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MINISTRY OF WATER



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Project Brief for the Proposed Public Toilet to be built at Coco Beach, Oyster Bay Mtaa, Msasani Ward, Kinondoni Municipality, Dar es Salaam Region

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ABBREVIATIONS

AAQ	Ambient Air Quality
AIDS	Acquired Immuno-Deficiency Syndrome
DAWASA	Dar es Salaam Water Supply and Sanitation Authority
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Monitoring Plan
GoT	Government of Tanzania
HIV	Human Infection Virus
HSMP	Health and Social Management Plan
IDA	International Development Association
IEC	Information, Education and Communication
KPH	Kilometer Per Hour
LGA	Local Government Authority
NEMC	National Environment Management Council
NEP	National Environment Policy
OGSP	Off-Grid Sanitation Project
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
RAP	Resettlement Action Plan
STDs	Sexual Transmitted Diseases
TMP	Traffic Management Plan

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CHAPTER ONE

1.0 BACKGROUND AND JUSTIFICATION

The Government of the United Republic of Tanzania (GoT) through the Dar es Salaam Water and Sewerage Authority (DAWASA) under the Ministry of Water intends to implement an Off Grid Sanitation Project (OGSP) in Dar es Salaam City to serve peri-urban areas not connected to the central sewerage system. DAWASA has received financing from the International Development Association (IDA) in the form of a credit to implement the project. Before implementing the project, the law in Tanzania requires an Environmental Impact Assessment to be conducted and approved by the relevant authorities. To comply with the law in Tanzania, the DAWASA intends to apply a portion of the proceeds of the credit to eligible payments for consulting services for the Preparation of Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) Report for the construction of off-grid sanitation projects.

Dar es Salaam is the largest and most important commercial and industrial center in Tanzania. The city has an estimated population of about 5,383,728 million with 2,600,018 male and 2,783,710 female and is projected to double at the end of the project horizon of 25 years. About 10% of the population is served by sewers and the rest almost depend on on-site sanitation systems. The sewer coverage is only limited to the area within the city center with a total length of 67.8km and the system is based on a separate system that discharges their effluent into oxidation ponds, and into the sea through a sea outfall of about 1.03km long. The onsite sanitation systems result in Fecal sludge of which handling and management throughout the sanitation chain (from domestic containment, transportation as well as disposal, and treatment) is currently hygienically inadequate thus posing environmental and public health risks. The Off Grid project is intended to address these challenges. The Off Grid project is divided into several subprojects which have been implemented in the five municipalities of Dar es Salaam City. Up to the implementation of the Off Grid

project, DAWASA proposed an Addendum to construct a public toilet at Coco Beach area, Oyster Bay street, Msasani Ward-Kinondoni Municipality. The toilet will mostly serve the people who established their businesses along the coastline-Coco beach (Traders) and visitors (customers). Public toilets are of great importance to the community at Coco beach for comfortability and maintaining beach sanitation, since Coco beach is one among of the very busy beaches in Dar es Salaam with large number of visitors during weekends and festival/holiday seasons. Presence of public toilet at Coco beach will help to improve the sanitation and maintain public health at the beach because people will have the places for ie washrooms hence control open defaecation.

The ESIA study will be conducted under the Environmental Management (Environmental Impact Assessment and Audit) (Amendment) Regulations, 2018 along with the Environmental Impact Assessment and Audit Regulations of 2005. These Regulations provide legal procedures for implementing the requirements of the Environmental Management Act Cap.191 of 2004. The Regulations give a mandate to NEMC to oversee the EIA process, which culminates with an award of the EIA Certificate by the Ministry responsible for Environment.

Following the EIA Regulations, NEMC is mandated to screen projects and make decisions regarding the level of EIA required as well as evaluate the adequacy of respective environmental statements. Considering the nature and size of the proposed “Public Toilet Project at Coco Beach in Kinondoni Municipality”, the project falls under Category “B2” (Non-Mandatory) following Reg.4(1)(c) and First Schedule of the amended 2018 Regulations. The regulations require developers to prepare and submit to the National Management Council (NEMC) filled EIA registration forms and “Project Briefs” for all B2 projects. The preparation and content of the “Project Briefs” are provided under Reg.6 (1). The same has been followed in preparing this “Project Brief”. The study for preparing this project brief was conducted in August 2022.

This project brief for the Proposed Construction of Public Toilet at Coco Beach in Kinondoni Municipality is being submitted to NEMC together with EIA Registration Forms for EIA Certificate decision.

1.2 NATURE OF THE PROJECT

The proposed project concerns the construction of a public toilet at the shore of Coco Beach, Oyster Bay street, Msasani ward, in Kinondoni Municipality. The nature of the project enhances environmental protection through proper handling and disposal of generated sewage; whereby there will be onsite sanitation system by using septic tank and soakway pit which are lined to protect percolation of waste, after the tanks are full are then emptied using trucks managed by DAWASA and being disposed to the Waste water stabilization ponds at Mikocheni. Also this project intends to serve all traders who established their stalls at the shore and all visitors including customers and tourists. According to the First Schedule of the EIA and Audit Regulations (Amended) of 2018, the nature of the project is small and entails no significant impacts. The project can be categorized as Type B2, which according to the regulations are “small-scale activities and enterprises that require registration but shall not require Environmental Impact Assessment. Further, the projects shall not require screening and scoping, rather, the Project Brief shall be examined and issued with an Environmental Impact Assessment Certificate”.

1.3 Project Budget

The investment cost for the proposed Public toilet is estimated to be around Tshs 45 Million which will be financed by The World Bank.

CHAPTER TWO

2.0 PROJECT DESCRIPTION

2.1 Project Location

The project site is located at Oyster Bay street, Msasani Ward, Kinondoni Municipal within the Dar es Salaam Region. The project site is geographically located at 37M UTM zone with coordinates in Table 1. The site is 6.8 Kilometers from Dar es Salaam city center. (Refer to Figure 1, and Figure 2).

Table 1: The coordinates of the project area

S/N	Coordinates	
	Easting	Northing
1	531150	9252118
2	531165	9252139
3	531148	9252140
4	531147	9252117

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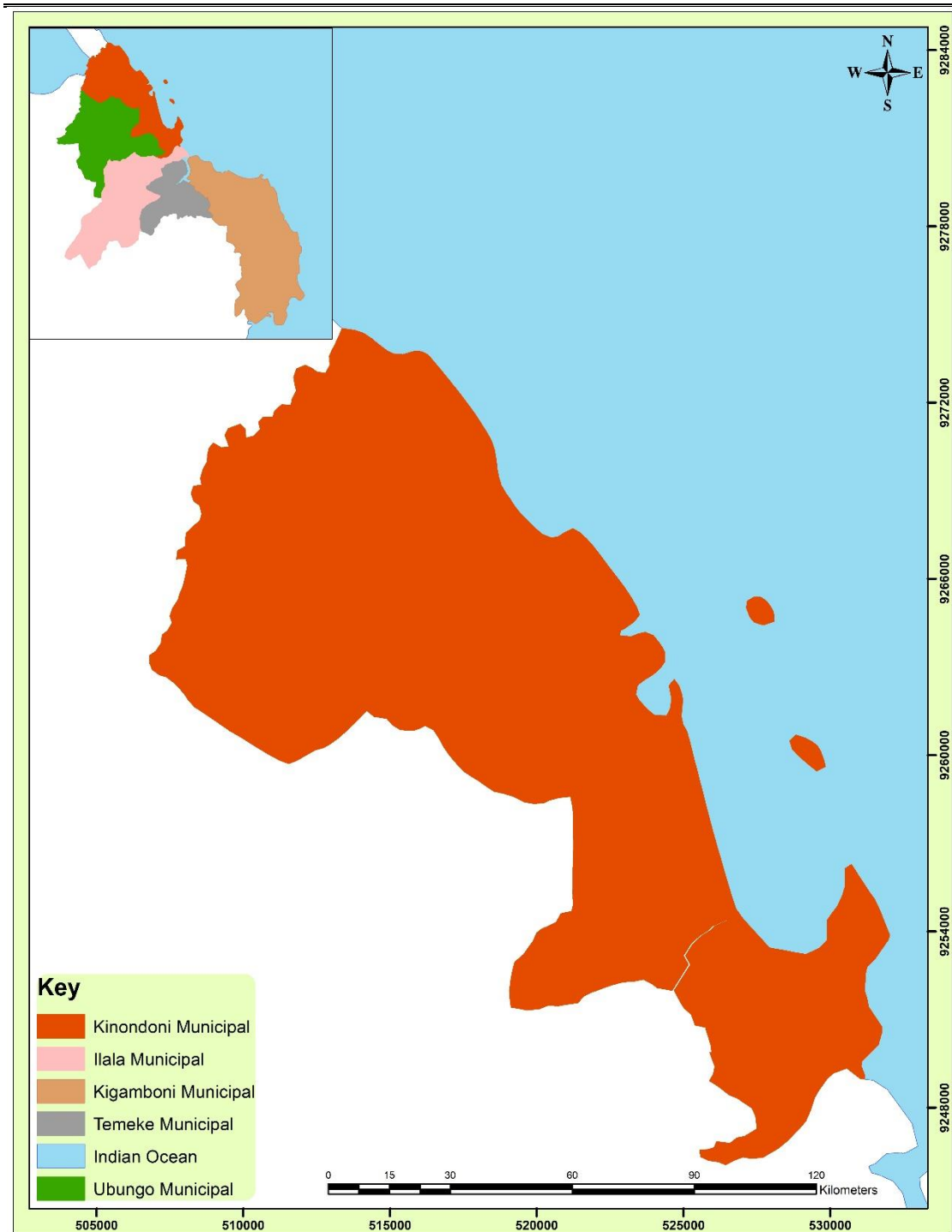


Figure 1: A Map of the Dar es salaam region showing the project Municipal

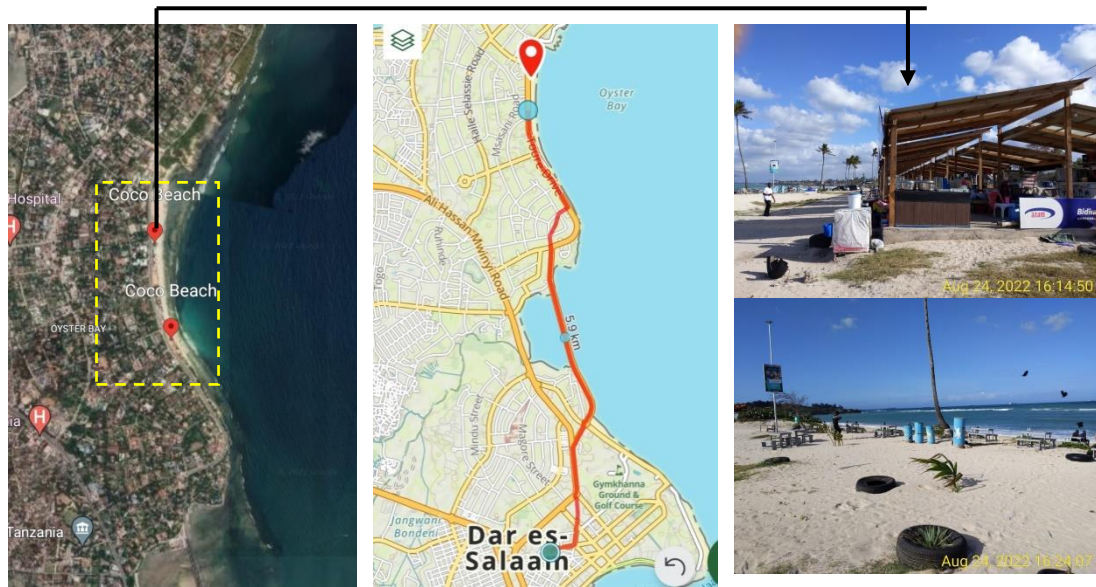


Figure 2: An Extract Google view to show the Location of the project area at Coco Beach (Accessed 28th August 2022)

2.2 Accessibility

From the City Center the proposed project site is accessible via Toure Drive, then Alihassan Mwinyi Road.

2.3 Specific Features

The project site is located about 40m from the shoreline of the Indian Ocean. Close to the project site, there are some vegetation such as; Cactus plants, Sisal, and a few Senna Siamea species, figure 3. On another side of the project site, there are stalls (Commercial) made of timber and roofed with steel sheets. The beach is provided with immovable benches and solid waste sorting facilities for easy recycling, Figure 4.



Figure 3: Vegetation close to the project site (Source: Fieldwork August 24th 2022)



Figure 4: Solid waste sorting and collection points located at coco-beach (Source: Fieldwork August 24th 2022)

2.4 Adjacent Land Use and Land Ownership

The proposed area for establishing a public toilet at Coco beach, Oyster Bay is owned by DAWASA under the memorandum of Understanding between DAWASA and Kinondoni Municipal council, the proposed project will occupy area with 400sqm located at the shoreline and within the beach area. The main land use at the proposed project site includes; business activities (cassava fries and beverages) and a variety of beach recreational activities.



Figure 5: Land use around the project site (Source: Fieldwork August 24th 2022)

2.5 Baseline information

2.5.1 Water Table and water quality analysis

Groundwater is abundant in almost the entire Dar es salaam City. This is evidenced by the fact that shallow wells are one of the sources of domestic water supply for most of the households around the project site and therefore the water table is high which is about 6m. Rises in groundwater level, can cause reductions in strength of the soil that can lead to failures of slopes. In regions of significant slope instability, significant damage to buildings can occur as a result of landslides. Lowering of the groundwater table can cause the soil to consolidate, which induces settlement.

2.5.2 Air quality

The air quality observations indicate that the general air quality in the project area is good as there is no any strange activity contributing to air pollution. However, seasonal variation as well as localized and temporal deterioration in air quality does occur. Smokes and greenhouse gases such as carbon dioxide, carbon monoxide is expected to be emitted from moving vehicles due to the burning of fossil fuels which passes at Toure drive which and other street roads closer to the project area. During construction phase, air quality of the area will be impacted and the proponent will be advised to use good quality material transportation vehicles.

2.5.3 Noise levels

The noise level at the project area is mainly due to moving vehicle along the road, moving air (wind) or rain and birds. Project activities during construction will change patterns and amplitude of noise in the project area. Operations of construction machines may cause adverse impacts on local residents, and on workers. The proponent has to ensure proper provision of ear mask to the workers and all works have to be executing during the day time.

2.5.4 Climate

Msasani ward in Kinondoni Municipality of Dar es Salaam Region in which the proposed site is located is close to the warm Indian Ocean. Kinondoni Municipality experiences a modified type of equatorial climate. It is generally hot and humid throughout the year with an average temperature of 29°C. The hottest season is from October to March while it is relatively cool between May and August with temperature around 25°C. There are two rain seasons: - short rain from October to December and long rain season between March and May. The average annual rainfall is 1300mm. Humidity is around 96% in the mornings and 67% in the afternoons. The climate is also influenced by the Southwest monsoon winds from April to October and Northeast monsoon winds between November and March. Implementation of Public toilet project will not be affected by the climate in Coco beach area because the structure has been designed in accordance to the climate of the proposed site, that means the indoor climate of the established facility will not hamper the its usage.

CHAPTER THREE

3.0 POLICIES, LEGISLATION AND INSTITUTIONAL ASPECT

According to the fundamental principles of environment, any developmental activities of this nature such as construction of Public Toilet would have socio-economic and somehow environmental impacts that must be addressed and governed in order to serve public interest and sustainable development. Given the many existing and developing environmental laws, regulations and standards in Tanzania, it is worth considering resorting to constitutional provisions to protect and manage the environment. With increasing environmental awareness in recent decades, the environment has become a higher political priority and many constitutions now expressly guarantee a 'right to a healthy environment', as well as the procedural rights necessary to implement and enforce the substantive rights granted. The public or national interest in this aspect is addressed through government Policies and regulated by Principal Acts and Regulations. The implementation of the proposed project shall touch various sectors; therefore, the developer has to comply with number of cross-sectorial policies and legislations relevant to this project. Also, the listed institutions involved in environmental management for the project is included in this chapter.

3.1 RELEVANT POLICIES

This section focuses on various policies which guide the development aspects for sustainable vision, apart from the national environmental policy, there are numbers of sector policies that are to be reviewed when executing the proposed development and these include;

3.1.1 National Environment Policy 2021

The National Environmental Policy of 2021 has just been launched in February 2021. The new policy formulation is a revision of the National Environmental Policy of 1997. The Policy serves as a national framework for planning and

sustainable management of the environment in a coordinated, holistic and adaptive approach taking into consideration the prevailing and emerging environmental challenges as well as national and international development issues. Effective implementation of this policy requires mainstreaming of environmental issues at all levels, strengthening institutional governance, and public participation in environmental management regimes. The long-term vision of this policy is geared towards the realization of environmental integrity, assurance of food security, poverty alleviation, and increased contribution of the environmental resources to the national economy. It also recommends strong institutional and governance measures to support the achievement of the desired objectives and goals.

