

Waste Management Framework

WMF



Nigeria Sustainable Urban and Rural Water
Supply, Sanitation and Hygiene Program
SURWASH

Federal Ministry of Water Resources (FMWR)

Waste Management Framework WMF

FINAL REPORT

Consultancy Services for the Preparation of an Occupational Health and Safety Management Framework, Waste Management Framework and Capacity Building on Occupational Health & Safety (OHS) and Waste Management for the FPIU, SPIUs and Implementation Partners under the Nigeria Sustainable Urban and Rural Water Supply, Sanitation and Hygiene Program (NG -SURWASH)

APRIL 2023



EXECUTIVE SUMMARY

ES 1: Introduction - Project Background

The Government of Nigeria (GoN) has proposed the Sustainable Urban and Rural Water Supply, Sanitation and Hygiene (NG - SURWASH) Program in the amount of 700 million USD (which has a 640 million USD Program-for-Results [PforR] Component, with a 60 million USD Investment Project Financing [IPF] Component), designed to support the implementation of the National Action Plan (NAP) for the Revitalization of Nigeria's Water Supply, Sanitation, and Hygiene (WASH) sub-sector. The Project Development Objective (PDO) is to increase access to water, sanitation, and hygiene services and to strengthen sector institutions in participating states of Nigeria. Currently, seven states are participating in this program, which include: Delta, Ekiti, Gombe, Imo, Kaduna, Katsina and Plateau States. This Program is designed to introduce an innovative approach to sector programming that leverages incentives to simultaneously deliver infrastructure that works, policies that govern, and institutions that sustain. NG - SURWASH implementation and institutional arrangements will follow existing structures as established in the National Water Supply and Sanitation Policy (2000) and later elaborated upon in the NAP (2018). For rural communities, the program will follow the Partnership for Expanded Water Supply, Sanitation and Hygiene (PEWASH) Program Strategy 2016-2030.

ES 2: Rationale for a Waste Management Framework (WMF) for the NG - SURWASH Program

The WMF provides a structural framework as well as standard and practicable approaches to the management of all waste types (taking into account waste characterization, collection, transport, treatment and environmentally safe and sound disposal) envisaged to be generated in the course of intervention works and operational activities carried out across all 7 benefiting states of the NG - SURWASH program. Considering that state-level implementation of civil works will require the procurement of Contractors by the NG - SURWASH Program and consequently the generation of waste over estimated periods of time, it is anticipated that hazardous chemicals/materials, wastewater, plastics, dusts/gases, debris, and other construction wastes from civil works may be generated, thus increasing chances of air, soil, and water pollution. This also extends to waste generation during the operation of rehabilitated and newly constructed WASH infrastructure (sewage/fecal sludge¹ and slurry). The WMF therefore is essential as it involves the use of a procedural approach, waste management strategies and management plans, that establish institutional responsibilities necessary to ensure pollution prevention and management while guaranteeing the sustainability of the NG - SURWASH program, during its implementation course. The main justification for the WMF is embedded on the basis that the World Bank Environmental and Social Policy for IPF sets out the requirements which the Bank must follow regarding projects it supports through IPF. Essentially, these programs or projects may include technical assistance supported by the Bank through IPF as in the case of NG - SURWASH (See Chapter 3 of this Report), whether they are stand-alone projects or part of a project. Moreover, the Bank's ESS 1 and 3 (ESS1: Assessment and Management of Environmental and Social Risks and Impacts and ESS3: Resource Efficiency and Pollution Prevention and Management) and the NG - SURWASH Environmental and Social Commitment Plan (ESCP) make it expedient that waste types likely to arise from NG - SURWASH implementation are identified, collected, and disposed suitably and accordingly.

ES 3: Objective of this WMF

The objective of the WMF is to equip the NG - SURWASH FPIU with the coordinative and technical capacity to provide oversight guidance in waste management throughout the program implementation and simultaneously, enable SPIUs and IAs to properly manage waste streams and mitigate pollution by ensuring Contractors and implementing parties dispose generated wastes in an environmentally sound and safe manner. This also extends to the promotion of a sustainable environment for workers and project communities. Consequently, the framework should help to eliminate

¹ Faecal sludge is the slurry that contains both solid and liquid waste that accumulates in onsite sanitation systems whereas Sewage refers to the mud-like residue resulting from wastewater treatment

FINAL REPORT

Waste Management Framework
WMF

SURWASH

Nigeria Sustainable Urban and Rural Water Supply,
Sanitation and Hygiene Program
FMWR

hazardous and non-hazardous wastes in WASH intervention works and services in participating states, by adopting effective measures proposed in this WMF. It establishes the need for non-hazardous and hazardous waste characterization, collection, treatment, and disposal, as well as waste management training and capacity building, amongst many.

