this Manager's Code of Conduct may result in disciplinary action.

Signature:	
Printed Name:	
Title:	
Date:	

16 May 2018 7

# Individual Code of Conduct Implementing ESHS and OHS Standards Preventing Gender Based Violence

I,	, acknowledge that adhering to environmental, social, health and
safety	(ESHS) standards, following the project's occupational health and safety (OHS) requirements, and
prevei	nting Gender Based Violence (GBV) is important.

The Company considers that failure to follow ESHS and OHS standards, or to partake in activities constituting GBV—be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities—constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who commit GBV may be pursued if appropriate.

I agree that while working on the project I will:

- 1. Consent to Police background check.
- 2. Attend and actively partake in training courses related to ESHS, OHS, and GBV as requested by my employer.
- 3. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in project related activities.
- 4. Take all practical steps to implement the contractor's environmental and social management plan (C-ESMP).
- 5. Implement the OHS Management Plan.
- 6. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.
- 7. Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
- 8. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- 9. Not sexually exploit or abuse project beneficiaries and members of the surrounding communities.
- 10. Not engage in sexual harassment of work personnel and staff —for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature is prohibited. E.g. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; in some instances, giving personal gifts.
- 11. Not engage in sexual favors —for instance, making promises of favorable treatment (e.g. promotion), threats of unfavorable treatment (e.g. loss of job) or payments in kind or in cash, dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.
- 12. Not use prostitution in any form at any time.
- 13. Not participate in sexual contact or activity with children under the age of 18—including grooming, or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.
- 14. Unless there is the full consent<sup>1</sup> by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or

16 May 2018

٠

<sup>&</sup>lt;sup>1</sup> **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that

- promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex (including prostitution). Such sexual activity is considered "non-consensual" within the scope of this Code.
- 15. Consider reporting through the GRM or to my manager any suspected or actual GBV by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

With regard to children under the age of 18:

- 16. Bring to the attention of my manager the presence of any children on the construction site or engaged in hazardous activities.
- 17. Wherever possible, ensure that another adult is present when working in the proximity of children.
- 18. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.
- 19. Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work related purposes" below).
- 20. Refrain from physical punishment or discipline of children.
- 21. Refrain from hiring children for domestic or other labor below the minimum age of 14 unless national law specifies a higher age, or which places them at significant risk of injury.
- 22. Comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age.
- 23. Take appropriate caution when photographing or filming children (See Annex 2 for details).

#### Use of children's images for work related purposes

When photographing or filming a child for work related purposes, I must:

- 24. Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
- 25. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
- 26. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
- 27. Ensure images are honest representations of the context and the facts.
- 28. Ensure file labels do not reveal identifying information about a child when sending images electronically.

#### **Sanctions**

I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

- 1. Informal warning.
- 2. Formal warning.
- 3. Additional Training.
- 4. Loss of up to one week's salary.

16 May 2018

-

consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

- 5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
- 6. Termination of employment.
- 7. Report to the Police if warranted.

I understand that it is my responsibility to ensure that the environmental, social, health and safety standards are met. That I will adhere to the occupational health and safety management plan. That I will avoid actions or behaviors that could be construed as GBV. Any such actions will be a breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to act mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature:	
Printed Name:	
Title:	
Date:	