The policy seeks to promote the economy and livelihoods of people while promoting sustainable utilization of natural resources in the country. The policy provides the framework for the formulation of plans, programmes, and guidelines for the achievement of sustainable development.

The policy overall objective is to provide a national framework for guiding harmonized and coordinated environmental management for the improvement of the welfare of present and future generations. The specific objectives are i) to strengthen coordination of environmental management in sectors at all levels; ii) to enhance environmentally sound management of land resources for socioeconomic development; iii) to promote environmental management of water sources; iv) to strengthen conservation of wildlife habitats and biodiversity; v) to enhance conservation of forest ecosystems for sustainable provision of environmental goods and services; vi) to manage pollution for the safe and healthy environment; vii) to strengthen the national capacity for addressing climate change impacts; viii) to enhance conservation of aquatic system for the sustained natural ecosystem; ix) to ensure safety at all levels of application of modern biotechnology; x) to promote gender consideration in environmental management; xi) to promote good governance in environmental management at all levels; and xii) to ensure predictable, accessible, adequate and sustainable financial resources for environmental management.

3.1.2 National Land Policy of 1997

The National Land Policy states that “the overall aim of a National Land Policy is to promote and ensure a secure land tenure system, to encourage the optimal use of land resources, and to facilitate broad-based social and economic development without upsetting or endangering the ecological balance of the environment”. This study partly responds to this requirement.

3.1.3 Construction Industry Policy (2003)

Among the major objectives of the policy, which supports a sustainable building development sector, include the promotion and application of cost effective and innovative technologies and practices to support socio-economic development activities such as sanitation, water supply, buildings, road-works, shelter delivery and income generating activities and to ensure application of practices, technologies and products which are not harmful to either the environment or human health. Proposed project is in-line with this policy as ultra-modern technology is used during construction and its operation.

3.1.4 National Health Policy, 2007

The Health Policy is a vital guide towards health development of any country. It is particularly, important in a country like ours where resources and technology are more limited than in other countries, which are relatively better off in both technology and resources. This Policy is a revision of the 1990 Health Policy, which emphasized on the need for increasing community involvement in health development and improved access and equity in health and health services.

The Policy recognizes the challenges of consolidating the principles of the previous health policy in community involvement, improved health services provision, access and equity while addressing the different dimensions of reforms that are taking place in the Public Sector.

The proposed project will adhere to policy requirements to ensure no transmission of such communicable diseases between construction workers and the community, protect workers from all sorts of health risks and hazards;

and provide adequate sanitation services within the project and ensure that its activities are not a source of health issues.

3.1.5 National Gender Policy, 2002

The overall objective of the Gender and Development Policy is to promote gender equality and equal participation of men and women through facilitation of access to education, child care, and employment and decision making. Also this policy is to provide guidelines that will ensure that gender-sensitive plans and strategies are developed in all sectors and institutions. While the policy aims at establishing strategies to eradicate poverty, it emphasizes gender quality and equal opportunity of both men and women to participate in development undertakings and to value the role played by each member of society. The proposed project will adhere the requirements addressed under this policy.

3.1.6 National Human Settlements Development Policy (2000)

Among the objectives of this policy is to improve the level of the provision of infrastructure and social services for the development of sustainable human settlements and to make serviced land available for shelter to all sections of the community. Such infrastructure and services constitute the backbone of urban/rural economic activities. Public Toilet is one among of the important infrastructure for Kampochea market, Charambe ward community and country at large

3.2 PRINCIPAL LEGISLATIONS AND REGULATIONS

The ESIA team reviewed several legislations relevant to the construction of public toilets. These encompass Principal Acts that support and provide guidelines to implement the intended project as discussed below.

3.2.1 Environmental Management Act, 2004 the written Law (Miscellaneous)(No.3) Act, 2016 and 2021

Among the major purposes of the EMA are to provide the legal and institutional framework for sustainable management of the environment in Tanzania; to

outline principles for management, impact and risk assessment, the prevention and control of pollution, waste management, environmental quality standards, public participation, compliance, and enforcement; to provide the basis for the implementation of international instruments on the environment; to provide for the implementation of the National Environmental Policy; to provide for the establishment of the National Environmental Fund and to provide for other related matters.

Part III, Section 15(a) states that "*in matters about the environment, the Director of Environment shall coordinate various environment management activities being undertaken by other agencies to promote the integration of environmental considerations into development policies, plans, programs, strategies projects and undertake strategic environmental assessments to ensure the proper management and rational utilization of environmental resources on a sustainable basis for the improvement of the quality of human life in Tanzania*".

Part X of the law deals with Environmental Quality Standards. Section 140 of this act states that "*The National Environmental Standards Committee of the Tanzania Bureau of Standards established under the Tanzania Bureau of Standards Act, 1975 shall develop, review and submit to the Minister proposal for environmental standards and criteria concerning; water quality; discharge of effluent into the water; air quality; control of noise and vibration pollution; sub-sonic vibrations; soil quality, control of noxious smells; light pollution; and any other environmental quality standard*" Some of these standards have already been published in the government *gazette* while others are not in place. This project shall consider all the standards specified by this act.

3.2.2 The Environmental Management (Fees and Charges) Regulations, 2021

These Regulations shall apply in relation to an act or service in respect of which fees and charges are payable under the Act and Regulations made thereunder. The regulations emphasize that "a person shall not, upon payment of fees and

charges prescribed in the Schedule to these Regulations, carry on any of the following”:

- Environmental Impact Assessment;
- Environmental Compliance Monitoring and Audit;
- Registration of Environmental Experts;
- Environmental Quality Standards;
- Noise and Vibrations; or
- other activities related to the environment

This project complies with the regulations since the proponent has already paid registration fees and review charges as directed by NEMC.

3.2.3 The Environmental Management (Control of hazardous Waste) regulations, 2021

The objective of these regulations is to protect the environment and human health by preventing or reducing the generation of Hazardous waste, the adverse impacts of the generation and management of hazardous waste and by reducing overall impacts of resource use and improving the efficiency of such use, which are crucial for the transition to a circular economy. The regulation requires that “any person generating, collecting, storing, transporting, treating, recycling, reusing, recovering and disposing of hazardous waste or any person exercising jurisdiction under these Regulations shall, assure that there are no adverse impacts to be generated or caused by the activity conducted. Project developer will comply with the requirements of this regulation by reducing the construction materials which may generate hazardous impacts, as well as proper handling of such waste such as in use of fuels for various purposes etc.

3.2.4 Environmental Management (Quality Standard for Control of Noise and Vibration Pollution) Regulations, 2021

The regulations focus on the maintenance of a healthy environment for all the people in Mainland Tanzania, the tranquility of their surrounding and their psychological well-being by regulating noise and vibration levels to prescribe the maximum permissible noise and vibration levels from a facility or activity to which a person may be exposed. The project developer will make sure that all the guidelines under this policy will be considered to ensure the healthy environment to everyone.

3.2.5 The Environmental Management (Prohibition of Plastic Carrier bags) regulations, 2022

Regulations are meant to impose a total ban on the import, export, manufacturing, sale, and use of plastic carrier bags regardless of their thickness. Plastic carrier bags has a wide definition in the Regulations, as a bag made of plastic film, with or without handles, or gussets and to which its layer is in any thickness. The Regulations also categorically state that no person shall sell or offer for sale beverages or other commodities wrapped in plastics unless the nature of such commodities require wrappings by plastics, and restricts any licensing authority from issuing any licenses after the Regulations come into force. Project developer will make sure that there will be no use of plastic bags within the project site and the whole project life time, also in case of the need of carrier bags the proponent will make sure that there will be a n alternative bags which are allowed by the regulations. For the commodities that are wrapped in plastic, then the proponent will make sure that such plastic will be handled properly.

3.2.6 The Environmental Management (Solid Waste Management) regulations, 2016

The solid waste management regulation of 2007, provides general directive on management of solid waste as follows: -

Regulation detail the requirements and responsibilities for managing solid waste in Tanzania

Highlight waste minimization and cleaner production principles alongside the duty to safeguard the public health and the environment from adverse effects of solid waste. Detail permitting requirements, notably that any person dealing with solid waste as collector, transporter, waste depositor or manager of a transfer station will apply to the LGA for a permit. The local authority will also issue licenses to individuals or companies qualified to operate solid waste disposal sites; permit is required to operate an LGA waste disposal site. The proposed project is expected to generate solid waste in construction phase. Therefore, to comply with this regulation the Project developer will engage the registered solid waste collection contractor.

3.2.7 The Environmental Management (Water Quality) regulations, 2009

Regulations provide for institutional and legal framework for sustainable management and development of water resources; to outline principles for water resources management; to provide for the prevention and control of water pollution; to provide for participation of stakeholders and the general public in implementation of the National Water Policy. These regulations require the sustainable management of water sources and proper use of the available sources without causing any damage towards such sources. Also, the regulations emphasize that it is every one's responsibility to conserve and preserve the available water sources in Tanzania. During all phases of the project there will be water demand, hence the project developer will make sure that there will be a sustainable use of water. Also during construction and maintenance phase the developer will make sure that the water supply pipes will not be damaged in either ways

3.2.8 The Environmental Management (Air Quality) regulations, 2009

The Regulations were formed in order to: -

- Prohibit emissions and releases of hazardous substances into the environment

- Prescribe permissible emission limits and quantities of emissions of sulphur oxide, carbon monoxide, black smoke and suspended particulate matters, nitrogen oxide, ozone, hydrocarbons, dust and lead
- Empower NEMC to issue air pollutant emission permits, enforce compliance, undertake emergency prevention and issue stop orders
- Set baseline parameters on air quality and emissions based on a number of practical considerations and acceptable limits and ensure protection of human health and the environment from various sources of pollution.

The proposed project will adhere the requirements of this Act, emission limits will be monitored to the permissible limits.

3.2.9 The Environmental Management (Soil Quality) regulations, 2009

These Regulations, made by the Minister of State under sections 143, 144 and 230 of the Environmental Management Act, concern soil pollution and soil quality standards and provide with respect to a soil protection permit and compliance system. They also concern measures of enforcement. The object of these Regulations is to

- Set limits for soil contaminants in agriculture and habitat;
- Enforce minimum soil quality standards prescribed by the National Environmental Standards Committee.

Also, the regulations require that, the contaminants of volatile organic compounds in habitat and agricultural soils shall comply with parameters and upper limits as prescribed and contaminants of heavy metals in habitat; agricultural soils shall comply with parameters and upper limits as prescribed and contaminants of pesticides in habitat and agricultural soils shall comply with parameters and upper limits as prescribed. Local government authority may prescribe special or specific measures and guidelines for soil conservation applicable to their respective areas of jurisdictions which are not below standards prescribed under these Regulations. The Project developer will comply with the requirements made under these regulations.

3.2.10 Occupational Health and Safety Act 2003

The provisions of this law require employers to provide decent working environment to employees to guarantee their health and safety. Occupational health and safety services are important for sustainable development of a country, as they reduce occupational accidents and diseases which can have huge economic burden to individuals, enterprises and the nation as whole. Improving health and safety of workers will significantly increase productivity at the workplaces to encourage more investments, increase job creation, higher morale, and job satisfaction hence industrial harmony. The law also entails employers to fulfil obligations of ensuring safety of the equipment's used by workers and providing proper safety gears as required.

3.2.11 The Water Supply and Sanitation Act No. 12 of 2019

This is also a new legislation that provides for sustainable management and adequate operation and transparent regulation of water supply and sanitation services; provides for establishment of water supply and sanitation authorities as well as community owned water supply organizations; and provides for appointment for service providers. The main aim of this law is to ensure the right of every Tanzanian to have access to efficient, effective and sustainable water supply and sanitation services for all purposes by taking into account among others protection and conservation of water resources and development and promotion of public health and sanitation; and protection of the interest of customers. Under this law, the Minister responsible for water affairs shall establish water authority and cluster water authorities in order to achieve commercial viabilities.

3.12 Engineers Registration Act and its Amendments 1997 and 2007

The Acts regulate the engineering practice in Tanzania by registering engineers and monitoring their conduct. It establishes the Engineering Registration Board (ERB), the law requires any local or foreigner engineer to register with ERB before practicing in the country. Project developer will continue to comply as it has utilized the services of registered engineering firm for its structural designs which it will continue to use to supervise the construction process.

3.2.13 Contractors Registration Act Cap 235 (amended) 2004, 2008, 2011 and 2016

The Contractors Registration Act requires contractors to be registered by the Contractors Board (CRB) before engaging in practice. It requires foreign contractors to be registered by the Board before gaining contracts in Tanzania. Project Developer shall comply with the law requirement during the recruitment of contractors for project implementation.

3.2.14 The Architects and Quantity Surveyors Act No R.E 2002

The Act requires Architects and Quantity Surveyors to be involved in the project to be registered by the Architects and Quantity Surveyor Board (AQSB) before engaging in practice. It also requires foreign contractors to be registered by the Board before gaining contracts in Tanzania. Project Developer has complied with the law requirement during the recruitment of architects who have designed the project and will continue to utilize registered persons in the project implementation.

3.2.15 The Urban Planning Act (2007)

The law provides for the orderly and sustainable development of land in urban areas, to preserve and improve amenities; to provide for the grant of consent to develop land and powers of control over the use of land and to provide for other related matters. Under Section 3, among others the law seeks to improve level of the provision of infrastructure and social services for sustainable human settlement development. This act established planning authorities which include the city, municipal, town and township councils in the country which have responsibilities including:

- Secure the orderly and environmentally sustainable development of area under its jurisdiction;
- Prepare general and detailed planning schemes;
- Control building densities and access to buildings;
- Recommending approval of building schemes and subdivision of plots by developers;

- Secure cooperation of all agencies, utility bodies, land owners and other bodies and institutions involved in the preparation and implementation of planning process;

3.2.16 Public Health Act (2009)

Provide for the promotion, preservation, maintenance of public health with a view to ensuring the provisions of comprehensive, functional and sustainable public health services to the general public. Part III (e) of the act requires premises owners to keep their premises free of mosquitoes and other disease vectors, vermin or causative agents; Section 54 prohibits causing or suffering from nuisance likely to be injurious or dangerous to health, land, premises, air or water; Part IV (c) assigns responsibility to City council to remove or appoint an agent to collect, transport and dispose solid and liquid waste and charge fees to beneficiaries of this service and responsibilities for prescribing types of wastes and guidelines for their collection and disposal; Section 101 it gives rights to any private sewer to connect it to any available public sewer to discharge foul or storm water therefore the project may connect to and discharge sewage or storm water into the available trunk main. However, the quality of the sewage should be as per agreed with the water authority.

The Contracting Authority will ensure that the project design, construction and operation does not constitute a nuisance; meets the requirements meets public health requirements

3.2.17 World Bank guidelines for Environmental Management

The main objective of this EMP is to establish a set of mitigation and monitoring measures to minimize the adverse social and environmental impacts that can take place during the implementation stage of the subproject. The measures especially focus on sensitive receptors or sensitive locations. The EMP also provides specific information about the monitoring program during construction stage including locations, frequency and reporting process. This project complies with these guidelines as it has ESMP which contains mitigation and monitoring plans of the identified impacts.

CHAPTER FOUR

4.0 PROJECT ACTIVITIES

4.1 Mobilization or pre-construction phase

This phase entails mobilization of the labor force, and equipment as well as the acquisition of various permits as required by the law.

Other activities during this phase include

- Topographical Survey for setting out purposes
- Construction Materials' Source Investigation
- Land acquisition (Memorandum of Understanding is appended on appendix IV and Letter from Kinondoni Municipal Council Appendix V)
- Material storage and material preparation

Duration

This phase is expected to take a total of three 3 Months.

4.2 Construction phase

During this phase a number of activities will be conducted, the phase is expected to last for one year the following is the list of activities expected to be carried out during this phase;

- **Site Clearance:** The contractor shall clear the construction areas within the site of all bushes, roots, boulders, natural obstructions, rubbish and any other natural or artificial obstructions, which would interfere with construction of buildings, roads, paths and drains.
 - **Excavation:** Excavations for foundations and the reinforced concrete structure shall be to the widths, depth and levels to accommodate the structure shown on the drawings. Working space has been allowed for in the measurement of excavation quantities given in these Bills of Quantities in accordance with the rules of measurement laid down elsewhere in these Bills, namely 1.00 meter from the face of any work
-

which requires formwork over 1m deep below the starting level of excavation, and 0.30 meter from face of any work which requires formwork not exceeding 1-metre-deep below starting level of excavation.

