

# **Minutes of Stakeholders Consultations**



**Minutes of the  
Stakeholder meeting for development of the EIA for the Regional Waste  
Management Facility at Zone 3 in Thilafushi**

Venue: Auditorium, Ministry of Environment

Date: 20<sup>th</sup> September 2018

Time: 9:00

The stakeholders for the establishment of the Regional Waste Management Facility at Thilafushi was held at Ministry of Environment and Energy on 20<sup>th</sup> September 2018. The meeting was organized by Ministry of Environment for a request by Water Solutions Pvt Ltd as the EIA consultant for the project.

The meeting was initiated by an introduction of the project by a brief introduction to the project by the project management team at the Ministry of Environment. They highlighted that ADB is financing the project in association with International Partners. Then Consultant for the project provided a detail outline of the project and the EIA Consultant provided the details of the EIA work that has been carried out as part of the project.

Mr. Kasdarli Chakir, Engineer, KOCKS CONSULT GMBH, provided a very detail outline of the proposed regional waste management facility development project for Zone III at Thilfushi. The detail account of the project included the proposed harbour rehabilitation component of the project to improve the waste acceptance area at Thilfushi, existing dumpsite rehabilitation component and the main Waste to Energy Facility component that is referred as the Regional Waste Management Facility for Zone III at Thilhafushi.

Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided an outline of the work that had been carried out as part of the EIA for the project. He highlighted that Water Solutions is undertaking a “hot water dispersion modelling work” to study the impacts of the hot water that would be discharged into the marine environment from the waste to energy plant. A dispersion modelling was done to study the stack height and the impacts of emission from the stack on the surrounding areas of Thilafushi. A geophysical study was carry out to determine the thickness of the waste that has been buried out at the landfill at Thilafushi. The consultant outlined that groundwater and marine water would be studied to establish the baseline at the proposed project site.

Aima, Engineer from GMIZ informed, GMIZ has plans to construct a new road from the periphery (southern side) of the newly reclaimed area at Thilfushi. This is to facilitate the ease of transportation between the eastern and western side of the halves of the island as the existing road that has been build is not expected to meet traffic demand that is expected in the future and establishment of the industries at Thilhafushi. However, Aiman, noted that it is just an idea that they are exploring and it has not developed into an advance stage of planning.

In reply, Chakir mentioned that the boundary of the reclaimed land is not confirmed and therefore it is difficult to see if land could be allocated for a new road. Chakir also mentioned that the proposition for this new roads shall be cleared before the procurement or any further steps. Furthermore, Chakir mentioned that ADB suggests a buffer zone for better coastal management.



Mr. Zameel from PMU suggested to have a policy level meeting to make final decision about the new road.

Mr. Ahmed Afrah Ismail EPA raised the issue of ownership of the energy that would be produced from the WTE (Waste to Energy Facility) and other valuable by products.

Chakir replied that the ownership and responsibility of the products from WTE has not been decided. This includes energy from waste to energy, metals and bottom ash. Excess energy will be converted into hot water and discharge to the sea. A business model shall be made to determine a percentage profit for the operators.

EPA also asked if it would be feasible for the operators to run without selling the energy produced.

Chakir replied that WAMCO will establish a tariff system. Operators will charge a gate fee as well. Taxpayers will have to subsidize the burning of waste.

In reply to EPA's question regarding the air pollution control for the system, Chakir provided details of the project stating that it would be the contractor's responsibility and obligation. There will live monitoring and external controls to ensure that air pollution from the stack is within the acceptable range. EPA should also have access to this data and shall be able to run individual assessments. The facility owner is MEE and as EPA is under MEE, EPA has a right to monitor and conduct regular monitoring. Operator will have to maintain emissions under international standards and currently there are no local air quality standards.

Ms Shaahina Ali from Parley highlighted that the proposed regional waste management facility is based on incineration. Sorting and segregation is not in the part of the entire waste management system, especially as this has started from collection, transfer and incineration. EPA also mentioned that they plan to start segregation of waste, however it discourage the citizens to segregate even in 15 years if the government plans to incinerate all the waste. They suggested that government should encourage waste reduction and sorting, either from a centralized or a decentralized system.

WAMCO replied saying that a sorting facility cannot be accommodated in the Male' transfer station and there will be a civic amenity facility at Hulhumale' where people can bring in their sorted waste.

Concerns were raised if all waste materials will be bailed if the WTE is down, to which Chakir replied that there is bunker with a capacity of 6 days. There is also a second line of at WTE, so there will not be complete shutdown of the system. He also added that a third line is foreseen in 15 years as the waste generation is expected to increase to 700 tonnes per day.

Moosa Haneef from HPA mentioned that the healthcare waste is not pretreated and if the waste management system can incinerate this waste at the waste management facility. EPA also inquired whether the proposed facility could incinerate hazardous waste. It was noted from the consultant that waste to energy plant can manage small quantity of the waste. However batteries should not be incinerated. Chakir replied that the 5 small incinerators were specially designed for healthcare waste.

WAMCO – can incinerator take large aluminum? Yes, there will be magnets and sieving.



EPA questioned when the open burning will stop in Thliafushi, to which the project manager replied that it will be done after obtaining the required machinery such as excavators and bulldozers.

Parley for the Oceans asked if the Male' Waste Transfer facility is under this project to which Chakir replied that it is, and so is Villingili and Hulhumale' Transfer Station. Parley inquired whether the facility could incinerate used tires. The consultant noted that the tires are high calorific value item that can be incinerated.

EPA asked of the capacity of the incinerator was designed for and if the design foresees a decrease in waste generation. The concept of the project does not seem to focus on waste reduction but the opposite. Chakir mentioned that this was the best feasible option for management waste that is generated in Zone III. Waste generation of 400tonnes per day without CnD waste is expected for 2022. Waste is also expected to increase from the tourism industry and after the airport development project is completed. There needs to be policy level changes to incorporate and implement sorting and waste reduction, such as less packaging. The proposed method is a safe treatment that technical and realistic.

GMIZ question about the kind of traffic that is expected after the project. Chakir replied that not much increase is expected. For the island connections, 2 to 3 vessels are expected to increase. Sometimes resorts bring in waste from the islands.

EPA noted that incineration should be the last option to consider after sorting, composting and pyrolysis. WS and KOCKS suggested sorting with colored plastic bags but was not considered due to management issues. Germany has been doing this and they have 70% sorting after 30 years of awareness.

Currently there is no hazard waste management but there should be.