ES 4: Project Description and Disbursement Linked Indicators (DLIs)

The PforR will support the implementation of a subset of actions set out in the NAP. The seven (7) participating states in the Program have been selected in a transparent process through the use of pre-determined criteria. The PforR has two Result Areas (RA) as follows: **RA 1** - Strengthened Sector Policies and Institutions for Improved Services; and **RA 2** - Improved Access to Water Supply, Sanitation and Hygiene Services. Seven (7) Disbursement-Linked Indicators (DLI) are associated with the RAs. These are below.

Key Result Areas and Disbursement Linked Indicators

Name		Amount IDA US\$ million
RA 1: Strengthened Sector Policies and Institutions for Improved Services		40.0
DLI 1	Design of National WASH Fund to enable its establishment.	5.0
DLI 2	Design, adoption and implementation of State PIR Plans and achievement of annual targets.	35.0
RA 2: Improved Access to Water Supply, Sanitation and Hygiene Services		600.0
DLI 3	People provided with basic drinking water service under the Program.	233.5
	<u>Sub-DLI 3.1</u> : Performance improvement of state water supply implementing agencies.	52.5
DLI 4	People with access to a sustainably functioning water service.	33.3
DLI 5	Households with improved sanitation facilities constructed or rehabilitated under the Program.	156.1
	<u>Sub-DLI 5.1</u> : Performance improvement of state sanitation implementing agencies.	52.5
DLI 6	Communities having achieved community-wide sanitation status (ODF+) or number of ODF+ communities having maintained their status.	16.6
DLI 7	Schools and healthcare facilities with functional, improved water supply, sanitation and handwashing facilities constructed or rehabilitated under the Program.	55.5

It is noteworthy to state that most potential Waste Management issues are envisaged to arise during the implementation of activities dependent on DLI 3,5 and 7

The IPF component supports TA activities within sector institutions at both the Federal and State level. 25 million USD will be implemented by the FMWR to support TA activities critical to Program activity at the Federal level, as well as those supporting assisted states in preparing for future investment. The additional 35 million USD will be on-lent to participating states to address identified institutional and capacity gaps.

ES 5: Summary of Planned Intervention Works

Result Area 2 (RA 2) - Improved Access to Water Supply, Sanitation and Hygiene Services (US\$600 million IDA) will support an integrated package of investments to expand access to and increase the use of WASH services in urban and rural areas and small towns; protecting poor and vulnerable people and supporting livelihoods and job creation. Broadly, the activities/intervention works are mainly associated with DLIs 3,5 and 7 and summarized below.

A) Urban Water Supply.

- Expansion of access to improved water supply through installation of metered household connections, public standposts and water kiosks;

FINAL REPORT

Waste Management Framework
WMF

SURWASH

Nigeria Sustainable Urban and Rural Water Supply,
Sanitation and Hygiene Program
FMWR



- Rehabilitation of water supply infrastructure to boost production, including the rehabilitation of production facilities and pump and treatment plant components replacement;
- Improvement of power supply to production facilities, prioritizing the use of renewable energies and improvements in energy efficiency;
- Rehabilitation of distribution networks, including leak detection and repairs;
- Installation of bulk, zonal, commercial, and domestic meters;
- Rehabilitation and furnishing of customer service centers, central stores, and electrical and mechanical workshops; Expansion of water quality testing capacity through the renovation and construction of laboratories;
- Development of water master plans;
- Development of feasibility studies for select urban centers; and
- Larger-scale works where required.

B) Rural and Small Towns Water Supply. The Program will support infrastructure development to increase sustainable access to improved water supply through the development of:

- New water points and schemes and rehabilitation of existing ones
- Support the continued functionality of supported water points and schemes by promoting effective infrastructure operations, management, and maintenance by service providers and ongoing technical and financial support by relevant sector institutions.