- **Filling:** The fill shall be clean, selected coarse sand or gravel. It should be taken from borrow pits if the soil on the site is found to contain too much fines and to have too low plasticity limit to be used as fill.
 - **Soil Sterilization:** Anti-termite treatment is to be carried out by an approved specialist firm who will be required, upon completion of the soil sterilization, to furnish a written guarantee qualifying the following:
 - That the chemicals applied comply with the requirements and concentration (The chemicals used shall be one of the following: Aldrin 0.5% applied in oil solution or water emulsion, Benzene hexachloride, 0.8% of gamma isomer applied in oil solution or water emulsion, Chlordane 1.0% applied in solution or water emulsion, Dieldrin 0.5% applied in oil solution or water emulsion, Lindane; 0.8% in oil solution or water emulsion, Pentachlorophenol; 5% in oil solution, Trichlorobenzene; 1 part to 3 parts oil.
 - That the treatment will remain effective against termite infestation for a period of five years.
 - The free re-treatment by the firm of any areas showing signs of infestation before the expiry of the five-year period.
 - **Disposal of surplus excavated material:** Surplus excavated material will be carted away from the vicinity of the walls and deposited, spread and levelled on areas to be allocated by the Structural Engineer, reasonably adjacent to the site.
 - Concrete work:
 - Steel fixing:
 - Formwork preparation:
 - Masonry work
 - Finishing work
-

- Carpentry work

Alternative source of Energy

During this phase the alternative source of energy is the generator with 30KVA which will be stand-by during power outage from TANESCO.

Duration

This phase is expected to take a total of twelve (12) Months.

4.3 Demobilization phase

This phase will involve the dismantling of temporary structures such as scar forming and removing/spreading spoil materials for proper restoration of the site, this phase will last for 2-3 months.

Other activities include;

- General cleanliness of the area, that is clearance of all sorts of solid wastes (plastics, wood, metal, papers, etc);
- Deposit all wastes to the authorized dumpsite;

4.4 Operation phase

The phase entails the actual usage of the toilet. Supply of water and toilet cleaning materials (disinfectants) are among the essentials for running the facility. Faecal sludge will be desludged using vacuum takers and disposed of at waste stabilization ponds for further treatment. The Kinondoni municipality will decide on the mode of running the toilet for instance instituting fee, Standby attendants will be positioned to oversee the day to day running of the facility. The facility is estimated to run for 30 years with subject to minor and major repair.

4.5 Decommissioning Phase

Decommissioning is not anticipated in the foreseeable future as the completed facility will be serving a lot of people from; stalls operators, visitors, and

customers. However, if this will happen, may entail a change of use (function). The estimated cost for decommissioning is expected to be 8,500,000 million.

4.6 PROJECT DESIGN

4.6.1 Toilet Design

The project intends to establish the Modern Public Toilet at Coco beach Oyster-Bay street, Msasani ward, in Kinondoni Municipality. About 22 units each with different size and type of service ranging from urinals, bidets, WCS, HWB, showers, lobby, storage room and office space, (*Technical guidelines for construction of institutional and public toilets 2012*). The Proposed Project site covers an approximately area of 120m². The project is one single multipurpose facility aimed at providing services to the community, this proposed project is suitable for the particular site as currently there is large number of people who are visiting Coco beach for recreation, therefore the facility will accommodate large number of people hence the public toilet was essential. Pertinent area of each cube/partition with their number in the facility is as described in Table 2. Furthermore, the project will involve the construction of a raiser for an elevated water storage tank to build adequate pressure for the proper functioning of the facility.

Table 4-1: The Proposed standard Public Toilet working spaces with their respective areas

Rooms/Compartments	Unit area (m ²)	Partition	Number of Units
Male Toilet	28	Squatting WCs	6
		Urinals	4
		Hand wash basins	5
Female toilet	28	Squatting WCs	8
		Hand wash basins	4
Male shower	10	Squatting WCs	2
		Hand wash basins	1
		Shower basin	1
Female shower	10	Squatting WCs	2
		Hand wash basins	1
		Shower basin	1
Disabled area (2)	6	Bidets	2

		Hand wash basins	2
Janitor area	2.8	-	1
Lobby Area	23		1
Store area	3.0	-	1
Reception area	3.6	-	1
Stand by Generator	30KVA		1

Design approach

- The basic idea of volumetric composition is based on emphasizing the entrance without affecting the privacy and security of the public.
- The building is designed with a connection of two volumes: the front entrance space and the functional toilet area to give comfort.
- Occupants waiting area are at the right and left side of the toilet which are not seen from the entry area into the toilet.

4.6.2 Layout Plan

The toilet layout plan is given in Figure 5. The project is a simple structure that shall be constructed using block works, corrugated iron sheets, and wooden members for doors.

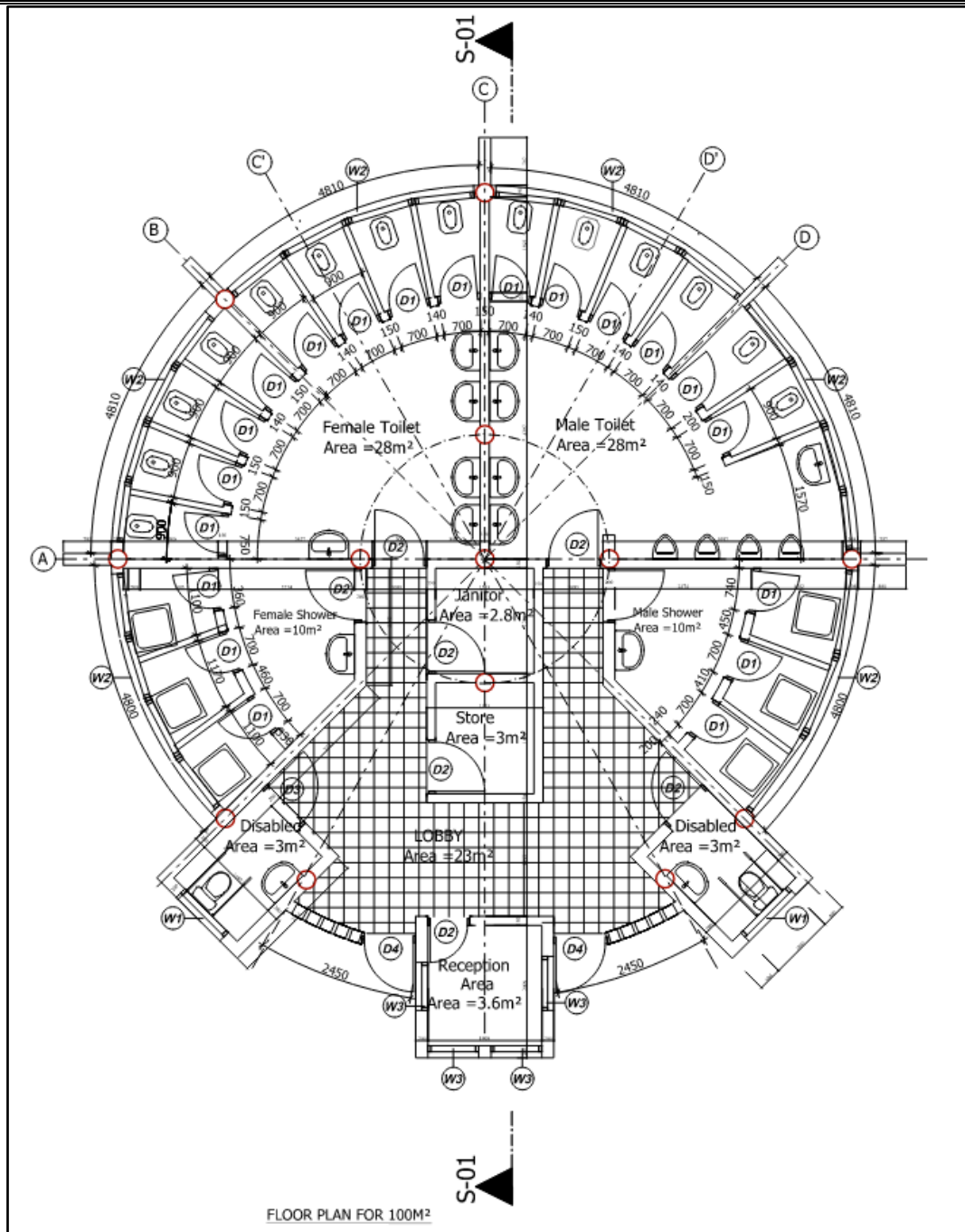


Figure 4-1: Typical Floor Plan for Public Toilet at Coco Beach

CHAPTER FIVE

5.0 STAKEHOLDER VIEWS ON THE PROPOSED PROJECT

5.1 Introduction

During the conduction of this study, different stakeholders were consulted. Among these include the Kinondoni Municipal Council and the community at Coco beach (see Figure 5-1). Consultations were held on 24th August 2022 at Kinondoni Municipal Council Office.



Figure 5-1: Stakeholder's consultation meeting at Kinondoni Municipal Council
(Source: Fieldwork August 24th 2022)

An official of Kinondoni was aware of the proposed project and its sensitivity. During the meeting at Kinondoni Municipal Office, the consultant reported to environmental and health officials. The environmental consultant provided a brief description and way forward to the conduction and preparation of the project brief Report. The views of officials were provided in the document, this happened after a brief introduction by DAWASA staff.

Other stakeholders were given chance to give their views on the project. Moreover, the consultant offered the chance to clarify issues where

stakeholders wanted to be given more explanations. The comments by stakeholders were analyzed and incorporated into the design of mitigation measures. Table 5-1, summarizes the issues raised. The names of the stakeholders consulted and Minutes of the stakeholders consultative meetings are given in Appendix I and II respectively.

Table 5-1: Stakeholders' issues and concerns

S/N	Name	Position	Issues
1	Denis P. Kobelo	Kinondoni Municipal Tourism Officer	<ul style="list-style-type: none"> ○ The Public toilet is urgently needed because at the moment there is no any reliable facility for the daily population at Coco-beach (Approximatelt 200 petty traders and more than 1,000 visitors per day other than holidays)
2	John R. Mariwa	Secretary of Coco Beach petty traders association	<ul style="list-style-type: none"> ○ The shoreline keeps moving year after year advancing toward the dry land, establishment of Public toilet is likely to be affected by the moving shoreline in the future ○ There used to be a large forest at Cocobeach area with snakes but now its no more

CHAPTER SIX

6.0 PROJECT REQUIREMENTS, WASTE GENERATION AND POTENTIAL ENVIRONMENTAL IMPACTS

6.1 Project requirements

6.1.1 Construction materials and labor force

The main materials for Public toilets include cement, aggregates (stones), water, steel, sand, timbers, blocks, uPVC pipes, IPS Pipes, and gravels. All materials are available in the local sources in Tanzania. The preliminary estimated quantities of the materials are summarized in table 6-1.

Table 6-1: Quantities of construction Materials

Requirements	Type	Source	Approx. Quantity required
Substructure	Hardcore	Registered Local vendors	114m ³
	Concrete		249 m ³
	Reinforcements		500 m ³
Frame	Hardcore		114m ³
	Concrete		249 m ³
	Reinforcements		500 m ³
Walling	230mm thick Block wall		83 m ²
	150mm thick Block wall		159 m ²
	100mm thick Block wall		83 m ²
Roofing	150x150 Rafters	127m	
	150x150 Tie Beams	110m	
	150x150 King posts	27m	

Environmental and Social Impacts Assessment for the Proposed Public Toilet to be built at Coco Beach, Oyster Bay street, Msasani ward, Kinondoni Municipality

	150x150 Struts		213m
	100x50 Thick wall plates		36m
	50x50 Purlins		123m
	240x20 Thick stained black fascia badge boards		54m
	150mm Half round UPVC rainwater gutter fixed to fascial board		28m
	100mm Diameter UPVC rainwater downpipe		15m
Windows and Doors	Door size 850 x 2400mm high		11 Nos
	Door size 850 x 1900mm high		14 Nos
	Window size 1300 x 1500mm High		1 Nos
	Window size 775 x 1500mm High		2 Nos
	Window size 700 x 500mm High		20 Nos

6.1.2 Labour force

The labor force will be determined by the Contractor; nevertheless, it is projected that during the construction phase the project will require not less than 50 workers both skilled and non-skilled laborers for each phase of project

construction. The workers will be in shift day time and Night time twelve hours each, it is estimated that 12 womens and 38 mens will be employed.

6.1.3 Machinery and Equipment

The proposed project development will employ various standard construction equipment and machinery. Equipment expected to be used during the construction works are Tippers, Concrete Mixers, poker vibrators, Wheelbarrow, Compactor, etc. All equipment and machinery for construction works needed by the proposed project will be determined when the bill of quantities (BoQ) and selection of Contractor are finalized. This equipment shall be temporary and shall be demobilized once the project is completed.

6.2 Wastes generation

The major waste generation associated with the project is spoiled soils resulting from earthworks during the foundation excavations, solid waste, and liquid waste. The spoil soil shall be stockpiled around the public toilet for further use in landscaping the site at the end of the project.

6.2.1 Liquid waste management

The project construction and operations will conform to the National Effluent Standard of Tanzania which includes pre-treatment through septic tanks before emptying and transportation of sewage to the treatment facility, after the tanks are full are then emptied using trucks managed by DAWASA and being disposed to the Waste water stabilization ponds at Mikocheni

6.2.2 Solid waste management

About 500-1,000Kg per month of domestic refuse and other solid wastes is estimated to be generated during the construction phase. A well-established solid waste collection system will be instituted. The system will involve among other things wastes segregation at the source, recycling or reuse of some wastes, and final disposal to the approved dumpsite/landfill.

The project management team will provide waste bins and recycling receptacles of a different types to enable sorting. Compostable materials will

be sent directly to the city dumpsite area. Table 4 below shows solid and liquid waste wastes to be generated by the project and the methods of their disposal.

Table 6-2: Management of construction and operation wastes

Type of waste	Sources	Disposal / Management procedure
Debris and Rubble (overburden)	Site clearance	Fill material for road potholes, etc.
Biodegradable materials mainly domestic waste (food, paper, wood etc.)	- Construction crew	Accessible litter bins within the camp site and later to the city waste disposal system (engage a private company)
Non- biodegradable materials (plastic, glass)	- Construction crew	Recycling/ reuse (Plastics to be sent to plastic recyclers and glass bottles to be sent to glass recyclers)
- Excreta (domestic) human - Grey water /cleaners	- Toilets and floor cleaning	Use of septic tanks and when full will empty to the wastewater treatment facility
- Construction waste	- resulted from masonry work, carpentry work and painting	Recycling/reuse

6:3 POTENTIAL IMPACTS

Positive impacts

6:3:1 Improved living conditions and economic growth

The project will improve the living conditions in Kinondoni Municipal, particularly in the Coco beach community whereby the project operation phase will do away with open urination. The charged fee for using the facility will be such as affordable to the intended user. Thus, there will be dignity and increased money circulation that result in increased income and consequently a better standard of living for people in the project area.

6.3.2 Employment opportunities

The Labour force for the project will be originated from Oyster Bay ward and particularly the unemployed youth would always walk to the beach (Coco beach) daily to look for part-time jobs, others will be communities of business operators who are close to the project site. Even though during construction the employment will be on a short-term basis, employees will have been benefiting from the project. Some will witness their incomes and family level of life improved. The selling of cassava fries and other food to workers will be high.

6.3.3 Improved public health

In crowded areas, it is normally hard to ensure safety to public health without the establishment of sound infrastructures. With the public toilet in crowded areas like recreational areas (Beach) offering several services under one umbrella, it is anticipated that the general health condition will not be endangered by health risks. Walking around the place at Coco Beach it's rare even to find a portable toilets. The establishment of this public toilet at the site will ensure the public is safe from water-borne diseases and malodorousness.

6.3.4 Increased socio-cultural interaction

Increased socio-cultural interaction is another anticipated positive impact. The implementation of the project will bring many people from different cultural backgrounds. The interactions may bring about social changes in the communities around the project areas. Interaction with technocrats as a result of new immigrants (customers) into the area will stimulate the adoption of the new technologies.

6.3.5 Increased Revenue to the nation through taxes, both direct and indirect

The public toilet facility constructed by DAWASA is expected to be operated by the Kinondoni Municipal. Therefore, it is expected to increase government revenue collection at the Municipal and at National levels. This will be enhanced by time-to-time payment of service by users. The revenue collected will

contribute towards economic development within the municipal and the country at large.

6.3.6 Environmental conservation

The proposed project will help in improving the environmental conservation as it will assure the availability of the service to the people and hence prevent or reduce the issue of open defecation hence control pollution

Negative impacts

6.3.7 Increased HIV/AIDS and other sexual-related diseases

Local communities surrounding the project area have to be aware of the fact that HIV/AIDS is present in their areas but accede to it not being at an alarming rate. The communities were worried that with an influx of people into the project area the pace of spread will accelerate especially during the construction phase.

Mitigation Measures

- The contractor shall enforce a code of conduct in the project area to encourage respect for the local community and to maintain the self-cleanliness of the working area at all times.
- The contractor shall deploy locally available labor to reduce the risk of spreading communicable diseases (especially STDs).
- To prevent more HIV/AIDS infections, during the implementation phase, the project should include an information education and communication component (IEC) in its budget. This will help to raise more awareness of HIV/AIDS and means to suppress its incidence.
- A safety, health, and environment induction course shall be conducted for all workers, putting more emphasis on HIV/AIDS, which has become a national disaster.