**Attendance**

Following officials attended the stakeholder meeting that was held at Ministry of Environment and Energy

<b>Name</b>	<b>Title</b>	<b>Organization / Address</b>	<b>Contact</b>
Mohamed Hamdhaan	Assistant Project Coordinator	Ministry of Environment and Energy	7681878
Ibrahim Zameel	Project Manager	Ministry of Environment and Energy	7794959
Aminath Maleeha Sollih	Procurement Specialist	Ministry of Environment and Energy	7931645
nafha.aujaz	Environment Analyst	Ministry of Housing and Infrastructure	3004110
Aishath Bariya	Engineer	Ministry of Housing and Infrastructure	3004110
Moosa Haneef	SDHPO	Health Protection Agency	7423180
Ismail Ubaidh	CS Manager	WAMCO	7931008
Ahmed Shafiu	BD & Marketing	WAMCO	7698899
Aminath Nazra	Project Officer	Save the Beach	7620044
Aminath Mohamed	Environment Analyst	Environment Protection Agency	7504494
Shaahina Ali	Executive Director	Parley for the Oceans	7771341
Ahmed Afrah Ismail	Engineer	Environment Protection Agency	9690600
Aiman	Engineer	Greater Male' Industrial Zone	7236734
Ahmed Jameel	Environment Consultant	Water Solution	7785379
Nashfa Nashidh	Junior Environmental Consultant	Water Solution	9533094
Kasdarli Chakir	Engineer	KOCKS CONSULT GMBH	+49 261 1302 112



**Water Solutions Pvt. Ltd.**

Ma.Fas Eri, Ameenee Magu, Malé, Maldives, Reg. No:C-344/2005

### Photos from the Stakeholder Meeting





**Water Solutions Pvt. Ltd.**

Ma.Fas Eri, Ameenee Magu, Malé, Maldives, Reg. No:C-344/2005





## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ގަވާއިދު

# Minutes of the Meeting

**Meeting Title:** GMEIWP ADB Mission Meetings- Stakeholder Consultation 1

**Date:** 5<sup>th</sup> August 2019

**Location:** Ministry of Environment

## Participants:

- Ministry of Environment (ME)
  - Mohamed Asif- Social and Environmental Safeguard Specialist.
  - Hana Farook- Assistant Project Coordinator
- Asian Development Bank (ADB)
  - Luca Di Mario- Urban Development Specialist/Project technical Leader
  - Ninnete Pajarillagu- Environment Specialist
  - Emma Marsnene- Senior Environmental Specialist
  - Miguel Diangan Jr- Environment Safeguards Consultant
- Asian Infrastructure Investment Bank (AIIB)
  - Irish Fe Aguilar- Social Development Specialist
- Water Solutions
  - Ahmed Jameel- Senior Consultant
  - Mohamed Umar- Junior Environmental Consultant.
- Others
  - Chathuranga- Environment & Sustainability Manager, Crossroads
  - Pradeep Kumar- Chief Engineer, Adaaran
  - Mohamed Faruhad, Assistant Chief Engineer, Vellasar
  - Sidath Anuruddha Paskuwal Handi, Chief Engineer, Vellasar
  - Mohamed Sinan, Environmental Officer, Ministry of Tourism



## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ސަރުކާރުގެ ގެޒެޓް

- Mariyam Nasheetha Nasheed- Director, Ministry of Gender, Family and Social Services
- Aminath Nizar- Project Director- Ministry of National Planning and Infrastructure.
- Ahmed Aiman Shareef- Project Coordinator, Greater Male' Industrial Zone
- Shamau Shareef- Deputy Mayor- Male' City Council
- Jerome Manuel- Area Chief Engineer- Centara Resort

### *Points presented:*

- A series of stakeholder consultations would be held.
- An overview of the project through a video of the project was presented.
- It was noted that until the incinerator is operational, the waste collected would be bailed and kept.
- Participants were informed that emissions and impacts from the project would be within accepted levels
- Participants were informed numerous studies such as arithmetic surveys, marine surveys and dispersion modelling were conducted to ensure there were no impact on the environment.
- Participants were informed that the results from the marine survey indicated the sediment from the proposed site were more deteriorated than from the outside, but were within acceptable levels as per New Zealand standards
- It was noted that the ambient air quality was measured and that it showed that burning occurred during the weekdays.
- It was noted that a German model had been used for pollutant dispersion modelling and that it indicated that there was no impact from the 50m stake.
- Participants were informed that surveys were conducted for where the outfall for the cooling process would be and that it had indicated the coral colour was good in the southern part.
- It was informed that the water dispersion model was modelled at depths of 10m, 20m, 30m from the mean sea level for temperatures 5 degrees, 7.5 degrees and 10 degrees. It was noted temperatures greater than 10 degrees were not considered as per EPA's recommendation and that even at 10 degrees despite being indicated as red there was not much difference from the ambient depth.

## C



### Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ސަރުކާރުގެ ގެޒެޓް

- A participant raised concern that a German model had been used and it was informed that this was a normal model.
- Participants inquired if the project had considered the increasing population, development projects and increased resorts expected in the zone. It was informed that the growth had been forecasted and taken into consideration during the feasibility studies.
- A participant inquired how the "oily waste" would be generated and it was informed that the primary focus of the project was addressing the solid waste issue in the country.
- A participant voiced that currently depending on the direction of wind many activities planned in the resort have to be cancelled due to the flies and smoke. It was inquired if smoke emissions from the WTE would be seen and how the issue of floating waste in the sea would be addressed, It was informed that there would be no smoke to be seen from the WTE plant and that all waste would be collected and transported by WAMCO in containerized vehicles in the sea thus there would be no spillage of waste.
- Participant inquired if during the transition period any measures would be taken to address the flies and it was informed that the waste collected would be covered.
- 
- A participant raised concerns that some resorts and individuals would still continue dump in the sea if they did not want to pay for the services of WAMCO.
- A participant inquired if there was any monitoring mechanism to assess the impact on the health of the people once the project is implemented. It was noted that this was something which could be considered.
- It was suggested to put an additional road in Thilfaushi to accommodate the increased traffic and future development projects. However, it was noted that the increased traffic would not be enough to justify a road.
- It was agreed to have a discussion with the City Council and Greater Male' Industrial Zone Pvt Ltd to discuss ongoing projects
-



## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ގަވާއިދު

# Minutes of the Meeting

**Meeting Title:** GMEIWP ADB Mission Meetings- Stakeholder Consultation (Thilafushi)

**Date:** 6<sup>th</sup> August 2019

**Location:** Ministry of Environment

## Participants:

- Ministry of Environment (ME)
  - Mohamed Asif- Social and Environmental Safeguard Specialist.
  - Hana Farook- Assistant Project Coordinator
- Asian Development Bank (ADB)
  - Luca Di Mario- Urban Development Specialist/Project technical Leader
  - Ninnete Pajarillagu- Environment Specialist
  - Emma Marsnene- Senior Environmental Specialist
  - Miguel Diangan Jr- Environment Safeguards Consultant
- Asian Infrastructure Investment Bank (AIIB)
  - Irish Fe Aguilar- Social Development Specialist
- Water Solutions
  - Ahmed Jameel- Senior Consultant
  - Mohamed Umar- Junior Environmental Consultant.
- Others
  - Hisham- Assistant Manager, Asrafee
  - Hassan Zareer- General Manager, Maldives Ports Limited
  - Ahmed Ibrahim- Manager, MPL
  - Ali Nashid, GM, Target
  - Mohamed Akman- Admin, Agas Maldives

## C



### Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް ގައި ބަޔާންކުރި ގޮތުގައި  
މިއަހަރުގެ ފެބްރުއަރީ ގައި

- A participant raised concerns that there were many unutilised lots/sites in Thilafushi and that it had become a hub for many migrant workers. It was also noted that these placed had very poor living standards and that it needed to be looked into.
- A participant suggested to incorporate the cooling system inside the plant, as it could have an impact on the corals and reefs. It was noted that due to STELCO's cooling system in the sea, the corals and reefs were being affected. Member stressed the importance of ensuring the reef is not affected and suggested to keep the cooling system 30 meters deep and 30 meters away from the reef.
- A participant inquired how the waste would be segregated and sorted, and requested for more details. Participant stressed that lease waste, mercury, hazardous waste needs to be segregated and if not the bottom ash would contain harmful residuals.
- When inquired, participants mentioned that the current state of Thilafushi poses health risks to their employees such as irritation of eyes, ears and skin, and also difficulty in breathing and an overall decline in health which increased absenteeism, affecting the productivity.
- When inquired if anyone in Thilafushi fished in the area, it was highlighted that it was possible some migrant workers may do so.
- It was agreed to share the exact location of the business lots.