6.3.8 Noise pollution

Noise pollution is likely to occur due to the application of construction equipment and generators at the site.

Mitigation Measure

- The proponent shall maintain equipment in good running conditions to ensure that ambient noise level and vibrations pollution into the environment is very minimum to comply with Tanzania standards
- The noisy construction activities will be scheduled at normal working hours. Regular inspection and maintenance of construction vehicles and equipment will be done to ensure that they have mufflers installed and worn parts are replaced.

6.3.9 Air Pollution from dust emission

Air pollution is likely to occur due to the emission of suspended particulate matter (dust) into the atmosphere from construction activities.

Mitigation Measure

- Mixing equipment shall be sealed properly and vibrating equipment will be equipped with dust-removing devices.
- Also, all vehicles that generate excessive black smoke will not be used.
- Adequate training and use of personal protective equipment (PPE) such as eyeglasses and dust masks will be ensured to reduce risks associated with dust.

6.3.10 Potential communicable diseases transmission

Many people from different places and of different health statuses will be using the toilet. This creates a premise for the potential transmission of different communicable diseases of a wide range including diarrheas, typhoid, COVID-19, etc.

Mitigation measures

- Ensure a supply of adequate provisions like water, toilet papers, soaps, disinfectants, etc.
- Maintain a high level of cleanliness
- Install guidelines on the usage of toilets

6.3.11 Smells and flies in toilets

Inadequate attention to the public toilet may render the facility a liability to adjacent land users and businesses. Drainage system blockage due to misuse of the toilet can be a source of sewage overflows and hence the area around becoming a nuisance to people. Overflowing sewage will produce the awful smell of decomposing organic matter that lowers the air quality in the vicinity. Experience in Tanzania shows that abandoned public toilets and unfinished buildings, can easily become centers for vagabond boys for planning evil acts in society.

Mitigation measures

- The developer to ensure an adequate supply of provisions
- Adhere to good maintenance
- Timely desludging

6.3.12 Groundwater pollution

The proposed area for the establishment of this public toilet is located at the shore of the Indian Ocean. It's obvious a site is the potential for groundwater due to a location of fewer than 50m from the ocean; any linkage from the constructed septic tank will expose the groundwater to pollution.

Mitigation measure

- The design and material to be used for septic construction need to ensure no leakage in the future.

- Monitoring of the treatment should be conducted from time to time
- Timely desludging of septic tank

6.3.13 High Risk of Health associated with construction work

Construction activities expose the workers to a lot of risks for example risk of falling into the excavated pits more than 3metres deep, the risk of injuries from falling objects or sharp pointed objects, etc.

Mitigation measure

- The project proponent shall ensure that all personnel is provided with appropriate protective gear.
- All works shall be planned and conducted per relevant OHS Guidelines. First Aid Kit as well as regular medical check-ups for the workers will be provided during the entire working hours.
- The adequate number of firefighting equipment/extinguishers will be provided every few distances to help put off fire in case of occurrence.
- Excavated pits should be protected by warning tape and guardrails to prevent workers from falling

6.3.14 Waste generation during construction

A lot of waste will be generated especially during the construction stage. For example, excavation of foundations will generate a lot of spoil materials that will need to be disposed of. The construction of walls and roof will both generate waste. Other wastes will be generated from cleaning construction equipment and containers like mixers and paint buckets.

Mitigation measures:

- Stick to the design specifications
 - Provide waste containers
 - Provide training to workers and orient them towards environmental protection values
-

CHAPTER SEVEN

7.0 ACTION PLAN FOR HEALTH AND SAFETY OF WORKERS AND COMMUNITY DURING THE IMPLEMENTATION STAGE

7.1 General

The project shall be implemented in compliance to labor laws in Tanzania, in particular, the Occupational Health and Safety Act (2003). Clauses to protect the health and safety of workers shall be included in the contract documents for implementation stage. All personnel are expected to comply fully with health and safety law and the associated approved codes of practice. Contractors are, in addition, to be aware of and pay due attention to guidance issued by the Health and Safety Executive as well as that issued by trade bodies and authorities, which constitute industry 'best practice'. Method and policy statements submitted for these works will be reviewed by the Site Project Manager and Safety Adviser to ensure that these standards are met. On such occasions that they fail to meet the standard they will be returned for amendment action.

7.2 Health and Safety Management System

7.2.1 Safety Training and Promotion

The aims of safety training programmers are:

- To update the safety awareness and technical skills of person in the field of application.
- To orient new employees to working environment.
- To identify and rectify hazards and convey the same to the workforce.
- To prepare the persons to select appropriate safety measure contain any unforeseen hazards/emergency situations.
- To achieve the above aims, following types of training shall be conducted at the site level:

7.2.1.1 Health and Safety Induction Training

New or reassigned employees shall be given Health& Safety induction training pertaining to Health& Safety management and general safety rules and procedure, site specific Health& Safety rules and their responsibility and accountability in safety performance. Health& Safety induction shall be given to all categories of personnel at site by Health& Safety Manager. Health& Safety induction shall be recorded in the prescribed format. All employees shall acknowledge such training by signing relevant document.

7.2.1.2 On the Job Training

Based on the trade, individuals are given On the Job training. These trainings shall be focused on the safe ways of working in a particular trade including hazards involved. This shall be conducted by the foremen/supervisors in collaboration with Safety personnel and trainees' performance after the programme shall be assessed to evaluate the effectiveness of the training. All risk assessment and related knowledge shall be done by the Health & Safety Manager.

7.2.1.3 Refresher courses

Refresher courses shall be conducted to update the skill and safe methods of work for a particular job. This shall be conducted periodically for welding/cutting, plant and equipment operation, defensive driving and hazards in electrical installation.

7.2.1.4 Tool Box Talks

In addition to the formal training mentioned above, toolbox talks shall be conducted every day before the commencement of the job. The Faecal Sludge Treatment Plant shall be designed to highlight relevant safety and individual health issue to the workforce to raise their level of awareness. Such meeting shall recall the risk assessment report and defects reported on previous performance. These shall be prepared and presented by the

Supervisor/Foremen. All trainings that are carried out shall be formally recorded on dated and signed by attendees and the copies shall be kept with the project safety focal point.

7.2.1.5 Safety Promotion

Safety Promotion schemes shall be developed and implemented at site to promote safety awareness amongst the workforce. Individuals with best safety performance shall be recognized and rewarded. A safety suggestion scheme shall be implemented at site to encourage the workforce to come up with good safety practices and suggestions for improving working condition. The best suggestion shall be selected and the person shall be rewarded.

Health& Safety posters and banners including HIV/AIDS shall be displayed around the worksite to raise the awareness among the workforce. The posters shall be prepared in English and Swahili languages.

7.2.2 Safety inspection and Follow up Actions

Contractor's Health& Safety Manager along with supervisory staff shall carry out frequent inspection with the focus on safety aspects at site and prepare reports of inspection. The frequency of inspection shall be determined by site activities and general conditions. However, the inspection shall be conducted at a minimum of once a week. Where high – risk activities are being carried out inspection shall be done at least once daily.

The inspection reports shall be discussed with the site managers and various sub – contractors (if any). In addition to these, the site staff will accompany the Engineer and other staff of Consultant for their site safety inspection.

Remedial action to rectify any deficiency identified or unsafe practices discovered during the safety inspection by developer shall be implemented immediately.

7.2.3 Reporting of Accidents, incidents & Investigation and Accident Statistics

Tanzania laws on incident reporting and investigation procedures shall be adhered. Such law requires reporting to the Chief inspector of Occupational Safety and Health Authority (OSHA) all lost time injuries (LTI) within twenty-four hours from the time of incident. Contractor will play this role to ensure that local requirements are followed. As per Contract Agreement the Contractor shall notify the Consultant and developer within 48 hours or as soon as reasonable possible after the occurrence of any accident which has resulted in damage or loss of property, disability or loss of human life, or which has or which could reasonably be foreseen to have a material impact on the environment and shall submit to the Consultant and developer no later than 28 days after the occurrence of such an event in the agreed format, a summary report thereof. All incidents including near misses shall be reported to the Consultant, regardless the potential of the incident.

All the incidents shall be investigated to find out the root causes and to prevent the recurrences of the same kind of incidents. If the consultant asks for the detailed investigation and the findings shall be submitting to the consultant. The methodology for the incident investigation shall be "Find out the facts, not the faults".

Incident data, if properly collected and analyzed, indicates the trend and can show where and how problems arise. A monthly safety performance report of the project shall be included in the Monthly Progress Report after the end of each month.

7.2.4 Hazard Identification and Risk Assessment

The purpose of the hazard identification and risk assessment is to identify all potential hazards and associated risks during construction. The contractor will take relevant measures to control all critical, high and moderate hazards. Low potential hazards will be totally eliminated. General risk assessment of this

project has already been done and submitted to the relevant parts per Tanzania's Occupational Safety and Health Laws.

Depend on the severity of hazards we will be able to take necessary preventive and control measure to mitigate the hazards. Prior to the commencement of any activity, detailed hazard identification shall be done by the site supervisory staff with the assistance of Health & Safety Manager and the hazards shall be communicated to the whole team deemed to execute the task. The hazards analysis done shall be produced to Consultant for approval and mitigating measures shall be taken up to their satisfaction. Risk assessment shall be done per Occupational Safety and Health Act, number five of 2003.

7.2.5 Industrial Health and Hygiene

Hazards to health on a construction industry can arise from the use of a number of materials, substances and process if they are not properly controlled. Some of the more serious risks are caused by the inhalation of dust, toxic fumes, exposure to high temperature, noise, vibration, radioactive substances, ergonomic hazards etc.

DAWASA shall be responsible for maintaining health working conditions for all employees and sub – contractors. If it is not possible to remove the cause of harm, then suitable and sufficient Personal Protective Equipment (PPE) shall be provide to those who could be affected.

7.2.6.1 Hazardous substances

Material Safety Data Sheet (MSDS) of all hazardous materials that are used on site (if any) shall be obtained. An inventory shall be kept of all such materials with the relevant MSDS and shall be available for the inspection of consultant. An assessment shall be conducted in relation to the intended usage of the hazardous substances on site and adequate precautionary and control measures shall be taken according to the assessment. Such MSDS shall be available for inspection from Tanzania Health and Safety law enforcer. An assessment shall be conducted in relation to the intended use of the hazardous substances on site and adequate precautionary and control measures shall be taken according to the assessment.

7.2.6.2 Heat

Illness due to heat comprises a wide range of problems from minor inconvenience to critical medical emergency and death. The functioning of the thermoregulatory system of the body gets upset, (balance between heat gain and heat loss), which results in the subsequent loss of salt and water. This takes the following forms like heat rashes; heat cramps; heat exhaustion and heat stroke. Following precautions shall be taken against heat stress.

- Wear light, airy clothes.
- Drink plenty of water even if you do not feel thirsty.
- Wear sunglasses/balaclava while working outside.
- New employees shall give adequate time to acclimatize with the hot environment before deploying to the work site.

7.2.6.3 Dust

Dust control will be initiated prior to any activity in dusty condition. Such control will adopt but not limiting to de-dusting procedures. In case of unavoidable dust emissions, introduction of PPEs will be adopted. In any case no personnel shall be exposed directly to harmful airborne contaminants of Silica, Rust (ferrous oxide), Blasting grit, Asbestos, Glass wool & Paint solvent mist. Water sprinkling system shall be adopted to control the dust on all identification areas of the Project.

7.2.6.4 Noise

The Contractor shall comply with the applicable Tanzanian laws, orders and regulation concerning the prevention, control and abatement of excessive noise. Industrial deafness is caused by over exposure to high levels of noise from plant, machinery or construction processes. No employees shall be exposed to noise dose that exceeds 85 dB (A), unless they are wearing suitable hearing protectors, which effectively reduce the sound level at the user's level to or

below 85 dB (A). Consideration shall be given first to reducing the noise level at source.

The precautionary measures for the exposure limits shall be as follows:

- 80 to 85 dB (A) – Provide hearing defends with proper training to use them.
- 85 dB (A) – Signposts shall be erected to inform all employees and public that usage of car defenders is mandatory in the area.
- 115dB (A) – No exposure to steady noise irrespective of hearing protection.
- 135 dB (A) – No exposure to impulse noise irrespective of duration of hearing protection.

7.2.6.5 Vibration

Vibration causes health hazards in two ways;

- Vibration of body parts due to hand held tools like concrete vibrator, plate compactor, jackhammer, hand drill, hand grinder etc.
- Vibration of the whole body experienced while traveling in vehicle and operating equipment like dozer, grader, roller etc.

Excess vibration will result in discomfort to the worker, which leads to a decrease in efficiency and finally causes damage to health. Vibrating equipment shall be equipped with proper handles to prevent causing any impact on the operator. Personnel shall be given intermittent rest or shall be changed and replaced frequently.

7.2.6.6 Sanitary Facilities

Adequate sanitary conveniences will be provided in strategic point of the workplace. Such conveniences are lavatories, showers, and washbasins. Such facilities shall be kept clean and in good working condition at all times. Domestic wastes shall be collected per environmental management plan and Environmental Guidelines.

7.2.6 Personal Protective Equipment (PPE)

PPE protects the employee from identified non-eliminated hazards at the site. Personal protective equipment safeguards the employee from the identified hazards so which he is exposed. PPE is the last line of defense for employee protection. PPE does not and cannot eliminate hazard, it can only prevent or reduce exposure to hazards and reduce the severity of the consequent injury.

All employees of the contractor shall be provided with necessary PPEs and ensure that the contractor and sub – contractor personnel are also properly protected by appropriate PPE. Such provision will be free of charge. Employees shall be trained by line supervisors for the correct utilization of the PPE. Individuals shall not be allowed to work if they are not equipped with the appropriate PPE. Suitable signboards shall be kept in work area indicating the potential hazards (e.g. noise, radiation etc.) and PPE that is required to be worn in that area/for that activity, in applicable languages and visual signs. The signage will be in Kiswahili and English languages and posted in visible areas.

7.2.7 First Aid Facilities

All accidents, which involve personal injury, whether it is minor or major, shall be given medical treatment and report to concerned Supervisor. A first aid station shall be set up at the site office and a trained first aider will be in charge of the station. All injury cases, except minor injuries shall send to medical center for treatment. In case of an accident with personal injury doctors will attend such person in a prescribed hospital. Only ambulance will be allowed to transfer the casualties. Adequate number of first Aid boxes will be fixed in strategic points where employees will be notified the nearest location of the same, telephone number of Emergency control room will be also displayed. Adequate number of first Aid boxes shall be available site. There shall be one trained first aider in a group of 20 persons. First aid boxes shall be frequently inspected by the trained first aider and updated.

The Contractor shall comply with the Government medical or labour requirements at all times and provide, equipment and maintain base dressing

stations where and at all times have trained first aider for attending minor injuries.

7.2.8 Fire Prevention and Fighting Facilities

Construction sites premises are very prone to fire hazards because of different kind of combustible material used in all the above places. The components of a fire are fuel (combustible substance), heat and oxygen. Unless all three are present fire will not occur. A fire hazard evaluation shall be conducted all the project sites and camp to identify the fire risk at each location. Depend upon the risk factors fire prevention and fighting system shall be provided and maintained.

Following steps shall be taken to implement fire prevention system at our project premises.

- All the employees shall be education about the fire hazards, firefighting methods and precautionary measures specific to this project.
- Adequate number of portable fire extinguishers shall be placed at strategic locations.
- All employees shall be demonstrated the operation of portable fire extinguishers.
- Good housekeeping shall be maintained at all sites to reduce the fire risk.

7.2.9 Road safety management

This project as relies heavily on road transport. Analysis shows that road accidents contribute a major portion of total accidents in such construction projects. To avoid road accidents the following measures shall be adopted during the execution of project;

- A transport coordinator shall be appointed to control the movement of vehicles and equipment and he shall be responsible for safe and smooth deployment of fleet.
 - All drivers and operators shall possess a valid Tanzania license for the types of vehicle being driven or machinery operated.
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- All vehicles shall be kept in a plot with good conditions and preventive maintenance system shall be followed.
- An in-house training on defensive driving techniques and safe tipping operation shall be imparted to all drivers before allotting vehicles to them.
- The drivers shall follow all traffic rules and regulation of Tanzania.
- Over speeding shall not be allowed at any case and if observed do so disciplinary actions shall be taken against the defaulter.
- Drivers shall not be allowed working more than 8 hours shift period. The shift period includes loading, unloading, waiting and driving time.
- No driver shall be allowed to drive after consuming alcohol/drugs, some medicines, under fatigue or when sick or ill.
- Drivers shall wear necessary PPEs while driving.
- A driver forum shall be constituted and shall meet once in a month or immediately after an incident to discuss the general safety issues as well as specific leaning points from incidents.
- Only one person shall direct the driver/operator
- Beware signage shall be established on public institutions' entrances

7.2.10 Traffic management plan

This project involves movement of heavy traffic both at the site and outside the Site. All drivers are instructed to strictly follow the minimum speed of 20 KPH at the site. Adequate sign boards will be placed at the relevant location and flag man will be assigned whenever necessary. Anybody found violating the traffic rules will be punished.

7.2.11 Sub-Contractors

Subcontractors are treated as integral part of the contact and subject to the same standard of treatment as that of main contractor's employees in all matters pertaining to Health& Safety. List of subcontractors shall get approved by developer (DAWASA) prior to their deployment in the project. On arrival of Subcontractor's employees, Health& Safety Manager shall conduct induction program. Sub-contractor employees shall participate in all Health& Safety activities along with Contractor's personnel working under the Contract.

7.2.12 General Safely Rules

All personnel working at site always shall strictly follow Health& Safety rules:

- Never take their eyes off the job, pay attention to what you are doing.
- Shall pay attention to what you are doing.
- Shall be in a continuous observation of hazardous conditions that could lead to an accident.
- Shall report all first aid injuries, lost time accidents and near misses immediately to their supervisors.
- Shall wear proper uniforms and other personal protective equipment necessary for the job that they have to do.
- Shall ensure that they have the right tools and equipment for the job.
- Check the tools condition before using it.
- Shall always use provided personal protective equipment like overall, helmet, goggles, shoes and balaclavas etc.
- Shall know the location of the nearest fire extinguisher first aid box.
- Shall always keep work place clean and tidy.
- Shall not play with fire. Smoking in 'No Smoking' area only.
- Shall not interfere with overhead electrical supplies and appliances.
- Shall observe all warning signs, labels and hazard notices.
- Shall not overtake and over speed vehicles in high traffic areas. Shall observe all speed limits and traffic controls.
- Shall not use unstable material/platform for working, climbing and standing purpose.
- Shall not abuse toilets and welfare facilities provided for their use.
- Shall always take care when lifting load. Keep straight back and bent knees
- Shall not keep any material or obstacle in access ways or exit path.
- Shall not operate cranes over or in the close proximity of power lines.
- Shall take sufficient water and fluid regularly during hot and humid weather conditions.

- Safety is everybody's responsibility.

7.3 Safety in Various Construction Activities

7.3.1 Excavation

Excavation is one of the important phases of the construction activity. Any insufficient attention to the safety aspects may cause of accident, therefore we shall take utmost care in planning and executing all excavations. The following precautionary measures shall be followed:

- The area to be excavated shall be inspected thoroughly by a competent person for any underground services or structures.
- It shall be ensured that a person having good knowledge and experience supervises all excavations.
- All mechanical excavations shall be carried out only in the presence of an authorized banks man.
- The integrity of excavation and supports shall be inspected prior to the commencement of work on daily basis.
- No soil or other materials shall be stored close to the sides of the excavation and at least 1m clearance shall be provide for storage and dumping of excavated materials.
- Edges of excavations shall be barricaded to prevent falling of persons and materials.
- If vehicular traffic is allowed near to the excavation, contractor shall provide adequate lighting, warning signs and concrete blocks painted with reflective paints.
- Excavations exceeding 1m shall be demarcated with solid barricades plus warning tapes. The rest shall be barricaded with warning tapes.
- Where there is a possibility of ingress of water then pumping sumps shall be established with pumps being readily available for use and additional ladders placed for use in the event of emergency evacuation.
- Adequate means for entry and exit shall be provided for excavations over 1.5m and it shall be either ramp or ladder.

- All the personnel engaged shall be made aware about safe digging practices, hazards in the operation and emergency procedures.
- Adequate number of strong and stable temporary crossing with handrails shall be provided for personnel.

7.3.2 Reinforcement Steel Work

Reinforcement steel work is an essential part of any construction phase. The activity involves unloading, bar bending, cutting and fixing of bars in position and people's unsafe acts. The main hazards are handling hazards, working with machinery, using of electricity, falling of material on body and taken.

- Loading and unloading of steel shall be done by proper lifting equipment lifting tackles and under proper supervision.
- All persons handling steel bars shall be provided with necessary PPE required for the job.
- The lengthy steel bars shall be stored in safe manner to avoid in tripping hazards and protruding hazards. Proper signage shall also be provided.
- Bar cutting machines and bending machines shall be in good working condition and provided with emergency stop switches and necessary guards. Both the machine shall be placed in such a way that the operation on it shall not create any danger to nearby workers.
- The electrical connections to the machine shall be done by electrician by providing appropriate circuit breakers and proper earthing after conducting risk assessment.
- Persons deployed for cutting and bending shall be trained and instructed about the job and its inherent hazards.
- The work area shall be kept clean and steel cut pieces will be kept separate.
- Adequate number of works shall be deployed to handle and fix the steel.
- The tools used for fixing the steel in place shall be inspected regularly and maintained properly.

- If the steel fixing work is at height or in an excavated pit/trench, safety measures shall be taken in accordance with the accordance with the particular procedure.

7.3.3 Concreting

This includes shuttering, formwork, de-shuttering and concreting. The main hazards are falling of objects; struck by object, falling of persons from height, crush injuries and impact injuries, ergonomic related, tripping and slipping. The following practices shall be adhered to ensure the safe operation in these activities.

- The persons deployed on work shall be given a safety induction related to the job. They shall participate in the risk assessment.
- The persons deployed on work shall have well experience and provided with all tools in good working condition.
- Handling, erection and dismantling of heavy shuttering shall be done with proper lifting equipment under close supervision.
- Required PPE shall be provided to all persons engaged in the job.
- The workers shall be informed about the hazards of the activity.
- The area shall be barricaded to prevent the entry of unauthorized persons and visitors.
- Hand tools shall be inspected on daily basis.
- There shall be effective communication between the crew members while erecting and dismantling the shuttering.
- Good housekeeping shall be maintained all over the area.
- Formwork for the concreting shall be inspected by a competent person, prior to the pouring.
- The concrete pump shall jack-up properly and park at firm and level ground.
- Two persons wearing reflective jackets shall be deployed to hold the concrete pouring pipe.
- Always look for overhead electrical cables while parking the concrete pump.

- Temporary platforms shall be provided on steel work for people to stand while working at the area.
- Tipping shall be away from overhead power lines

7.3.4 Material Handling

7.3.4.1 Mechanical Handling

Lifting equipment and lifting gears shall be inspected per Occupational Safety and Health Laws of this Country and should be used for handling of construction materials. All lifting equipment shall be checked and ensured that they are in good operating condition and free from defects. All lifting equipment and tackles shall have valid third party certificate. Inspection intervals shall be as per Tanzania laws and safety regulations. Inspection and certification shall be done from Tanzania's approved competent authority which is Occupational Safety and Health Authority (OSHA). Colour coding system for lifting equipment shall be followed. All lifting operations shall be done by experienced persons and supervised by competent persons. In case of tandem lifting only the Project Manager shall authorize such lifting. The following safe practices shall be adhered in all mechanical lifting operation. The following safe practices shall be adhered in all mechanical lifting operation.

- All lifting equipment and tackles shall be maintained in good operative condition.
 - Every dangerous and rotating parts of lifting equipment shall be guarded.
 - Care shall be taken to avoid the overloading lifting equipment and tackles.
 - All lifting operation shall be performed under the supervision of an experienced and trained supervisor.
 - Signalman with reflective jacket shall be deployed with the lifting equipment.
 - Only one signalman shall direct the operator
 - Proper communication shall be maintained between the operator and signalman during the operation.
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- Wind speed shall be taken into consideration before lifting and if it exceeds the safe limit all lifting operation shall be ceased.
- Extreme care shall be taken while working near overhead power lines and safe distance shall be maintained.
- Toolbox talks shall be conducted before lifting operation for prevention of incidents.
- Only the project Manager shall authorize tandem lifting.

7.3.4.2 Manual Handling

Correct manual lifting and handling procedures can prevent back injuries and strains that account for a major portion of all industrial injuries. Before handling any material, its weight, size, shape and physical characteristics are to be seen and further action shall be taken accordingly. Following are the measures to prevent the incidents during manual handling.

- Load to be lifted shall be assessed for its weight, shape and size.
- Load shall be sized up and assistance sought if necessary.
- Proper method and posture of lifting shall be adopted.
- Load being carried shall not obstruct the view in front.
- Do not change position of load while moving.
- Slipping and tripping hazards shall be taken care of.

7.3.5 Working at Height

7.3.5.1 Scaffolding

Proper scaffolding and working platform shall be provided to work at height. All scaffolds shall be designed by a competent person and shall be made of good and standard materials. Prior to use, all scaffolds shall be subjected to the inspection of Consultant and shall get approval. All persons involved in the erection and dismantling of scaffold shall be trained and experienced for the same. No persons other than the supervisor involved shall be permitted to be upon any part of an incomplete scaffold.

- All personnel shall be provided with necessary PPE.
 - Persons with vertigo shall not be allowed to work at any height.
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- As long as the scaffold is in use, supervisor concerned shall inspect it daily before allowing persons to work on it and satisfy himself that the scaffold is complete and is fit for use.
- Subsequent to rain or heavy wind, the scaffolding supervisor shall inspect all scaffolds prior to restart the work.
- All working platforms shall be close boarded and all boards shall be lashed and secured.
- Handrail and toe board shall be provided for all scaffolds and the planks shall be tied to the ledgers properly.
- Always ensure that no loose items and materials are left at height that may fall on person working or passing beneath.
- In case of mobile towers, the height shall never exceed three times the length of the shortest side and there shall be only one working platform on a mobile scaffold.
- The mobile tower shall only be moved by pulling or pushing the base and the working platform shall be clear of men and materials when the tower is being moved.
- The wheels of mobile tower shall be turned outwards and brakes shall be on and locked before use.
- Diagonal bracing shall be fitted on all lifts on all sides and cross bracing shall be fitted at the base and every alternative lifts of an independent tower scaffold.
- Adequate ladders shall be provided for the access to and egress from the scaffold.

7.3.5.2 Ladders

- All ladders shall be factory made and of sound construction.
 - Wooden ladders shall not be used with the scaffold.
 - If the work is being done in and around electrical equipment and/or cables only wooden (non-conductive) ladders shall be used.
 - Ladders shall not be painted.
 - Ladders shall be secured properly at top and base.
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- Ladder shall be extended for at least on meter above the landing.
- Ladders shall not be used as working platform or part of load bearing component of a scaffold.
- The base to height ratio of ladder shall be maintained as 1:4 such that the angle is 75° from the horizontal can be maintained.

7.3.6 Heavy equipment and workshop

Faecal Sludge Treatment Plant construction project mostly depends on heavy equipment like Dozer, Excavator, Grader, Wheel Loader, Backhoe and Crane. So, the safe operation and maintenance of heavy equipment play a major role in accident prevention. A workshop facility shall be set up in the lay down area to perform routine maintenance and repairs of equipment deployed for the project. Following measures shall be taken to ensure safe operation and maintenance of equipment and plant:

- Equipment shall be put into service after obtaining approval by a competent technical authority.
- All the operators shall have valid Tanzania license and thoroughly educated about the safe operation and maintenance of equipment.
- It shall be ensured that operators are performing daily checks before commencing the activity and report abnormalities, if any.
- All operators shall undergo frequent refresher training on safe operation and basic firefighting.
- No one shall be allowed to travel in the cabin along with the operator.
- Equipment shall be transported from one place to another only by low bed trailers and proper lashing shall be ensured while transporting through road.
- Adequate space shall be available in the workshop for free movement of vehicle / equipment and each activity shall be performed in a clearly defined area.
- Hazardous activities like painting, welding, cutting, grinding etc. shall segregate from other activities normally will do in dedicated booths.

- Storage of hazardous materials shall be in a secured and dedicated area as per Tanzania Policy standards.
- Emergency exit, fire alarm and firefighting equipment, first aid box, requirement to wear PPE and other necessary safety information shall be displayed at prominent locations with visible signs.
- Adequate lighting and ventilations shall be provided in all work places.
- Adequate provision shall be made for the collection, temporary storage and disposal of solid and liquid waste material from all workplace.
- Good housekeeping standards shall be maintained.
- Smoking and consumption of food shall be restricted to designate area.
- No horseplay or practical work jokes shall be allowed in work place.

7.3.7 Cable Laying, Termination and Jointing& Electrical Works

Laying of high voltage and low voltage cable and other Electrical works are one of the activities in this project. The main hazards involved in these are struck by, falling of materials, fall of persons, and failure of lifting equipment and tackles, fire and burn injuries. Following precautionary measures shall be taken to avoid any incidents during this stage.

- Risk assessment shall be conducted prior to execution of such job.
- All electrical works shall be performed by qualified persons who shall be provided with adequate and necessary personal protective equipment.
- Prior to maintenance operations on any electrical equipment or appliances, the electrical current shall be disconnected, (lockout and tag out) with a lock or any other adequate means and tagged out to ensure the prevention of reenergizing of the equipment by any person during work.
- Employees working in electricity shall be instructed in using the proper fire extinguishers in electrical fires such as Dry Chemical and CO₂ extinguishers.
- Water or extinguishers containing water shall not be used in extinguishing electrical fires which occur in electrical equipment or

conductors as water is a good conductor which causes electrical shocks for the person using the extinguisher.

- Metal ladders or non-insulated hand tools shall not be used while working in electrical installations. (Handles of all hand tools used shall be insulated and wooden ladders shall be used)
- When the fuse or circuit breaker disconnect the electrical circuit, electrical current shall not be re-connected before inspecting the cause of the fault and repair it and thus replace the fuse with other fuse of the same rating or the circuit breaker shall be returned to its first position by a qualified employee.
- Electrical circuit shall not be overloaded to prevent occurrence of fires.
- Electrical wires shall not be passed through doors or windows and shall be kept away from heating sources such as heaters and shall not be hung from nails to prevent the damage or wearing of the insulating material.
- Defective or corroded electrical wires shall not be used and shall immediately replace.
- Cable drums shall be placed on level and firm ground and properly wedged to prevent rolling.
- Jacks and other accessories for cable laying shall be inspected by a competent person to make sure that it is free from defects.
- Rollers shall be placed properly to avoid the over exertion of force on cables while laying.
- The winch shall be fixed firmly on ground to prevent any unintended movement while pulling the cable.
- Experienced and trained persons shall be deployed for cable laying and winch operation.
- All cable jointing and terminations shall be done by certified and approved cable jointers.
- Adequate fire safety measures shall be taken care while termination and jointing the cable.

- The area shall be barricaded to prevent the entry of unauthorized persons during the operation.
- In case a person receives an electrical shock, this person shall not be touched, first, disconnect the power and remove the injured person away using a piece of wood or any other insulated material, and then, first aid shall be provided to the injured person such as Cardiac Pulmonary Resuscitation (CPR). The doctor shall be informed immediately or the injured person shall be taken to the nearest hospital.
- When recharging batteries, employees shall be instructed not touch the battery liquids, and shall be provided with adequate and suitable personal protective equipment when doing that (Face shield, rubber gloves, aprons) and when refilling batteries by acid, acid shall be added to water (and not water to acid), in case any burns by the effects of acids occurred, immediately flush the burn with big amount of water.

7.3.8 Portable Power and Hand Tools

The main causes of most injuries involving hand tools are the use of unsuitable tools, their incorrect use or their incorrect storage. Inspect the tool and ensure that it is in good condition. Unsafe tools include wrenches with cracked or worn jaws, screwdrivers with broken tips etc.

- Select the right tools for the job.
- Use all tools correctly.
- Keep tools in a safe place.
- We shall train the workers to select the right tools for each job, and ensure that the tools are available.
- Protect the edges of the sharp tools while carrying.
- Tools shall not be kept lying on floor, walkways or scaffolds,
- Tools shall not throw from one level to another. It shall be lifted and lowered by hand lines.
- All guards and covers shall be securely fitted and correctly adjusted.

7.3.9 Transportation

This section outlines the procedure and guideline for avoidance for motor vehicle accidents.

- Every person driving a motor vehicle or operating a machine must possess valid driving licenses appropriate to the class of vehicle being driven.
- All drivers should observe posted speed limits. Adverse weather conditions, traffic and light (visibility) require lower speeds than posted speed limit. Maximum speed limit must be limited 40 KPH in camps and 60 KPH on haul roads.
- All vehicles shall be parked uniformly and where provided, in designated parking areas. Parked vehicle shall not be obstructing other vehicle, roads, and access ways for fire hydrants.
- Vehicle shall be maintained in good condition and regular inspection carried out to check steering system, foot and parking breaks, tyres, seat belts, horn, Head lights, tail lights, stop light and indicators, rear view mirrors, wind shield wipers and washer, crank case and radiator level.
- Drivers and passengers in all vehicles including buses should wear seat belts.
- Driver shall slowdown in inter section, blind corners and stop completely at all stop.