**Minutes of the  
Public Hearing for the EIA for the Regional Waste Management Facility at Zone 3 in  
Thilafushi**

Venue: Auditorium, Ministry of Environment, Male', Maldives

Date: 4<sup>th</sup> September 2019

Time: 1400 hrs

---

## **1. Welcome**

Mr. Ahmed Murthaza, Director General, Ministry of Environment thanked everyone for attending the public hearing held as part of the EIA carried out for the Regional Waste Management Facility to be established at Thilafushi for zone III in the Maldives. Mr. Murthaza noted that the meeting was organized by Ministry of Environment for a request by Water Solutions Pvt Ltd as the EIA consultant for the project. Public Hearing is part of the EIA work that is being carried out for the project in accordance with ADB Safeguard Policy and EIA Regulation implemented by EPA. Mr. Murthaza introduced the project team.

The main component of the Regional Waste Management Facility, includes, the waste to energy facility and the residual landfills at Thilafushi, which would be developed under a Design Build Operate (DBO) contract where the Design-Build period is expected to be 3 years. The Operation Service period is 15 years. The Design-Build of the facility will be funded by the Government of Maldives using the proceeds of a loan co-funded by the Asian Development Bank (ADB), the Asian Infrastructure Investment Bank (AIIB), and the Islamic Development Bank (ISDB). The Operation Service component of the DBO contract will be funded by the Ministry of Environment and Energy (ME).

## **2. Purpose of the Meeting**

Mr. Ahmed Murthaza explained that the purpose of the meeting was to inform public about the Thilafushi Regional Waste Management Project as well as the EIA process that is currently underway. The public meeting were to inform public and other stakeholders of the identified key issues, to provide public and stakeholders the opportunity to raise additional issues or concerns that have not been identified in the EIA.

## **3. Presentation**

Mr. Mohamed Asif, Social and Environmental Safeguards Specialist - Greater Male' Environment Improvement and Waste Management Project, Ministry of Environment presented an overview of the project. He provided details of the Greater Male' Environment Improvement and Waste Management Project components including the waste to energy component which is the establishment of the waste to energy facility as part of the Regional Waste Management Facility at Thilafushi for Zone III. In his presentation he presented an overview of the ADB Safeguard Policy Statement (SPS) noted the components that is relevant to this project. He noted that EIA has been prepared in accordance with the requirements of ADB Safeguard Policy Statement, which categorized the Thilhafushi waste project as Category A, that required to undertake an EIA and the Terms of Reference (TOR) issued by the Environmental Protection Agency.

In his presentation, he presented the Grievance Redress Mechanism that had been developed for the project. He provided details of the mechanism outlining how the grievances could be addressed at First level, Second Level and Third Level where an individual or an interest group has the option of going to established judiciary system of the Maldives with their grievances.

Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided a detail presentation of the findings of the EIA that carried out for the Regional Waste Management Facility at Thilafushi for Zone III project. During the presentation, he provided details of the proposed Greater Male' Waste to Energy at Thilhafushi and provide a details of the context and rationale for the project. He explained the purpose of the EIA that had been carried out for the project and detail out the objectives of the EIA. The Terms of Reference issued for the project from EPA was presented and highlighted the key issues that was highlighted in the TOR. The EIA Consultant presented the approach the EIA team took undertake the EIA Study. The findings of the study was presented in very details including the existing environment of the study area focusing on the

---

physical environment providing the details of the topography of the site, marine water and sediment quality. Marine environment of study area was presented by covering the coral reef, marine water quality and sediment quality. The context of climate change and disaster risks were presented. The legislative and regulatory consideration which is important to the project was highlighted. The results of the air quality monitoring that was carried out for the baseline monitoring were presented.

After presenting the existing environment of the project site, significant environmental impacts were presented. These includes the environmental impacts during the construction stage and operation phase of the project. During the presentation, a very detail account of the hot water dispersion modelling work that was carried to study the impacts of hot water on the marine environment, air pollutant dispersion from the stack emission was presented.

One of the objectives of the EIA is to minimize or avoid environmental impacts from the project activities. The aspects that had been integrated into the design of the project was highlighted which are part of the impact mitigation measures identified in the EIA. Similarly the mitigation measures that was recommended to be undertaken during the construction and operation phase of the project were presented.

The alternatives to the project were also presented. Some of these were considered during the early stage of the project development.

As a last component of the presentation was the presentation of the Environmental Management Plan proposed for the project. This included the proposed environmental monitoring to monitor the impacts of the project during the construction and operation phase of the development. Additionally Health and Safety, Environmental Management Capacity and proposed Environmental Emergency Response Plan was presented.

#### **4. Questions and Discussion.**

It was asked if the residents of the area would benefit from this project.

*Mr. Asif stated that the residents of Male', Villingili, Gulheefalhu and people working at Thilafushi would benefit directly from this project. The project would extinguish the smoke from Thilfushi dumpsite and waste to energy facility will help to manage, treat and dispose waste in a manner an acceptable way that will have no impact on the communities living around the facility. He explained that the project would also generate jobs for the entire region, not just the community.*

A participant asked why a large Incinerator has been proposed to manage the waste. He asked why sorting and reuse of waste has been not proposed as the method to manage the waste that is generated from Greater Male' Region.

*Consultant answered to the question by saying that 3R strategy has been considered while developing the Regional Waste Management Project for the Greater Male' region and Zone III. Waste to Energy facility was considered as a measure to reduce the volume of waste that would go final landfilling as bottom ash and fly ash. Presently allocated land for land filling can be used for 15 years without bottom ash recycling. If bottom ash can be reused, then the life the landfill would be extended. Due to this reason the other methods for final treatment of waste has not been feasible in the Maldives.*

A participant raised the question that incinerator would be fueling by high calorific materials such as plastics and this would become a disincentive to minimize the use of single use plastic.

*Though waste to energy is main component of the regional waste management system at Thilhafushi, the sorting of the waste could be carried out at source, at transfer station and at*

---

waste receiving area of Thilfushi. The waste management system developed for the Zone III does not discourage sorting, reduction of single use plastic and reuse of waste. These streams would improve in the future as a result of the public awareness and education programs that would be implemented as part of the project.

A participant raised the question that waste to energy plant will burn all type of waste. This will move the public away from sorting of the waste at source such as household and offices.

*Consultant replied during the feasibility study stage of the project different methods and technologies for the management of waste was considered.*

*saying that a sorting facility cannot be accommodated in the Male' transfer station and there will be a civic amenity facility at Hulhumale' where people can bring in their sorted waste.*

A participant raised the question that he wanted to know how much the tax payers will be paying to the DBO contractor to run the waste to energy plant at Thilafushi

*Consultant replied that WAMCO or ME will establish a tariff system. Operator will charge a gate fee as well. Taxpayers will have to subsidize the management of waste. Mr. Murthaza clarified that the Ministry and the project team is in discussion to work out a tariff system that would not be a burden the public but it would generate enough revenue to keep the operations in a sustainable mode.*

A participant raised the question that why Ministry of Energy is undertaking an energy project not a waste management project to address the current urgent waste issue at Thilafushi.