7.4 Emergency Preparedness and Response

DAWASA plan to construct a Public toilet at Coco Beach, Oyster-bay Mtaa, Msasani Ward in Kinondoni Municipality. This DAWASA Emergency Response Plan (ERP) has been prepared to establish the procedures for responding to specific emergencies that may occur. Copies of these plans are maintained at the contractor office, DAWASA office and at the Public toilet site. The Emergency Response Plan includes protocols to ensure close coordination with local area emergency response organizations, agencies and also with existing state and local Emergency Preparedness Plans. In the event there is

a conflict within the standards or regulations or within pre-established site safety guidelines, the more stringent shall govern.

7.4.1 Review and responsibilities

- **DAWASA Management:** The management is committed to the principle of the safe working and desires that on no account, should any person ever put him to risk.
- **Contractor:** It is the responsibility of the site management to review and ensure awareness of emergency procedure among all the site personnel.
- **Contractor Employees:** It is also the responsibility of all employees to continually familiarize themselves with the assembly procedures for their relevant areas of work.
- **General:** Any information being relayed about an emergency shall be clear and precise giving the exact location, the nature of the emergency and the seriousness of the emergency and contact numbers and names.

CHAPTER EIGHT

8.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

8.1 Environmental and Social Management Plan

The Environmental and Social Management Plan (ESMP) presents the implementation schedule of the proposed mitigation measures for both environmental and social impacts. The ESMP for the proposed Construction of a Public Toilet at Coco beach is summarized in Table 5. The ESMP also indicates the environmental costs needed to implement the recommended mitigation measures. The public toilet site selection process and engineering designs have already included some of the mitigation measures recommended in this report. Additional recommendations are provided in the ESMP to enable the public toilet to be constructed and operated in an environmentally friendly manner.

DAWASA in collaboration with Kinondoni Municipality shall be the main implementer of the ESMP through supervisors of the site. The environmental measures incorporated in the detailed engineering design will be attached to the Bills of Quantities and Contract Documents. Moreover, there will be an Environmental, Social, Health and Safety (ESHS) Code of Conduct to be signed by the Contractor(s) to show their commitment to the implementation of the Environmental, Social, Health, and Safety. The implementation of the Code will be supervised by DAWASA or his consultant.

The ESHS Code is a set of Guidelines attached to the Bidding Document and Contract to be adopted by the Contractor during project implementation. It contains the commitment and obligations of the Contractor and its subsidiaries (i.e. Sub-Contractors and staff) to undertake construction activities following all applicable Laws, Rules, and Regulations. The Contractor and its subsidiaries shall comply with the Code of Conduct with high ethical standards. Failure to observe the Code will subject the firm to disciplinary action, including Contract

termination. Violation of the Code is a violation of Law that may result in civil and/or criminal penalties to Contractors, Supervisors, or Firm.

Some of the issues to be included in the ESHS shall include;

- Site-specific **ESMP & HSMP**
- Traffic Management Plan (**TMP**), **where applicable**
- HIV/AIDS Awareness Program
- Occupational Health and Safety Awareness Program.
- Sexual Harassment Prevention Policy
- Child Labour Prevention Policy

The environmental and social mitigation and enhancement measures incorporated in the detailed engineering design will be attached to the Contract Documents. The Contractor shall take stock of the contents of the Project Brief.

Table 8-1: Environmental and Social Management Plan for the Proposed Construction of Public Toilet at Coco Beach, Oyster Bay street, Msasani ward-Kinondoni Municipal

Impact	Mitigation Measure	Responsible Institution	Estimated One-Time Cost (TZS)	Estimated Annual cost (TZS)
Increased HIV/AIDS and other sexual-related diseases-<u>Construction Phase</u>	<ul style="list-style-type: none"> ○ Enforcement of a code of conduct in the project area ○ Deployment of locally available labor ○ Involvement of information education and communication component (IEC) in its budget. This will help to raise more awareness of HIV/AIDS. ○ A safety, health, and environment induction course shall be conducted for all workers 	DAWASA	500,000.00	
Noise pollution-<u>Construction Phase</u>	<ul style="list-style-type: none"> ○ Maintaining equipment in good running conditions to ensure that ambient noise level and vibrations pollution into the environment is very minimum ○ Noisy construction activities will be scheduled at normal working hours. ○ Regular inspection and maintenance of construction vehicles and equipment will be done to ensure that they have mufflers installed and worn parts are replaced. 	DAWASA	500,000.00	
Air Pollution from dust emission-<u>Construction Phase</u>	<ul style="list-style-type: none"> ○ Mixing equipment shall be sealed properly and vibrating equipment will be equipped with dust-removing devices. ○ Adequate training and use of personal protective equipment (PPE) such as eyeglasses and dust masks will be ensured to reduce risks associated with dust. 	DAWASA	1,000,000.00	

<p>Potentially communicable disease transmission- Operation Phase</p>	<ul style="list-style-type: none"> ○ Ensure a supply of adequate provisions like water, toilet papers, soaps, disinfectants, etc. ○ Maintain a high level of cleanliness ○ Install guidelines on the usage of toilets 	<p>DAWASA</p>	<p>5,000,000.00</p>	
<p>Smells and flies in toilets</p>	<ul style="list-style-type: none"> ○ The developer to ensure an adequate supply of provisions ○ Adhere to good maintenance ○ Timely desludging 	<p>DAWASA</p>		
<p>Groundwater pollution</p>	<ul style="list-style-type: none"> ○ The design and material to be used for septic construction need to ensure no leakage in the future. ○ Monitoring of the treatment should be conducted from time to time ○ Timely desludging of septic tank 	<p>DAWASA</p>	<p>To be included in the BOQ</p>	
<p>Health Risks associated with construction works</p>	<ul style="list-style-type: none"> ○ The project proponent shall ensure that all personnel is provided with appropriate protective gear. ○ All works shall be planned and conducted following relevant OHS Guidelines. First Aid Kit as well as regular medical check-ups for the workers will be provided during the entire working hours. ○ An adequate number of firefighting equipment/extinguishers will be provided every few distances to help put off fire in case of occurrence. ○ Excavated pits should be protected by warning tape and guardrails to prevent workers from falling 	<p>DAWASA</p>	<p>1,000,000.00</p>	
<p>Increased waste generation</p>	<ul style="list-style-type: none"> ○ Stick to the design specifications 	<p>DAWASA</p>	<p>To be included in the BOQ</p>	

Environmental and Social Impacts Assessment for the Proposed Public Toilet to be built at Coco Beach, Oyster Bay street, Msasani ward, Kinondoni Municipality

	<ul style="list-style-type: none">○ Provide waste containers○ Provide training to workers and orient them towards environmental protection values			
Total			8,000,000.00	8,000,000.00

CHAPTER NINE

9.0 ENVIRONMENTAL AND MONITORING PLAN

9.1 Environmental Monitoring

The national EIA guidelines require the developer to prepare and undertake a monitoring plan of implemented development projects. Monitoring is needed to check if and to what extent the impacts are mitigated, benefits enhanced and new problems addressed. Recommendations for monitoring have been included in Table 6. The monitoring plan also assigns responsibilities to different actors. Moreover, the ward and street environmental committees will shoulder the long-term monitoring of the project.

Table 9-1: Monitoring Plan for the Proposed Construction of Public Toilet at Coco Beach area, Oyster Bay street, Msasani ward, Kinondoni Municipal

Parameter	Monitoring Frequency	Sampling Area	Measurement Unit	Method	Target Level/Standard	Responsibility for monitoring	Estimated Annual (or once cost (TZS)
Dust	Daily	Immediate working area	Presence of nuisance dust	Physical-visual	-	DAWASA	None
Air Quality	Daily	In and around the public toilet	Presence of smells	Smelling (nasal)	Absence of nuisance smells	DAWASA	1,000,000.00
Waste Generation	Weekly	In the working area	Amount of waste	Physical measurement or estimation	All waste contained	DAWASA	In BOQ
Health risks	Daily	At working area	Accidents	Counting	NO accident	DAWASA	
HIV/AIDS	Monthly	Workers	Training	Numbers	One per month during the construction phase only	DAWASA	1,000,000.00
Biodiversity	Once (at commencement)	Working area	Destruction of habitat or removal of biodiversity	Area affected	Minimal disturbance to biodiversity	DAWASA	500,000.00
Total							2,500,000.00

CHAPTER TEN

10.0 CONCEPTUAL DECOMMISSIONING PLAN

10.1 Closure Plan

The decommissioning plan is part of the reversal phase, which has the additional and often dominant risk factors associated with the materials casted and imported during the life of the project (e.g., toxic and/or explosive material, etc.), as well as the potentially decreased structural integrity due to renovations and/or wear and tear. Similar impacts encountered during the construction phase will be experienced in much the same way when the reverse process is set in motion a detailed closure plan for the project will be prepared prior to decommissioning commencement. Since closure activities might cause contamination of soil surface and groundwater, the work should be conducted by a competent and experienced company.

11.2 Aim of the Preliminary Plan

The preliminary plan serves to establish decommissioning as an important consideration from the inception of the project, during design and throughout the operation of the public toilet. The plan has the following purposes:

- a) The primary purpose of the preliminary plan is to ensure that the public toilet designers are aware of decommissioning during the initial design of the toilet. Thus, where design choices that would enhance decommissioning are available for types of materials and system components, and location of components, these choices should be made.
- b) Another purpose of the preliminary plan is to identify the ultimate decommissioning options and final facility status. These options would be evaluated and narrowed to the decommissioning method of choice as the end of toilet facility life is approached.
- c) The final purpose of the preliminary plan is to demonstrate to regulatory agencies that important aspects of decommissioning are considered as early as possible during the initial design of the facility. The plan serves as the starting

point to demonstrate that areas such as decommissioning methods, costs, schedules, and operating impact on decommissioning will be reviewed and refined throughout the operating life of the toilet facility.

CHAPTER ELEVEN

12.0 CONCLUSION

The proposed project is of greater profit to the community and the country at large as it promotes and improve sanitation in the streets especialy at Coco Beach area. When there is good and improved sanition, then the outbreak of diseases like diarhoea and associated stomach and waterborne diseases are also reduced and prevented hence improved public health.

The impacts identified are preventable and of less negativity to the community, therefore the developer can be provided with the environmental clearance certifacte in order to commence the implimentation of the project.

It is, therefore, concluded that implementation of the proposed construction of the Public Toilet at Coco Beach Oyster Bay Mtaa will entail no detrimental impacts provided that the recommended mitigation measures are adequately and timely put in place. The identified adverse impacts shall be managed through the proposed mitigation measures and implementation regime laid down in this EIS. DAWASA is committed to implementing all the recommendations given in the EIS and further carrying out the environmental auditing and monitoring schedules.






REFERENCES

1. Kinodnoni Social Economical Profile, 2022
2. National Environmental Action Plan, 1994
3. United Republic of Tanzania (2004): Environmental Management Act
4. United Republic of Tanzania (2005): Environmental Impact Assessment Regulations

Appendix I: List of Stakeholders Consulted

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF OFF-GRID SANITATION PROJECTS, DAR ES SALAAM

LIST OF CONSULTED STAKEHOLDERS

SN	DATE/TAREHE	NAME/JINA	INSTITUTION/TAASISI	POSITION/CHEO	PHONE NO./SIMU	SIGNATURE/SAINI
01	24/08/2022	KWABWA W. JAMBO	Kmcc	MNRECO	0717727201	
02	24/08/2022	Kennedy Mvira	KMCC	CEO	0657 853 027	
	24/08/2022	SINGO L. MDEGELA & ESTHER P. GAMBWA	S/MITA-O-BAY	VEO	0735-276182	
	24/08/2022	DEJUS P. KIBETO	AFISA UTALI/KMCC		0713707893	
	24/08/2022	JOHN R. MARIWA	Kmcc	KATIBA/MSASANI	0754310134	

Appendix II: Minutes of Meetings with the Local community

TATHMINI YA ATHARI KWA MAZINGIRA NA JAMII NA UHAMAISHAJI KWA JAMII KUHUSU MPANGO WA MAKAZI MBADALA NA PIDA ZITOKANZO NA UJENZI WA MRADI WA MIUNDOMBINU YA UCHAKATABI MAJI TAKA NA UJENZI WA CHOO CHA UMA UKOA WA DAR ES SALAAM, HALMAJHAURI YA MANISPAA YA KINONDONI, KAFA YA MSAJANI MTAA WA OYSTER BAY (COCO BEACH PUBLIC TOILETS)

AGENDA:

- 01: KUFUNGA MKUTANO
- 02: MAELEZO NA TARATIBU KUHUSU MRADI WA CHOO
- 03: MAONI/MATWALI KUTOKA KWA WADAU
- 04: KUATHIRISHA MKUTANO

01: KUFUNGA MKUTANO:

Mkutano uliunguliwa mwanzo saa 10:33 jioni na mwenyekiti ndugu Mjusa Nyamba ambapo aliwakaribisha warandhi katika mkutano pamoja na wataalamu. Weshauri tukka ka mauteka ya maji safi na usafi wa mazingira (DANASA). Mwenyekiti aliwataka warandhi kuwa wahalimu na kusitiza kwa makini kueleza yote yanayotolwa na wataalamu. Mwenyekiti aliwakaribisha wataalamu kuhusu kueleza na agenda inayofuata.

02: MAELEZO NA TARATIBU KUHUSU MRADI

Wataalamu kuhusu ndugu Emmanuel Rajabu alianza kwa kuwaza kwa mradi huu upo chini ya utimamizi wa opini ya DANASA, ambapo kwa sasa mradi huu uneshauri kuyengwa baada ya serikali kuona kuna umuhimu mkubwa wa kuwa na choo katika eneo hili. Sheria ya mazingira ya mwaka 2018 ndiyo itakayohimika katika yenzi wa choo hiki.

Mbali na hayo, mkutano huu pia una lengo la kupata maoni kutoka kwa warandhi juu ya nini kifanyike



Katika ujenzi huu. Wanandi wote wanaoambwa kuwa wajulikani wakati zoezi hili lote linaendelea. Vilevile vyoo hivi ni ya kirasa kwa ajili ya piasa zote mbili pia walenavyo wamezingatiwa hawajaelewa nyuma vyoo hivi vitakuwa ya kulipia na wakali ya utaa ndiyo utakua na jukumu la kuliniania dhughuli zote za uendaji wake.

08: MAOM/MADWALI KUTOKA KWA WADAU.

01: Kenedy Julius: - Ujenzi wa choo hiki kitatumia muda gani kumalizika?

- Mlisema utalete choo cha muda (temporary) kabara mpaka sasa hakipo?

JIBU: - Ujenzi umeshareza na bado unaandelea, tutarajie mpaka mwakani utakuwa umeshika (Dawara)

- Vyoo ya temporary vitolewa, limechukuliwa na litajikichwa mahali husika. (Ajisa mazingira Manispaa).



02: Neema Lino: Aliomba wakati huu ujenzi unapoendelea, barufu mbaya imayabokana na waki kujisaidia pambazoni kwa eneo la ujenzi lidhibitime.

03: Hamzi Pascal: Aliomba kujenge vyoo viwili tu kwanza ya muda kwa baraka kabli wakati ujenzi unaandelea.

04: Aginole Mbaraka: → Aliomba mazingira ya vichaka pambazoni kwa choo kinapojengwa yabaki vitenile hata pale ujenzi utakapomalizika.

→ Aliomba katika eneo la nyuma ya choo kupandwe majani ili kutunza mazingira ya eneo hilo.

05:

- Aliomba waki wa mazingira wakiletewe tatizo bari walishughulikia kwa baraka sana.

Ch: KUAHIRIATA MKUTANO

Mkutano uliainishwa mwanzo saa 10:55 ambapo mwenyekiti aliwashukumu wananchi kwa kutudhania kwao na kwa wataalamu watahamu kwa maoleo mazuri waliyeyata kwa harufaa ya jamaa na taifa kwa kijumu.

KATIBU

MWENYEKITI

JINA MUSSA MYAMBA

JINA

SATHIHI

SATHIHI M. Ngidi

NAMBA YA SIMU

NAMBA YA SIMU
0655 172117



Environmental and Social Impacts Assessment for the Proposed Public Toilet to be built at Coco Beach, Oyster Bay street, Msasani ward, Kinondoni Municipality

TATHINIMI YA ATHARI KWA MAZINGIRA NA JAMII NA UHAMASISHAJI KWA JAMII KUHUSU MPANZO WA MAKAZI MBADALA NA FIDIA ZITOKANAZO NA UJENZI WA MURADI WA MIUNDOMBINI YA UCHAKATJI MAJI TARA NA UJENZI WA CHOO CHA UMMA Mkoa wa DAR-ES-SALAAM, HALHASHAURI YA MAMOPAA YA KINONDONI, KATA YA MSASANI Mtaa wa OYSTER BAY (COCO BEACH PUBLIC TOILETS.)