*Mr. Murthaza answered to this question. He stated that the Ministry of Environment has no intention of implementing an energy project. The proposed project is a waste management project. Waste to Energy specialist working for this project have noted that the waste incinerator with or without the waste to energy system would have no impact on the efficiency of the incinerator. However with a waste to energy system, the plant can generate 8MW of electricity which can be used for Thilafushi and for the Greater Male' Region with the government vision of having a bridge which connects Male' to Thilafushi.*

A participant raised the question that hazardous and medical waste cannot be treated at a waste to energy plant. So how this kind of waste generated in Male' can be managed or treated.

*It was noted from the consultant that waste to energy plant can manage small quantity of the waste. However batteries should not be incinerated. Mr. Murthaza replied that the hazardous waste would be separated, stored in appropriate containers.*

A participants raised the issue of ownership of the energy that would be produced from the Waste to Energy facility and other valuable by products.

*Mr. Murthaza. replied that the ownership and responsibility of the products from Waste to Energy facility has not been decided. This includes energy from waste to energy, metals and bottom ash. Excess energy will be converted into hot water and discharge to the sea. One of the options that is being discussed to have a business model would be made to determine a percentage of profit from sale of such projects to the operator.*

A participant enquired when the open burning will stop at Thilafushi.

*Mr. Asif replied stating that one of the most priority of the project is to stop the burning and extinguish the smoke from Thilafushi. The project is trying to procure urgently needed equipment to better manage the existing dumpsite at Thilfushi. With this intervention, WAMCO will be able to cover the waste that is dumped to the waste mount on a daily basis which will*

---

*prevent the fire and smoke. The project is also recruiting an expert on managing the dumpsite who will train and oversee the operation of WAMCO at Thilafushi dumpsite.*

A participant enquired about the capacity of the incinerator that had been designed for and if the design foresees a decrease in waste generation.

*The consultant explained that during the feasibility stage a number of scenarios was considered. The proposed design has a number of mechanism to mitigate the risk either waste received is higher than the forecasted amount or lower than the forecasted value. Waste generation of 500 tonnes per day without CnD waste is expected for 2022. Waste is also expected to increase from the tourism industry and after the airport development project is completed. There needs to be policy level changes to incorporate and implement sorting and waste reduction, such has less packaging. These would help to lower the growth of amount of waste generation. This can delay the construction of the third line in the waste to energy facility.*

A member of the community enquired whether they could see the final draft of the EIA and the studies that had been completed as part of the project. He also enquired whether he could submit comments to EIA when it released to the public.

*The consultant explained that the draft final report will be made public at ADB and EPA website. ADB will make it public for commenting for 3 months as part of the ADB ADB Safeguard Policy Statement for Category A project. Hence the public is encouraged to submit comments and concern to the project. Mr. Asif also explained that through the Grievance Redress Mechanism for the project, the public can address their Grievances to the project during the project implementation stage. Any comments or concern raised would be considered by the project team.*

## **5. Closure**

The meeting ended at 1530.

## Photos from the Public Hearing Meeting





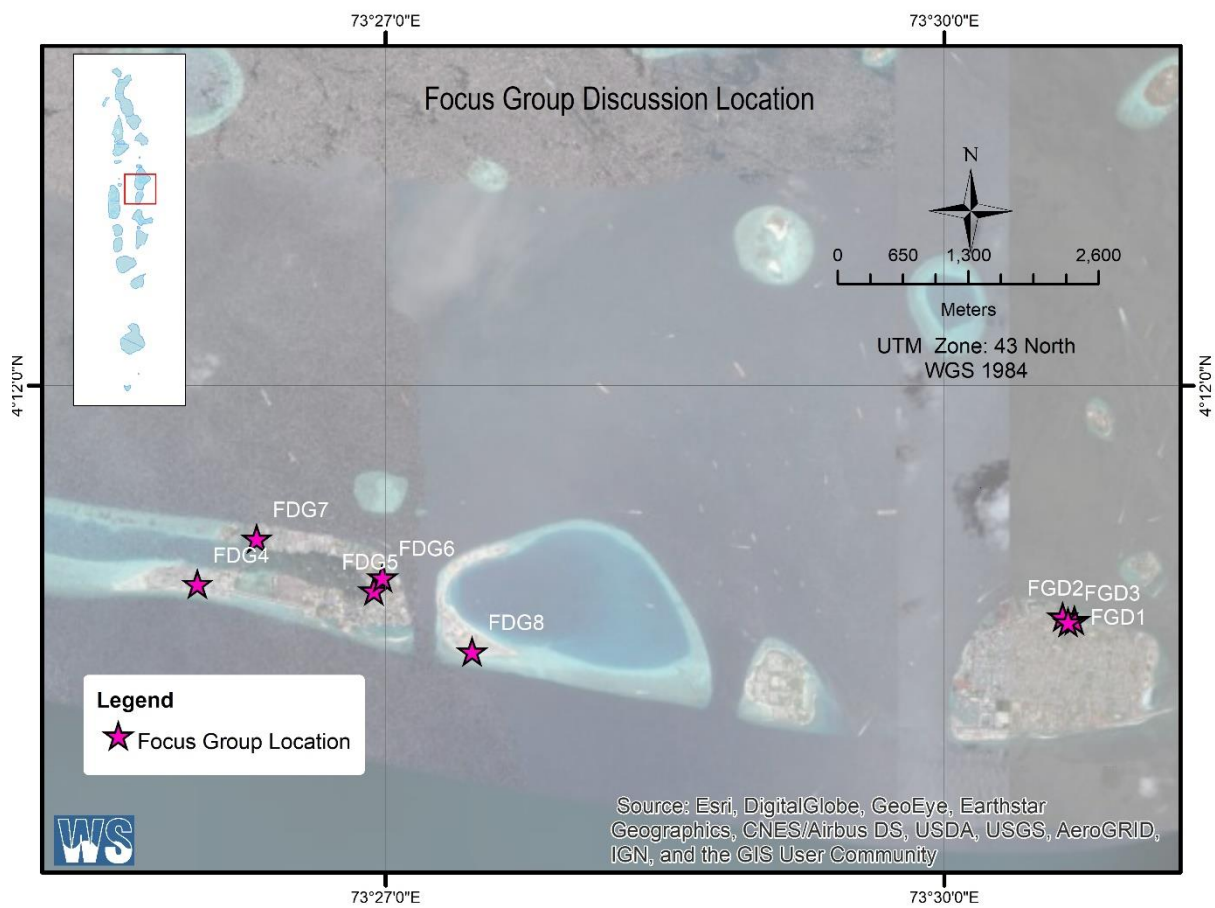
**Minutes of the Focus Group Discussions**  
**EIA for the Regional Waste Management Facility at Zone 3 in Thilafushi**

---

## Table of Contents

1	Locations where Focus Group Discussion were held .....	3
2	Focus Group Discussions 1 .....	4
3	Focus Group Discussions 2 .....	6
4	Focus Group Discussions 3 .....	8
5	Focus Group Discussions 4 .....	11
6	Focus Group Discussions 5 .....	13
7	Focus Group Discussions 6 .....	15
8	Focus Group Discussions 7 .....	18
9	Focus Group Discussions 8 .....	21

## 1 Locations where Focus Group Discussion were held



---

### 3 Focus Group Discussions 1

Venue: Jumhoori Park, Male', Maldives

Date: 30<sup>th</sup> August 2019

Time: 1630 hrs

A focus group discussion was carried out with the expatriates living in Male'. The expatriate communities comes to the Jumhoori Park Public Square on Friday afternoon. The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist - Greater Male' Environment Improvement and Waste Management Project, Ministry of Environment. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

The FDG were women and all of them in the group have not been to Thilafushi. They are mostly domestic workers working at houses in Male'. However they have seen the smoke rising from Thilafushi from western side of Male'. Some of them said they have experience the bad smell coming from Thilafushi on some days.

Some of the members in the group said they have friends who have visited Thilafushi and they said the island has a very big waste dumpsite. Some days the waste site is on fire.

The group felt that improving the waste management at Thilafushi will improve the condition of people working at the island.

#### Closure

The meeting ended at 1700 hrs

#### Attendance - Focus Group Discussions 1

Following people were at FDG. Most of the people in the group were reluctant to give details of their contact.

Name	Gender	Country	Contact
Latha	Female	Work as a housemaid. Expatriate from India	-
Nirumalee	Female	Work as a housemaid. Expatriate from India	-
Dharushinee	Female	Work as a housemaid. Expatriate from India	-
Charanjeet	Female	Work as a housemaid. Expatriate from India	-
Phrajeet	Female	Work as a housemaid. Expatriate from India	-
Anjali	Female	Work as a housemaid. Expatriate from India	-
Gittu	Female	Work as a housemaid. Expatriate from India	-
Paramjit	Female	Work as a housemaid. Expatriate from India	-
Baljeet	Female	Work as a housemaid. Expatriate from India	-
Mamta	Female	Work as a housemaid. Expatriate from India	-
Thn	Female	Work as a housemaid. Expatriate from India	-
Sarita	Female	Work as a housemaid. Expatriate from India	-

---

## Photos from the Focus Group Discussions 1



---

## 4 Focus Group Discussions 2

Venue: Jumhoori Park, Male', Maldives

Date: 30<sup>th</sup> August 2019

Time: 1710 hrs

A focus group discussion was carried out with the expatriates living in Male' at Jumhoori Park Public Square on Friday afternoon. The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist - Greater Male' Environment Improvement and Waste Management Project, Ministry of Environment. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

Everyone in the group knows about Thilafushi as they know it is place they can find work easily. Some of them have been Thilafushi and knows about the smoke and its impact on the people on the island. Most of the people in the group were employed as construction workers working at construction sites in Male'.

The group felt that improving the waste management at Thilafushi will improve the condition of people working at the island.

### Closure

The meeting ended at 1730 hrs

### Attendance - Focus Group Discussions 2

Following people were at FDG. Most of the people in the group were reluctant to give details of their contact.

Name	Gender	Country	Contact
Akash	Male	Expatriate from Bangladesh working as a construction laborer	-
Shahidul	Male	Expatriate from Bangladesh working as a housemaid	-
Prito	Male	Expatriate from Bangladesh working as a construction laborer	-
Manzoor	Male	Expatriate from Bangladesh working as a house helper	-
Anawar	Male	Expatriate from Bangladesh working as a construction laborer	-
Hossain	Male	Expatriate from Bangladesh working as a house worker	-
Sarker	Male	Expatriate from Bangladesh working as a construction laborer	-
Munes	Male	Expatriate from Bangladesh working as a house helper	-
Wasif	Male	Expatriate from Bangladesh working as a construction laborer	-
Reza	Male	Expatriate from Bangladesh working as a construction laborer	-
Athiu	Male	Expatriate from Bangladesh working as a paint worker	-
Sharee	Male	Expatriate from Bangladesh working as a house helper	-

---

## Photos from the Focus Group Discussions 2



---

## 5 Focus Group Discussions 3

Venue: Jumhoori Park, Male', Maldives

Date: 30<sup>th</sup> August 2019

Time: 1740 hrs

A focus group discussion was carried out with the Maldivians living in Male' at Jumhoori Park Public Square on Friday afternoon. The group mainly had Maldivian women who were at the park. The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist - Greater Male' Environment Improvement and Waste Management Project, Ministry of Environment. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

Everyone in the group knows about Thilafushi. Some of the women were from islands who were visiting Male'. Everyone in the group knew Thilafushi is the island where waste is taken from Male'. They said the waste taken at Thilafushi is burnt as they have seen smoke rising from big mountain at Thilafushi. Some people in the group said some days, they can smell really bad from the smoke coming from Thilafushi. The people in the group said the smoke at Thilafushi need to be stopped. A group member asked when the fire will be stop at Thilafushi. She was told that one of the main priority of the project is to stop smoke risking and this is an urgent work that will be carried out. The group was informed that the implementation of the Greater Male' Waste to Energy Project will not have visible smoke emitting from the long stack that would be constructed at Thilafushi.

The group felt that improving the waste management at Thilafushi will improve the condition of people working at the island.

As we were concluding the FGD, Vice President of Maldives came to the park with his son. He met the members of the FGD.

### Closure

The meeting ended at 1800 hrs.

### Attendance - Focus Group Discussions 3

Following people were at FDG. Most of the people in the group were reluctant to give details of their contact.

Name	Gender	Country	Contact
Nadheema	Female	Maldivian	-
Amira	Female	Maldivian	-
Shareef	Female	Maldivian	-
Fathimath	Female	Maldivian	-
Aishath	Female	Maldivian	-
Nihaani	Female	Maldivian	-

---

### Photos from the Focus Group Discussions 3





---

## 6 Focus Group Discussions 4

Venue: Thilhafushi, Maldives

Date: 1<sup>st</sup> September 2019

Time: 1000 hrs

A focus group discussion was carried out with the people working at Thilhafushi, west of the proposed waste to energy project site. The group mainly had expatriate workers and Maldivian supervisor who were doing some construction work at Thilhafushi. The group members said that they have been working at Thilafushi over a year. All of the group members comes to work at Thilhafushi in the morning and leave to Male' in the afternoon. They take the public ferry to Thilhafushi.

The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

Everyone in the group knows about smoke issuing facing Thilafushi as they have to cross the site on a daily basis. The group member said, the situation of smoke depends on the wind direction. If they have to work downwind, the situation becomes very difficult. Some days, they have to stop work because the smoke makes it impossible for them to work. The group members said, urgently the smoke issue need to be addressed and better waste management need to implement at Thilhafushi. The group member said they have seen a number of development near the waste dumpsite. They pointed out new land had been reclaimed and new equipment had been installed to manage the waste.

A group member asked when the fire will be stop at Thilafushi. He was told that one of the main priority of the project is to stop smoke risking and this is an urgent work that will be carried out.

The group felt that improving the waste management at Thilhafushi will improve the condition of people working at the island. They said they hope that the big stack at the new waste to energy plant will not have any visible smoke emitting from the long stack that would be constructed at Thilhafushi.

### Closure

The meeting ended at 1030 hrs.

---

## Attendance - Focus Group Discussions 4

Following people were at FDG.