MAHUNDHURIO:

TAREHE: 08/11/2022

S/N	JINA	CHEO	ATOKAKU	NAMBA YA SIMU	SAAHIHI
01	MUSSA MYAMBH	MKIKITI	COCO BEACH	0655172117	M. Myambh
02	EMANUEL NGOMI		COCO BEACH	0689271915	E. Ngomi
03	DAUDY AGUMBA	MASALI	COCO BEACH		D. Agumba
04	HAMZA PASCHER	MSPARI	COCO BEACH	-	H. Pascher
05	SALHE MWAMADI		COCO BEACH	0688251580	S. Mwamadi
06	Maulidi Saidi	Masali	COCO BEACH	0699853685	M. Saidi
07	Ana Kirule	Masali	COCO BEACH	0713365596	A. Kirule
08	PAUL MACHIZYA		COCO BEACH	0689075391	P. Machizya
09	GASTO TARIMO		COCO BEACH	0714428546	G. Tarimo
10	KENEDY JULIAS	MFANYABIBI	COCO BEACH	0787775834	K. Julias
11	MCCMA NYILLO	BISHARA	TABATA KISIWI	0763-044765	M. Nyillo
12	ABINTORE MUBANO	BISHARA	COCO BEACH	- - -	A. Mubano
13	SAMSON SAMUEL JUMA	BISHARA	COCO BEACH	0756799769	S. Samson
14	BUNTAMU JUMA	BISHARA	COCO BEACH	071828095	B. Juma



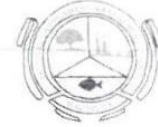
Appendix III: Screening Decision from NEMC



THE UNITED REPUBLIC OF TANZANIA

VICE PRESIDENT'S OFFICE
UNION AND ENVIRONMENT

NATIONAL ENVIRONMENT MANAGEMENT COUNCIL
(NEMC)



In reply please quote:

Ref: EC/EIA/2022/8748/1

Date: 26th September, 2022

Managing Director,
Dar es Salaam Water Supply and Sanitation Authority (DAWASA),
Building, Dunga/Malaga Street,
Mwananyamala Area ,
P. O. Box 1573,
DAR ES SALAAM

**RE: SCREENING DECISION FOR THE PROPOSED PUBLIC TOILET
TO BE BUILT AT COCO BEACH, OYSTER BAY STREET,
MSASANI WARD, KINONDONI MUNICIPALITY,
DAR ES SALAAM REGION**

Kindly refer to the above subject.

2. National Environment Management Council (NEMC) acknowledges receipt of your project brief and Environmental Impact Assessment (EIA) registration forms for the above mentioned project. The project has been registered with Application Reference Number (ARN) EC/EIA/2022/8748. Please refer this number for any future correspondence with us.
3. Following screening using criteria set out in Second Schedule of EIA and Audit Regulations (Amendment) 2018, your project falls under Type B2 projects. Therefore, the Council has reached a decision that the project will end up at Project Brief Stage.
4. Thus you are required to prepare an **Improved Project Brief** which will guide the Council in decision making. Moreover, the following information and documents must be included or attached in the improved project brief:
 - i. Provide Land ownership documents and permit from Kinondoni Municipal Council. Ensure that the acquired land size and use is compatible with the project activity;
 - ii. Stakeholders' consultations should be done adequately including all neighbours, Mtaa, Ward offices and Kinondoni Municipal Council. Minutes of the meeting and pictures attached in the Improved Project Brief, their views and

Head Office, Kambarage Tower, 6th Floor, P.O. Box 2724, Dodoma. Phone: +255 262960098, 0713608930,
Email Address: nemcdg@nemc.or.tz Website: www.nemc.or.tz

concerns should be responded to by proponent. Names and signatures of all the consulted stakeholders should be appended as well;

- iii. Detailed information of solid, liquid and hazardous waste management and storm water management;
 - iv. Baseline conditions such as population, soil, air quality and surface water quality (also state the distance from the highest waterline of sea shore to the project site);
 - v. The materials to be used and source, products and by-products, including waste to be generated by the project and the methods of their management in all project phases;
 - vi. The potential environmental impacts of the project and the mitigation measures to be taken during and after implementation of the project;
 - vii. The economic and socio-cultural impacts to the local community and the nation in general;
 - viii. Environmental and Social Management and Monitoring Plans;
 - ix. Decommissioning plan of the project; and
 - x. The site layout plan.
5. Upon submission of the Improved Project Brief, the Council will arrange for the internal technical review of the document. Prior to this review, representatives of the Council will visit the project site to inspect and verify the adequacy of the Project Brief with respect to the proposed project and surrounding environment.
7. Looking forward to your cooperation on this project.


A. N. Sembeka

For: **DIRECTOR GENERAL**

Cc: Prof. Rubhera RAM Mato (PhD), CEng. (T), Reg. EIA Expert,
Mobile: +255754898592,
E-Mail: rubheramato@gmail.com

Appendix IV: Memorandum of Understanding between DAWASA and Dar es Salaam Municipal Councils



MEMORANDUM OF UNDERSTANDING
BETWEEN
MINISTRY OF WATER
AND
THE DAR ES SALAAM WATER SUPPLY AND
SEWERAGE AUTHORITY,
REGIONAL ADMINISTRATIVE SECRETARIAT
AND
DAR ES SALAAM MUNICIPAL COUNCILS
(Kinondoni, Ilala, Temeke, Ubungo, Kigamboni)

JANUARY 2019

ACRONYMS

BC	Beneficiary Community
CEO	Chief Executive Officer
CPM	Critical Path Method
CV	Curriculum Vitae
DAWASA	Dar es Salaam Water and Sewerage Authority
DDCA	Drilling and Dam Construction Agency
DEWATS	Decentralized Wastewater Treatment System
DSM	Dar es Salaam
EMP	Environmental Management Plan
ESA	Environmental and Social Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EWURA	Energy and Water Utilities Regulatory Authority
FDR	Final Design Report
FSM	Feacal Sludge Management
GIS	Geographic Information System
GoT	Government of the United Republic of Tanzania
H&S	Health and Safety
ICB	International Competitive Bidding
IFRs	Interim Financial Report
LGAs	Local Government Authorities
m ³	Cubic meter = 1,000 litres
MD	Managing Director
MKUKUTA	National Strategy for Growth and Reduction of Poverty
MoEVT	Ministry of Education and Vocational Training
MoHCDEC	Ministry of Health, Community Development, Gender, Elderly and Children
MoU	Memorandum of Understanding
MoW	Ministry of Water
NCB	National Competitive Bidding
NEMC	National Environment Management Council

NGO	Non-Governmental Organization
NWSDS	National Water Sector Development Strategy
O&M	Operations and Maintenance
PAP	Projected Affected Person
PERT	Program Evaluation Review Technique
PIM	Project Implementation Manual
PIP	Program Implementation Plan
PO	Private Operators
PO-RALG	Presidents Office Regional Administration and Local Government
PPRA	Public Procurement Regulatory Authority
RAP	Resettlement Action Plan
RAS	Regional Administrative Secretary
RS	Regional Secretariat
RFP	Request for Proposals
SDG	Sustainable Development Goal
SPS	Small Piped Water Supply
TBS	Tanzania Bureau of Standards
ToR	Terms of Reference
UWSA	Urban Water and Sewerage Authority
WC	Water Committee
WSDP	Water Sector Development Program
WSS	Water Supply and Sanitation.
WSSP	Water Sector Development Program
WSSPII	Second Water Sector Support Project

**A MEMORANDUM OF UNDERSTANDING
FOR THE IMPLEMENTATION OF THE OFF- GRID WATER SUPPLY AND
SANITATION PROJECTS UNDER THE SECOND WATER SUPPLY AND
SANITATION PROJECT USING EARMARKED FINANCING**

Memorandum of Understanding (“MoU”) between the Ministry of Water on one part and the Dar es Salaam Water Supply and Sewerage Authority (“DAWASA”), the Dar es Salaam Regional Secretariat (RS), and the five municipalities of Dar es Salaam (collectively referred to as “the MUNICIPALITIES”) on the other part.

WHEREAS in recognition of the importance and contribution of the water sector to the social and economic development of the United Republic of Tanzania, the Government has developed a water sector support framework set out in the following documentation: (a) the National Strategy for Growth and Reduction of Poverty (“MKUKUTA, as amended”), (b) the National Water Sector Development Strategy (“NWSDS”) and (c) the Water Sector Development Program (“WSSP”).

WHEREAS after being satisfied with the objectives of the WSSP II, parties to this Memorandum have expressed their willingness to participate fully in its implementation;

WHEREAS The WSSP II project development objective is to strengthen the capacity for the integrated water resources planning and management in the United Republic of Tanzania and improve access to water supply and sanitation services in an operationally efficient manner in Dar es Salaam. The project has four components namely: Integrated Water Resources Management, Dar es Salaam Water Supply improvement, Dar es Salaam Sanitation Improvement, and Project Management and Implementation support.

WHEREAS the project is being financed by IDA Credit through Investment Project Financing, the recipient has declared its commitment to the objectives of the Project.

WHEREAS on the other part DAWASA has committed itself to the principle of harmonization and strive for the highest degree of alignment with the Government’s budgetary and accountability systems and local financial framework so as to enhance effective implementation, reduce the administrative burden on the Government, and minimize transaction costs; and

NOW THEREFORE, the parties hereby agree to cooperate in coordinating the implementation of the off-grid water supply and sanitation part of WSSP II in accordance with the principles and procedures set forth in this MoU; provided, however, that in case of any conflict between the provisions of this MoU AND THE PROJECT Financing Agreement, the provisions of the Financing Agreement shall prevail.

1. **DEFINITIONS**

Unless the context otherwise requires, several terms defined in the Preamble of this MoU have the respective meanings set forth therein, and the additional terms referred to below have the following meanings:

1. **Off Grid water supply** means the activities which will provide water supply services to people of Dar es Salaam, who are not connected to the formal network. The proposed solutions include decentralized Interventions, which may be an interim measure to be integrated to the grid network as it expands in the future. Schemes to be implemented include mostly independent water supply distribution systems supplied from point sources (e.g boreholes) or a bulk water supply from the DAWASA distribution system. In areas where the existing grid network is not available, independent stand-alone Small Piped Water Supply (SPS) systems will be implemented. These projects, typically involve a source of water (for example, borehole), a community-based distribution system and water points at a community and/or household level. The operations and maintenance will be supported from the tariff collected from the users.
2. **Off-Grid Sanitation** means activities which will provide sanitation services in Dar es Salaam to areas without access to sewers. This activity will support installation of improved toilets; safe emptying and transportation of the waste to a treatment facility; and treatment and safe disposal of treated waste into the environment. This will include piloting decentralized systems and other new technology.
3. **Environmental and Social Management Framework or ESMF** means the framework dated September 2006, prepared by the Government and cleared by the International Development Association, setting forth an environmental and social screening process that will enable WSSP II Implementing Agencies to identify and assess potential adverse environmental and social impacts, and offset and reduce them to acceptable levels, or enhance positive impacts, and in accordance with which environmental and social management plans will be prepared by WSSP II Implementing Agencies.
4. **MKUKUTA II** Means the Government's National Strategy for Growth and Reduction of Poverty dated July 2010, covering the period from 2011 – 12 to 2016 – 17 and subsequent versions that may be introduced by GOT.
5. **Resettlement Policy Framework** or RPF means the governing framework dated September 2006, prepared by the Government and approved by the International Development Association, for land acquisition, resettlement and compensation under the WSDP, and in accordance with which resettlement action plans will be prepared,

as necessary, as the same may be amended from time to time with the concurrence of the International Development Association;

6. **WSSP Implementation Manual** means the Project Implementation Manual (PIM) specifying implementation arrangements for the Second WSSP, including institutional arrangements; procedures for procurement, disbursement of funds, financial management, environmental and social management, and monitoring and evaluation; and progress reporting requirements, including annexes to the said manual.
7. **Project Management Team** means a team set up by DAWASA for day to day management of the off-grid water supply sub-project. Same for management of off-grid sanitation sub-project.
8. **Facilitation Team** A team appointed by the Municipal Director of the respective Municipal Council from Dar es Salaam region for the purpose of facilitating the implementation of the Off-Grid water supply projects and Off- Grid Sanitation projects. The scope of their responsibility are detailed in the PIM and summarized in this MoU.

2. UNDERLYING PRINCIPLES

- 2.1 The MoW, DAWASA, RS and Municipalities agree that the following are the underlying principles that govern this partnership:
 - (a.) Commitment to the fulfilment of the aspirations of the National Development Vision 2025;
 - (b.) Compliance with defined budgeting, procurement and public financial management rules and regulations;
 - (c.) Good governance and accountability of the Government to its citizens, including an active fight against corruption;
 - (d.) Coordinating the implementation of the off-grid water supply and sanitation sub-projects cost effectively; and
 - (e.) Each party executing its respective roles in a timely manner

3. GENERAL PROVISIONS

3.1 Purpose

This MoU outlines the responsibilities of the **MoW, DAWASA, RS and Municipalities** with respect to the implementation of off-grid water supply and sanitation sub-projects and sets forth common institutional, environmental and social measures, monitoring and evaluation, audit and reporting arrangements. The WSSP II Implementation Manual complements procedures and arrangements set out in this MoU.

3.2 **Status of the MoU**

This MoU is not intended to create any legally binding obligations and the parties take due cognizance of the separate sector laws and regulations between the Government Institutions, and this MoU is adopted pursuant to and subject to any such regulations. In case of any conflict between the provisions of this MoU and the project Financing Agreement, the provisions of the Financing Agreement shall prevail.

4. **OFF GRID WATER SUPPLY**

4.1. **Commitment**

The DAWASA declares its commitment to the objectives of the **Second Water Sector Support Project** and will act with due diligence and efficiency to facilitate the successful implementation of the projects. To this end, DAWASA, as an Implementing Agency will effectively carry out its roles and responsibilities in the implementation of the off-grid water supply and sanitation sub-projects as defined in the WSSP II Project Implementation Manual. The Ministry of Water, as the Responsible Agency for WSSP II will have overall responsibility for the coordination and implementation of the off-grid water supply and sanitation sub-projects.

4.2 **Institutional Arrangements**

The institutional framework for overseeing the implementation of the WSSP II comprises the following key bodies, as set out in the Sections below, and in greater detail in the WSSP Implementation Manual:

1. Ministry of Water;
2. Prime Minister's Office Regional Administration and Local Government;
3. Ministry of Health, Community Development, Gender, Elderly and Children
4. Municipal Councils
5. Beneficiary Communities ("BC");

4.2.1 **Ministry of Water (MoW)**

The MoW will be responsible for provision of overall coordination and oversight. The Ministry will also provide technical and administrative support in the implementation of WSSP II, including without limitation the following activities:

1. Coordinating and consolidating the quarterly WSSP II IFRs (Interim Financial Report); semi-annual and annual progress reports; and ensuring that funds earmarked for implementation of WSSP II activities are duly considered in the annual work plans

and budgets of the implementing agencies; and that the WSSP II procurement plans are consistent with WSSP II work plans and budgets;

2. Ensuring quality and consistency of the documents referred to in subparagraph (a) above prior to consolidation as indicated in the Programme Implementation Manual and submission to the Off-Grid WSS SC for discussion;
3. Monitoring the implementation of the Annual Work Plans and Budgets by the WSSP II Implementing Agencies, at least on quarterly basis;
4. Providing oversight on financial management, controls, audit and reports; and
5. Ensuring that management decisions made by the Off-Grid WSS Steering Committee are communicated to the Implementing Agencies, implemented and monitored.

4.2.2 DAWASA

DAWASA will be responsible for overall coordination and implementation of off grid water supply activities. The off-grid water supply shall be implemented under the Directorate of Infrastructure Development (for construction arrangements) in collaboration with the Communication Unit (for coordination arrangements). The Communication Unit will be generally responsible for:-

1. Coordinating inputs as required from other units within DAWASA such as Procurement, Technical Services, and Finance, etc.
2. Supervising and monitoring contracts / agreements
3. Setting up Sub-project Agreements with beneficiary communities
4. Monitoring and reporting overall progress of the off-grid water supply sub-component.
5. Reviewing and evaluating the operation and management of the water supply sub-projects.
6. The financial aspects for off- grid water supply sub-projects will be managed as per Project Implementation Manual VOLUME II, and
7. Overall supervision of off-grid water supply activities.

4.2.3 Municipal Councils (or DLGAs)

The five Dar es Salaam Municipal Councils, through their respective Urban Planning Department, Legal Unit, Municipal Health and Water Department, will be responsible for the following tasks:

1. Creating awareness and mobilization of the communities.

2. Each DLGA will form a Municipal Facilitation Team comprising different specialists from Water, Health, Education, Community Development departments that will be tasked to assist consultants/contractors/PO on implementation and operation of Off Grid Water Supply facilities in their respective areas.
3. DLGAs through Legal unit, Health and Water department will coordinate the formation of Water Supply by-laws and regulations and thereafter enforcing for sustainability of Off Grid Water Supply facilities.
4. DLGAs will be responsible for identification and facilitation of Land acquisition for construction of Off- Grid Water Supply facilities

4.2.4 WSS Steering Committee

Given the multiplicity of institutions with varying roles, a WSS Steering Committee (SC) will be set up under the project to ensure coordination, synergy, and dovetailing. This SC will be newly set up or be adopted from some of the other projects (for example, Dar es Salaam Metropolitan Development Program [DMDP]) which may have similar steering mechanisms. This steering committee will be chaired by the Head of the Water Sector from RS and DAWASA will provide the secretary to WSS SC.