Name	Gender	Country	Contact
Abdul Mannan	Male	Maldivian	7967447
Al Ameen	Male	Expatriate from Bangedhesh working as a construction laborer	-
Santil	Male	Expatriate from Bangedhesh working as a construction laborer	-
Mumeen	Male	Expatriate from India working as a construction laborer	-
Algiri	Male	Expatriate from Bangedhesh working as a construction laborer	-
Balaau	Male	Expatriate from India working as a construction laborer	-
Amir	Male	Expatriate from Bangedhesh working as a construction laborer	-
Shahid	Male	Expatriate from Bangedhesh working as a construction laborer	-
Haleem	Male	Expatriate from Bangedhesh working as a construction laborer	-

## Photos from the Focus Group Discussions 4



---

## 7 Focus Group Discussions 5

Venue: Thilhafushi, Maldives

Date: 1<sup>st</sup> September 2019

Time: 1100 hrs

A focus group discussion was carried out with the people working at Heavy Force Site 2 at Thilhafushi. The site is located north east of the proposed waste to energy project site. A total of 8 people participated in the discussion: 6 were Bangladeshi and two were Maldivian. All of the Bangladeshi participants are employed under “laborer” visas. However, their work ranged from cleaning the barge to driving vehicles. The two Maldivians worked in supervisory positions. All of the group members has been living at Thilafushi for more than one year.

All of the participants said they would be willing to continue to work in their current jobs even though the site is impact from the heavy smoke from the waste dump site. At night Thilhafushi is a very quiet place. A participant told that at night, they would some time hear explosion from the dumpsite as bottles and canister catches fire.

The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

The group member said, the situation of smoke depends on the wind direction. If they have to work downwind, the situation becomes very difficult. Some days, they have to stop work because the smoke makes it impossible for them to work. During the discussion, issues related when the smoke would be extinguish, when the project start and what will to the surrounding area after the completion of the project were covered.

The group felt that improving the waste management at Thilhafushi will improve the condition of people working at the island.

### **Closure**

The meeting ended at 1100 hrs.

---

## Attendance - Focus Group Discussions 5

Following people were at FDG.

Name	Gender	Country	Contact
Shahid Haleem	M	Maldivian, Supervisor, Heavy Force	7902107
Hussain Fayaz	M	Maldivian, Excavator Driver, Heavy Force	7920107
Haithim	M	Bangladesh, Labourer, Heavy Force	
Sumon MD	M	Bangladesh, Labourer, Heavy Force	
Shibu bai	M	Bangladesh, Labourer, Heavy Force	
MD Suhail	M	Bangladesh, Labourer, Heavy Force	
MD Turaab	M	Bangladesh, Labourer, Heavy Force	
MD Suraab	M	Bangladesh, Labourer, Heavy Force	

## Photos from the Focus Group Discussions 5



---

## 8 Focus Group Discussions 6

Venue: Waste Management Site at Thilhafushi, Maldives

Date: 1<sup>st</sup> September 2019

Time: 1230 hrs

A focus group discussion was carried out with the people working at Thilhafushi waste management site. The focus group discussion was held at WAMCO Office during their lunch time break hours. A total of 13 people participated in the discussion: 11 were Bangladeshi and two were Maldivian. All of the Bangladeshi participants are employed under work permit working at Thilafushi. Their work ranged from cook to excavator drivers. The two Maldivians worked in supervisory positions. Most of the group members has been living at Thilafushi for more than one year. The supervisors comes to Thilhafushi to work and return back to Male' in the afternoon. They take the public ferry to Thilhafushi.

The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

Everyone in the group are familiar with smoke issuing facing Thilafushi as they work at the waste management site on a daily basis. Most of the members of the group have bad experiences working in the smoking conditions. Some said, they get red eyes when they work and others said they get throat infection. Some say, they have to take sick leave on regular basis.

The members of the group said, the smoke from the dumpsite could be extinguish when they get additional heavy machineries to handle the waste and manage the dumpsite. The group felt that improving the waste management at Thilhafushi will improve the condition of people working at the island. All of the participants said they would be happy to continue to work at Thilhafushi when the dumpsite is properly managed. Some of the participants said they did not have any concerns of losing their job in the future, when the project is completed.

### Closure

The meeting ended at 1300 hrs.

---

## Attendance - Focus Group Discussions 6

Following people were at FDG.

Name	Gender	Country	Contact
Hazim Ibrahim	M	Maldivian, Assistant Manager, WAMCO	799146
Mohamed Asraf	M	Maldivian, Supervision, WAMCO	9908430
Mohamed Yoosuf	M	Bangladesh, Driver, WAMCO	
Sadir	M	Bangladesh, Driver, WAMCO	
Asadhul	M	Bangladesh, Driver, WAMCO	
Narayan	M	Bangladesh, Lorry Driver, WAMCO	
Oulal	M	Bangladesh, Labor, WAMCO	
Halim	M	Bangladesh, Cook, WAMCO	
Habib	M	Bangladesh, Lorry Driver, WAMCO	
Sohel	M	Bangladesh, Lorry Driver, WAMCO	
Sadik	M	Bangladesh Lorry Driver, WAMCO	
Muneer	M	Bangladesh, Lorry Driver, WAMCO	
Faisal	M	Bangladesh, Lorry Driver, WAMCO	

## Photos from the Focus Group Discussions 6





---

## 9 Focus Group Discussions 7

Venue: Thilhafushi, Maldives

Date: 2<sup>st</sup> September 2019

Time: 0930 hrs

A focus group discussion was carried out with the people working at the MTCC Boat Yard at Thilhafushi. All participants were male and their age ranged from 30 years to 50 years. The site is located directly north of the waste dumpsite at Thilafushi. The group mainly had Maldivian working at the site. Most of the members of the group had been working at Thilafushi for a long time. Some of the members in the group works and live at the site at Thilafushi. There was a high rate of job satisfaction amongst the workers. Their key reasons include high salaries, regular pay and good benefits such as food and accommodation. The group members said around 100 people work at Thilafushi site. The work at the site requires them to work outdoors all the time. Hence it makes very difficult during south west monsoon as most of the days the site is covered by the smoke. The

Most of them, especially the supervisors believed that the equipment in the Waste Management Section need to be upgraded immediately. The constant smoke from open burning, particularly during southwest monsoon when their site is directly in the path of the smoke plume, causes discomfort. Some workers said that they have got used to it and thus they no longer are able to understand its effects.

The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project.

Everyone in the group knows about smoke issuing facing Thilafushi as they see it every day which is across the bay on other side of their site. The group member said, the situation of smoke depends on the wind direction. If they have to work downwind, the situation becomes very difficult. Some days, they have to stop work because the smoke makes it impossible for them to work. Even when they come indoors, the smoke will fill the rooms and the smoke will come through the air conditioning unit. The group members said, urgently the smoke issue need to be addressed and better waste management need to implement at Thilhafushi. The group were brief that one of the activity of the project is to stop the smoke coming from the exiting dump and it will happen early next year. The group members said that because of the smoke and current situation at Thilafushi, they are unable to attract good talents and experience professionals to work at the boat building yard at Thilhafushi.

A group member said he have seen a number of cases where the workers get stick and he believes it is due to the smoke. Improve the situation at Thilafushi waste site with the proposed project will have a very positive impact on industries at Thilafushi. They would be able to improve their services by attracting good and experience professional to work at their site.

The group felt that improving the waste management at Thilhafushi will improve the condition of people working and living at the island. Everyone welcomes the project said they are hoping the implementation of the project would commence soon. They said they hope that the big stack at the new waste to energy plant will not have any visible smoke when it becomes operational.

### Closure

The meeting ended at 1030 hrs.

---

## Attendance - Focus Group Discussions 7

Following people were at FGD

Name	Gender	Country	Contact
Moahmed Husham	M	Maldivian, General Manager, MTCC	7773653
Abdulla Abdu Shakoor	M	Maldivian, Manager, MTCC	791220
Mohamed Rasheed	M	Maldivian, Engineer, MTCC	7785716
Mohmed Fahty	M	Maldivian, Engineer, MTCC	7747379
Iqbal	M	Maldivian, Engineer r, MTCC	7708026
Sameeu	M	Maldivian, Engineer, MTCC	7914961
Ghina	M	Maldivian, Engineer, MTCC	
Inrhaim Mohamed	M	Maldivian, Accounts Officer, MTCC	7795575
Abdul Shafeeu	M	Maldivian, Welder Supervisor, MTCC	7795575
Abdul Hussam	M	Maldivian, Senior Engineer MTCC	78397615

## Photos from the Focus Group Discussions 7



---

## 10 Focus Group Discussions 8

Venue: Gulheefalhu, Maldives

Date: 2<sup>st</sup> September 2019

Time: 1130 hrs

A focus group discussion was carried out with the people working and living at Gulheefalhu. Gulheefalhu is an island which is located east of Thilafushi. The group mainly Maldivian working at Greater Male' Industrial Zone Limited. The group members said that they have been working at Gulheefalhu over many years. There was one member of the group who had work at Thilafushi waste management site before he joined Greater Male' Industrial Zone Limited. He said working at Gulheefalhu is very comfortable than working at Thilafushi due to the smoke and difficulties related to the smoke. The group members said, Gulheefalhu is impact during south west monsoon on some days when the wind takes smoke over the island from Thilafushi waste dump site. Some of the group members comes to work at Gulheefalhu in the morning and leave to Male' in the afternoon. They take the public ferry to Male' from Gulheefalhu. Others live in Gulheefalhu.

The participants of the FGD were presented the Greater Male' Environment Improvement and Waste Management Project by Mr. Mohamed Asif, Social and Environmental Safeguards Specialist. Mr. Ahmed Jameel, EIA Consultant at Water Solutions provided the findings of the EIA to the group members. Colour Maps printed on A3 was used as aid to show the present situation of Thilafushi, the proposed Greater Male' Waste to Energy Project and bird eye view of Thilafushi after the completion of the project. The group were briefed that when the Greater Male' Waste to Energy project is implemented and the facility is operational in 2022/2023 there will be no emission from the stack of the incinerator.

Everyone in the group knows about smoke issuing facing Thilafushi. The group members said, urgently the smoke issue need to be addressed and better waste management need to implement at Thilafushi. The group member said they have seen a number of development near the waste dumpsite but the small incinerators that were installed at the site was a waste of money as it is not been used. The group was informed that those incinerators would be moved to other islands as these were installed temporarily.

A member of the group asked whether it is safe to fish from the Gulheefalhu house reef. The EIA consultant explained no government agency, including Health Protection Agency, Environmental Protection Agency or Marine Research Center has issued any notice restriction of fishing at the Gulheefalhu or Thilafushi House reef. It has been general practice that no fishing would be carried out from the reef nest to the waste dumpsite. Hence it would not advisable to fish from such reefs. The test carried out by the EIA team has not seen an increase of heavy metals in sediments and marine water that was sampled for the study.

The group felt that improving the waste management at Thilafushi will improve the condition of people working at Gulheefalhu. Gulheefalhu is a nice place to work, but the work condition gets deteriorated on some days because of the smoke from Thilafushi.

### Closure

The meeting ended at 1200 hrs.

---

## Attendance - Focus Group Discussions 8

Following people were at FGD.

Name	Gender	Country / Office	Contact
Ahmed Faisal	M	Maldivian, Greater Male' Industrial Zone	9930909
Mohamed Ziyaad	M	Maldivian, Greater Male' Industrial Zone	7912228
Mohamed Adil	M	Maldivian, Greater Male' Industrial Zone	7741234
Sheer Ahmed	M	Maldivian, Greater Male' Industrial Zone	9558184
Ahmed Ihrish	M	Maldivian, Greater Male' Industrial Zone	9724819
Ibrahim Razee	M	Maldivian, Greater Male' Industrial Zone	7743049
Hassan Saeed	M	Maldivian, Greater Male' Industrial Zone	7753347

## Photos from the Focus Group Discussions 8





## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ގަވާއިދު

## Minutes of the Meeting

**Meeting Title:** Public Consultation for Environmental Impact Assessment (EIA) of Regional Waste Management Facility

**Date:** 28<sup>th</sup> October 2019

**Location:** MNU Auditorium

### Participants:

- Ministry of Environment (ME) -
  - Ibrahim Zameel Project Manager
  - Mohamed Asif Social and Environmental Safeguard Specialist
  - Sham'aan Shakir Information Education and Communication Specialist
  - Hana Farook Assistant Project Coordinator
- Waster Solution- EIA Consultant
  - Ahmed Jameel EIA Consultant
- Other Participants
  - Fathimath Rishana
  - Abdullah Adam
  - Ahmed Mohamed
  - Adam Isham
  - Humaida Abdul Gafoor
  - Ahmed Afrah Ismail
  - Mariyam Mohamed
  - Juma Ahmed
  - Aleef Naseem
  - Hoodh Ahmed
  - Mohamed Rasheed (Bari)
  - Abdul Aleem



## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ވަނަ ބައި

### Points presented:

- Overview of the Project
- Results of the Environmental Impact Assessment of the Regional Waste Management Facility

### Issues raised and response:

#### Timing and venue of the public consultation

- Some of the participants raised concern that the timing of the public consultation was not ideal as it falls within the official working hours. A participant also suggested that the University Auditorium was not ideal and that the closed space would discourage people from attending the public consultation. It was suggested that future public consultations should be held after the official working hours in the evening and at a public space such as the “Jumhooree park” to encourage more people to attend.
  - *ME informed that the points mentioned would be taken into consideration for future public consultations*

#### High-level Technology fund

- A participant inquired what was meant by the high-level technology fund
  - *ME informed they would clarify and inform later. Towards the end of the discussion it was informed that a High-Level Technology Fund is a multi-donor trust fund that provides grant financing to encourage more widespread adoption of high-level technology (HLT) to address development challenges in ADB's developing member countries*

#### Capacity building

- A participant inquired since there is capacity building in phase 1, what was already being done to acquire information
  - *ME informed that a firm would be hired for capacity building activity and that that the firm would be working throughout the project to build the capacity of the community.*

#### Involvement of Women.

- A participant inquired why involvement of women was specified in awareness raising.
  - *ME noted that the project aims to increase the involvement of women throughout the different activities planned in the project and as such even the committee under the Grievance Redress Mechanism also specifies that the president of the island's women's committee be included. Women had been involved in all stages of the project development.*

#### Reduction of Waste

- A participant inquired the plans to reduce waste. Another participant added that instead of incinerating, the solution would be to reduce waste, and decrease the import of items that would create waste.
  - *ME informed that under the project there were plans to increase community awareness with regard to waste reduction. The EIA consultant added that there would be a focus on 3R under the community awareness and behaviour change strategies.*
- A participant raised concern that incineration was being used as the solution to reduce waste and stressed that incineration and re-using the ‘gunk’ from the incineration plant was not the solution.



## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ގަވާއިދު

- *In the management of waste, even after carrying out successful waste reduction strategies, there will be residual waste that need to be treated and disposed. Incineration has been recommended as an optimum technology for the Maldives. ME informed that the bottom ash could be utilised for road development and that currently a feasibility study was being undertaken.*
- A participant inquired if the government's pledge to reduce waste to 3 percent would have an impact on the operation of the plant.
  - *The proposed waste management strategy had taken account to waste reduction strategies. The proposed system would have no impact with current change of policy to ban the use of single use plastic by 2024.*

### Public involvement for the whole project

- A participant raised concern that the public consultation was only for the regional waste management facility and not for the whole project.
- Moreover, it was added that public involvement should have been at an earlier stage, before incineration was chosen as the way forward to manage waste, as it is similar to the World Bank waste management project in Vandhoo which had failed.
  - *ME noted that the waste management project for Zone III has been formulated based on the lesson learnt from the Vandhoo Project. Vandhoo project was s a Design and Build project, and the project had failed because the operator of the facility was different and the Government took a while to handover the facility to WAMCO to run the facility. The current project for the Zone III is a DBO, Design, Built and Operate, building on the lessons from Vandhoo case..*
- A participant added that they were not aware of the level of consultations which had taken place with regard to the project. And that since all government infrastructure development projects (such as the Gulhifalhu Reclamation, development of resorts on shallow, development of harbours in the islands) are related, it needs to be considered, and Mministries and other big companies needs to consulted before undertaking such a project.
  - *ME informed that stakeholder consultations had taken place at all the stages of project formulation from feasibility to EIA. During the feasibility stage, stakeholders were consulted and stakeholder meetings were held. During the designing stage of the project, stakeholders were consulted. Various stakeholders and communities meeting were held for the EIA for this project in the past 24 months. During these meetings, relevant ministries, resorts and companies had also been invited to participate in the stakeholder meetings and workshops.*
- Many participants suggested that a multi sectoral discussion should be held for the consultation to be more meaningful. It was also noted that the outcome of the stakeholder meetings was not known to the public.
- A participant inquired how much the comments received from the public would be incorporated. Another participant also inquired if the minutes of the meeting would be available.
  - *ME informed that the project formulation has been guided by the inputs from stakeholders in different stages of the project. The minutes of the consultations will be included in the EIA*

### Sustainability of the project

- A participant inquired how the project aligns to the SDG goals 1,2,3. He also added that the project had no engagement of the community. He also stressed that civil society should be part of the project instead of creating mega-companies. He also questioned if such a project would be financially sustainable and the dollar value of the cost to the community. He also inquired how the project would affect the human capital and enhance human development. He also drew

## C



### Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ސަރުކާރުގެ ގެޒެޓް

examples of the Male' Sewerage Project which in his opinion had failed and did not work as designed, because there was no proper oversight from the regulator of the company.. He also highlighted that a gap between the design, installation and operation of a project could affect the sustainability of the project, thus a systematic approach would be needed. Another participant also questioned if the approach was sustainable.

- *ME noted that the various stakeholders including NGOs and Civil Society groups has been engaged in the project development. The project aims to build the overall institutional capacity in the country. And as such, improving the institutional capacity of EPA is a priority. Moreover, since it's a DBO (Design Build Operate) project, the operational issues would be minimized and local capacity would be developed before the operation is handed over to the Ministry/WAMCO at the end of the DBO period.*
- A participant inquired if ME could assure that project would be sustainable and the sustainability plans of the project. Similarly, another participant also questioned the sustainability of the project and inquired if all these aspects had been considered.
  - *ME informed that lessons from similar projects were being considered, and feasibility studies were undertaken to ensure the project was viable.*

#### No solution for bottom ash

- A participant raised concern that there was no solution for the bottom ash produced from the WTE facility. And stressed that before the project starts there should a proper way for it to be utilised as currently its only a study which is being undertaken.
  - *EIA consultant briefed that currently there is work going to study the alternative uses for the bottom ash. Presently the study is being focused to use the bottom ash on the production of paving blocks and other similar kind of use in the construction industry. It was also noted that a key objective of the project is to address the waste issue in Thilafushi.*

#### Producer responsibility and consideration of other government projects

- A participant inquired about the details of the grant and loans and suggested that producers should take responsibility of the waste they generate, and if not, it would be a misusing state funds. As such, she highlighted that resorts are one of the biggest generators of waste and that currently waste from all resorts are being taken to Thilafushi. Thus, the participant questioned how thoroughly the project had considered all these issues, and stated that the project seems like a reactionary project and a band-aid solution. She also inquired if the increasing number of resorts and other infrastructure projects had been considered. Another participant also inquired if the population growth in the Greater Male' region had been considered.
  - *EIA consultant briefed the waste to energy facility for the zone III is being financed by ADB through a grant/concessional loan. Resorts bring the waste to Thilafushi because current regulations requires the waste from the resorts to be brought to Thilafushi for disposal. The feasibility considered that waste generated from the resorts in the zone III would be brought to Thilafushi for treatment and disposal. WAMCO will be collecting the waste from the resort and the resorts will pay collection fee to WAMCO which includes the cost of treatment/disposal. The feasibility study considered the populations in the zone III, including the planned increase of resort beds in the region.*

#### EIA

- A participant also informed that they had been requesting for the EIA and was yet to receive it. Another participant also questioned the results of the EIA, as the participant stated that Thilafushi was dead in terms of bio-diversity thus the results were questionable.
  - *ME informed that the EIA would be shared once the EIA is finalised. It was mentioned that the EIA and annexes including the studies that is part of the EIA would be made available at the ADB website soon for comments. It would be made available on the*



## Ministry of Environment

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް  
ދިވެހިރާއްޖޭގެ ބޭރުގެ ސަރުކާރުގެ ގެޒެޓް

*website for a period of 3 months. EPA would also publish it on their website, once the ME submits the final EIA to EPA.*

### Inefficiency and ineffectiveness of ME and EPA

- Participants raised concern over the ineffectiveness of Ministry of Environment and the Environmental Protection Agency. It was noted that they do not hear back from the organisations in a timely manner for other matters that they have contacted to those institutions. It was also noted that EPA should have the capacity monitor air emission levels from the project.
  - *PM noted that the project would response on any queries regarding this waste project. ME noted that part of the project is to build the capacity of EPA and strengthen institutional capacity to monitor the air pollution emissions. Air pollution emission stations are recommended to be established at Thilafushi to monitor the impacts of stack emission on Thilhafushi.*

### Other waste

- A participant inquired how hazardous waste, medical waste, construction and demolition waste, and end of life vessels would be handled at Thilafushi when this project is completed.
  - *ME noted that all the hospitals and health care facilities are required to have autoclaves to treat the medical waste before it is send to Thilhafushi for treatment and disposal. The proposed facility can manage the hazardous waste in the household. The facility would store any other hazardous waste received. The facility can receive end of life vehicles. ME noted that the facility at Thilhafushi is a municipal solid waste incinerator facility. Government is developing another facility to treat hazardous waste.*