The RS will chair the Off Grid WSS Steering Committee, which will be comprised of representatives from the DAWASA, RS, WRBO, MOW, DLGAs i.e Temeke, Ilala, Kinondoni, Kigamboni and Ubungo. The Steering Committee will be responsible for providing general oversight of the selection and approval of sub-projects for implementation by the Off-Grid Water Supply and Sanitation. The key responsibilities of the Off Grid WSS Steering Committee include:

1. Reviewing overall Off Grid Sanitation implementation arrangements
2. Reviewing and approving Off Grid Sanitation sub-project operational guidelines
3. Reviewing and approving Off Grid Sanitation sub-project proposals
4. Reviewing overall Off Grid Sanitation progress and performance and providing guidance for improvements if needed
5. Conflict Resolution as per PIM.

4.2.5 Beneficiary Community

At the project level, Beneficiary Community will be involved in the project appraisal, that includes identification of sources, selection of appropriate sites, kiosk locations, and

protection of water source and infrastructures. DAWASA will be responsible for the efficient operation and management of the water supply systems.

4.2.6 Private Operator

The Private Operator (PO) may be engaged if the expansion of DAWASA grid network is beyond five years away. The PO would primarily have as its members the households from the community, with an operating body selected by the members from among themselves, with additional membership from DAWASA/DLGA. The regulation of these systems, including the tariff, would be undertaken by EWURA, as part of the overall regulation of the sector in Dar es Salaam.

Private Operator will operate, maintain, and manage the scheme under contract with DAWASA.

The Private Operator shall be responsible for keeping and maintaining appropriate records of its business activities. These shall include:

1. Customer details
2. Operation and maintenance records including volume of water produced and sold
3. Asset register, work as executed records, manuals of plant and equipment
4. Condition and expected life of assets
5. The details of network expansions as up to standards.
6. The Private Operator shall prepare monthly and quarterly operation and maintenance
7. Reports for the completed off-grid water supply subproject
8. Billing and payment records
9. Business accounts and financial statement

In general, the Operation and Maintenance Reports will address such issues as:

1. Number of registered customers in the service area
2. Number of people in the service area and number of people served
3. Business plan and budget
4. Level of service; proposed and actual
5. Revenue and expenses, progress against budget
6. Customer satisfaction
7. Maintenance activities, breakdowns, failures
8. Availability of ground/reliable water sources
9. Availability for land resources for project activities
10. Manage non-revenue water in the business area

4.3 SELECTION CRITERIA

DAWASA, in consultation with the five municipalities Ilala, Temeke, Kinondoni, Kigamboni and Ubungo will identify communities which are eligible for the Off-Grid Water Supply sub-project under the WSSP II. The identification will follow the criteria below;

1. High population density
2. Low-income areas
3. Prevalence/risk of waterborne diseases
4. No wholesome water services
5. Near-trunk infrastructure
6. Availability of sufficient land for the interventions
7. Unplanned settlements
8. Community willingness

Each of these criteria will be allocated a score, and the communities prioritized according to their total score. Keeping in mind the decisions of other interventions (for example, The Dar es Salaam Metropolitan Development Program - DMDP), WSSP-II will invest in those communities which have the highest need.

5.0 OFF-GRID SANITATION

5.1 Definition.

The Off-Grid Sanitation components will provide much needed improvements to wastewater management services in areas of Dar es Salaam that are not served by DAWASA network. These improvements will be realised as a result of construction of Off-Grid sanitation stand-alone projects such as Decentralized Waste Water Treatment Systems (DEWATs), faecal sludge treatment facilities, and condominial/simplified sewerage. The Off-Grid Sanitation Services will address the lack of sanitation services in unserved areas.

5.2 Institutional Arrangements

A strategy to address the poor sanitation in Dar es Salaam requires clarity and coordination among the various institutions involved in the sector. However, institutional responsibility is fragmented and unclear, being divided between National Ministries, City Utilities, Municipal Organizations, Regulatory Authorities, Community-Based Organizations, the Informal Private Sector and sanitation users themselves.

Currently sanitation service delivery is undertaken by a mixture of Utilities, Municipalities and Regulators. DAWASA will be responsible for overall coordination and supervision of Off-Grid sanitation activities. Other institution as detailed in PIM are summarised below:

1. MoHCDGEC,
2. MoW,
3. RS,
4. DLGAs,
5. NGOs,
6. PO

5.2.1 Ministry of Water

Ministry of Water will be responsible with setting Policy and guidelines specific to FSM and overall project coordination and implementation support .

5.2.2 DAWASA

DAWASA will provide a foundation and resources for the overall implementation of Off-Grid Sanitation.

Directorate of Infrastructure Development will be the department within DAWASA responsible for overseeing the implementation of the WSSP II including Off-Grid Sanitation Sub component. The head of this department will report directly to the DAWASA Chief Executive Officer and will generally be responsible for:

1. Coordination of the Off-Grid Sanitation Steering Committee as well as establishing a general agenda and timetable for Steering Committee meetings with consultation with Steering Committee Chairperson and providing secretariat services.
2. Coordinating inputs as required from other Directorates within DAWASA such as Procurement, Infrastructure Development, and Finance, etc.
3. Signing, supervising and monitoring contracts / agreements
4. Setting up Sub-project Agreements with successful communities.
5. Monitoring and reporting overall progress of the Off-Grid Sanitation
6. Reviewing and evaluating the operation and management of the community sanitation schemes.

In support of Sub Component 3.2: a Sanitation coordination team led by PO-RALG - Regional Secretariat will be established to coordinate implementation of the Off- Grid sanitation services. The technical department in the municipalities in coordination with DAWASA will be responsible for implementation of the off-grid sanitation component. DLGAs through Health, Legal unit and Water departments will coordinate the formation or improvement of existing Sanitation by laws and regulations and thereafter enforcing them for the sustainability of Off Grid Sanitation facilities. Areas where these facilities will be built people will be required to connect. DLGAs will be responsible for identification and facilitation of Land acquisition for construction of Off- Grid Sanitation facilities, and management of Public toilets.

5.2.3 MoHCDGEC/MoW:

Policy and guidelines specific to FSM.

5.2.4 DLGAS under Regional Secretariat:

Roles and responsibilities of the DLGAs will include:

1. Creating awareness and mobilization of the community
2. Formulation of Municipal Facilitation Team comprised of specialists from Water, Health, Education, Community Development departments that will be tasked to assist consultants/Contractors/PO on implementation and operation of Off Grid Sanitation facilities
3. Coordination of the formation of Sanitation by-laws and regulations and thereafter enforcing them for sustainability of Off Grid Sanitation facilities through Legal unit, Health and Water Department
4. Identification and facilitation of land acquisition for construction of Off- Grid Sanitation facilities
5. Establish and capacitate the grievance redress mechanism (GRM) team
6. Monitor and evaluate project implementation, trouble shooting and responding to grievances raised by Grievance Redress Mechanisms (GRM) teams
7. Prepare and submit to WSS SC a monthly project implementation progress report

5.2.5 WSS Steering Committee

Given the multiplicity of institutions with varying roles, a WSS Steering Committee (SC) will be set up under the project to ensure coordination, synergy, and dovetailing. This SC will be newly set up or be adopted from some of the other projects (for example, Dar es Salaam Metropolitan Development Program [DMDP]) which may have similar steering mechanisms. This steering committee will be chaired by the Head of the Water Sector from RS and DAWASA will provide the secretary to WSS SC.

The RS will chair the Off Grid WSS Steering Committee, which will be comprised of representatives from the DAWASA, RS, WRBO, MOW, DLGAs i.e Temeke, Ilala, Kinondoni, Kigamboni and Ubungo. The Steering Committee will be responsible for providing general oversight of the selection and approval of sub-projects for implementation by the Off-Grid Water Supply and Sanitation. The key responsibilities of the Off Grid WSS Steering Committee include:

1. Reviewing overall Off Grid Sanitation implementation arrangements
2. Reviewing and approving Off Grid Sanitation sub-project operational guidelines
3. Reviewing and approving Off Grid Sanitation sub-project proposals

4. Reviewing overall Off Grid Sanitation progress and performance and providing guidance for improvements if needed
5. Conflict Resolution as per PIM.

5.2.6 Private Operator (PO):

The domestic private sector will be a major institution which will require to be involved for sanitation in low-income settlements. Their involvement will include approaches to empty faecal sludge from latrine pits and septic tanks. This could be through vacuum trucks, or in areas where access is difficult, small 'gulper' technologies.

Private Operator will form the basic unit for planning and eventually operating and managing the community-based sanitation schemes implemented under the off-grid sanitation. Off-grid sanitation POs, will be responsible for:

1. Possession of necessary registration as per requirements.
2. Undertaking training and development in operations and maintenance, financial management, monitoring and reporting.
3. Operating and maintaining the off-grid sanitation Scheme in a sustainable manner and providing equitable access to the service for everyone in the community
4. Maintaining adequate records and reporting on technical and financial performance to DLGAs and DAWASA.

5.2.7 NGOs/ Consultant:

NGO will be responsible for Capacity building, mobilization of community; media campaigns

DAWASA will contract with a reputable NGO active in the DAWASA service area as implementing agents for the off- grid Sanitation. The key roles of the off-grid sanitation NGO include:

1. Mobilising community groups to identify all sanitation needs and raising awareness within community groups about sanitation issues.
2. Assisting community members to obtain legal status if required and to set up the necessary bank accounts, for the community to qualify for funding from micro finance institution for toilet improvements.
3. Undertaking a needs analysis and preparing a subproject proposal design, budget, impact assessment, operational and maintenance of the sanitation facility
4. Preparing subproject proposals in association with the community members for consideration by the off-grid sanitation Steering Committee.
5. Sensitization and training of POs to operate, maintain, and manage off-grid sanitation systems.

6. Assisting DAWASA to develop suitable O&M guidelines/manuals and financial management guidelines for use by the POs in operating and managing the completed schemes.

5.3 SELECTION CRITERIA

DAWASA, in consultation with the five municipalities Ilala, Temeke, Kinondoni, Kigamboni and Ubungo will identify communities which are eligible for Off-Grid Sanitation sub-project under the WSSP II, in the eligible project area using the criteria mentioned in the PIM. The criteria will include the availability of land resources for the project activities as additional criteria.

Each of these criteria will be allocated a score, and the communities prioritized according to their total score. Keeping in mind the decisions of other interventions (for example, DMDP), WSSP-II will invest in those communities, which have the highest need.

The five municipalities will be the focal point for planning, prioritizing, and implementing the off-grid sanitation in their areas. A comprehensive master sanitation plan, based on empirical data and evidence, will form the basis for this planning and implementation.

The results of the ongoing efforts to map the city on the said indicators, will form the basis for the planning efforts by the stakeholders.

Summary of Institutional Roles for Sanitation Provision

MoH/MoW/PO-RALG	Policy and guidelines specific to FSM
MoW	Overall project coordination and implementation support
EWURA	Regulate performance of DAWASA
DAWASA	Facilitating the establishment and operation of treatment facilities (FSM and the like and facilitating the development of options for transportation and treatment of this waste, establishment and management of public toilets; regulating the services of transporters
Municipalities	Facilitating the upgrading of unimproved household toilets to improved ones and regulation of waste disposal; facilitating the availability of land for decentralized systems; provide licenses to private transport operators
Private sector	Development of infrastructure for transportation and treatment, operation
NGOs	Capacity building, mobilization of community; media campaigns

TBS	Setting up of standards for effluent disposal
NEMC	Regulation of disposal of effluent

6.0 EFFECTIVENESS AND DURATION OF MoU

- 6.1. This MoU will become effective on the date of signature by all parties.
- 6.2 This MoU shall remain in force until end Closure of the Second WSSP, or as shall be mutually agreed by the parties hereto.

7.0 AMENDMENTS

This MoU may be amended at any time with the written agreement of the parties hereto.

8.0 CONFLICT RESOLUTION

In the event of any differences arising with respect to the provisions of this MoU, the parties will endeavour to find a solution through dialogue and consultation.

9.0 INFORMATION AND NOTICES

- 9.1 The parties to this MoU will furnish to each other all such information in relation to the WSSP II as will be reasonably requested in a timely manner.
- 9.2 Any notices or documents given, made or sent by the parties in relation to this MoU will be in writing and will be deemed to have been duly given, made or sent to the organization or person to which it is addressed at the time of its delivery by hand, mail, or courier at its respective address, as listed in this MoU.
- 9.3. Any party hereto may, by written notice to the other parties, change the address to which any notice or request for the Participant so giving such notice will be addressed.
- 9.4 All communications and documents submitted to any party and by any part will be in the English language.
- 9.5 The following addresses are specified for purposes of Section 16.2.

9.6 FOR THE PARTIES

Permanent Secretary
Ministry of Water
Address
Tel:
E-mail:

Chief Executive Officer
DAWASA
Address
Tel:
E-mail:

Region Administrative Secretary
Dar es Salaam Region
Address:
Tel:
E-mail:

Municipal Director
Temeke Municipal Council
Address:
Tel:
E-mail:

Municipal Director
Ilala Municipal Council
Address:
Tel:
E-mail:



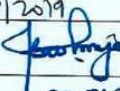
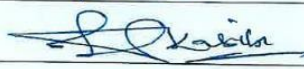
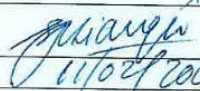

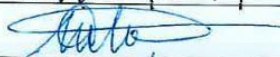
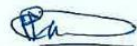
Municipal Director
Kinondoni Municipal Council
Address:
Tel:
E-mail:

Municipal Director
Ubungo Municipal Council
Address:
Tel:
E-mail:

Municipal Director
Kigamboni Municipal Council
Address:
Tel:
E-mail:

Environmental and Social Impacts Assessment for the Proposed Public Toilet to be built at Coco Beach, Oyster Bay street, Msasani ward, Kinondoni Municipality

Signed by the duly authorized representatives of the parties as hereunder:

Permanent Secretary Ministry of Water	
Date	18/2/2019
Regional Administrative Secretary Dar es Salaam	
Date	1/2/2019
CEO DAWASA	
Date	28.01.2019
Municipal Director Temeke	
Date	
Municipal Director Ilala	
Date	11/02/2019
Municipal Director Ubungo	
Date	07/02/2019
MD Kinondoni	
Date	07/02/2019
Municipal Director Kigamboni	
Date	07/02/2019

Appendix V: Letter from Kinondoni Municipal Council

JAMHURI YA MUUNGANO WA TANZANIA



OFISI YA RAIS,
TAWALA ZA MIKOA NA SERIKALI ZA MITAA
HALMASHAURI YA MANISPAA YA KINONDONI



Unapojibutafadhaitaja:
Kumb. Na.KMC/HEALTH/A.1.7/126

20 Sept, 2021

Afisa Mtendaji Mkuu,
Mamlaka ya Maji Safi na Maji Taka,
S.I.p 1573,
Dar Es Salaam.

Yah: **KUHAMISHA MRADI WA CHOO CHA UMMMA SOKO LA MBEZI BEACH 'A'
KWENDA FUKWE ZA COCO**

Tafadhali rejea kichwa cha habari hapo juu.
Rejea barua ya DAWASA yenye Kumb. DAWASA/KINO/DOC/2020/01 ya
Tarehe 13 Machi 2020 ya kumuomba Mkurugenzi wa Halmashauri ya
Manispaa ya Kinondoni kuainisha maeneo kwa ajili ya utekelezaji wa miradi
ya Afya na Usafi wa Mazingira inayofadhiliwa na benki ya Dunia kupitia
DAWASA

Miongoni mwa maeneo yaliyoidhinishwa kujengwa choo cha umma ni eneo
la soko tarajiwa la Mbezi Beach 'A' kwa barua yenye
Kumb.KMC/HEALTH/A.1.7/654 ya tarehe 09 Septi 2020. Kutokana na soko hilo
kushindwa kuanzishwa kama ilivyopangwa, napendekeza mradi wa choo
cha umma soko la Mbezi Beach 'A' uhamishiwe kwenye fukwe za coco
zilizopo Mtaa wa Oysterbay Msasani ambazo hazina vyoo vya kutosheleza
kwa ukubwa na wingi wa watu wanaofika eneo hilo.

Wako katika ujenzi wa Taifa,

Dkt Samwel Laizer
**Kny:MKURUGENZI WA MANISPAA
MANISPAA YA KINONDONI**

Kny: MKURUGENZI WA MANISPAA
MANISPAA YA KINONDONI
DAR-ES-SALAAM

Appendix VI: Approved Architectural Drawings