C) WASH in Institutions and Public Spaces. Finally, RA 2 supports the construction and rehabilitation of Water Supply and Sanitation (WSS) facilities and handwashing stations in institutions (schools and HCFs) in accordance with relevant Federal Ministry of Education [FME] and Federal Ministry of Health [FMoH] guidelines) and public spaces (markets, motor parks) with a focus on child and women safety and comfort and adequate provisions for Menstrual Hygiene Management (MHM).

ES 6: Baseline Waste Management Practices in the Participating States

The current baseline waste management practices across the NG - SURWASH participating states are very similar. In the more urbanized areas of these states, solid wastes are mostly collected and disposed in designated dumpsites by the SEPAs and SWMAs, which in most cases is unregulated and open to pests (rodents, stray dogs, birds, flies, etc.) and waste scavengers. With the exception of Katsina State, there are no waste treatment facilities present in the states. Generally, fecal sludge is collected from households, schools and hospitals at intervals (on request) by some private sector participants and discharged overland in the remote areas of the states. A summary of the baseline waste management practices for WASH activities in the NG - SURWASH participating states is presented below.

FINAL REPORT

Waste Management Framework
WMF

SURWASH

Nigeria Sustainable Urban and Rural Water Supply,
Sanitation and Hygiene Program
FMWR

S/N	NG - SURWASH Participating State	Baseline Waste Management Practice
1.	Delta State	<p><u>Waste Management Systems:</u> The Waste management framework and guidelines for the water supply and sanitation chain is incorporated in the Delta State WASH Law/ WASH Policy that was prepared by United Nations Children Education Fund (UNICEF) in 2020.</p> <p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> For Urban, Small Town, and Rural, solid waste is managed by Private Sector Partners (PSPs). Whenever evacuation services are needed by either HCF, Schools, households or other government/private organizations, these PSPs are contacted. There are seven trucks used for the evacuation of solid waste. After evacuation, the solid waste is transported and disposed in a government approved dumpsite.</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u> For Urban and Small Town, fecal sludge is managed by PSPs. Whenever evacuation services are needed by either Health Care Facilities (HCF), Schools, households or other government/private organizations, these PSPs are contacted, a date is fixed for the evacuation process. After evacuation, the fecal sludge is transported and disposed in an illegal dumpsite in Warri (there is no approved liquid waste dumpsite in the State). During the stakeholder consultation with the Delta State Water Corporation (DESWACO) and other IAs, it was stated that there have been grievances from some farmers. This is because in some cases, these PSPs dump the evacuated fecal sludge in farmlands. Currently, the Delta State Water Regulatory Commission (DESWAREC) has been set up to supervise the process of fecal sludge evacuation and disposal although it is not functional yet. There is no fecal sludge treatment plant in Delta State. Currently, the Governor has approved a site for fecal sludge management. This site has been fenced and civil works are ongoing. For Rural, fecal sludge is being managed by the Department of quality control and sanitation in the Ministry of Water Resources.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> Plastic waste – Pet bottles are collected from individual waste bins and approved dumpsites by scavengers. The pet bottles are transported to bottle water companies within the state for treatment while some are shredded and transported to lagos for further recycling. Delta State Waste Management Board is in partnership with these bottle water companies. Sensitization is conducted in schools and other private firms by the Delta State Waste Management Board on the sorting of pet bottles and plastics for collection by the scavengers.</p> <p><u>Waste Management Trainings:</u> USAID has conducted training from 2019 - 2022 on liquid waste management in view of the proposed fecal treatment plant.</p>
2.	Ekiti State	<p><u>Waste Management Systems:</u> Section 20 of the Environmental Protection Law (2010), CAP E12-10 provides guidelines on waste management and environmental pollution control. Additionally, Waste management guidelines are incorporated in the above stated law.</p> <p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> Solid waste from households, schools, HCF, and other government and private organizations is evacuated/managed by Ekiti State Waste Management Authority (EKSWAMA) and transported to approved dumpsites available in some LGAs within the state.</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u> Fecal sludge from households, schools, HCF, and other government and private organizations is evacuated/managed by a PSP (contractor) licenced by the EKSWAMA. There are currently 4 workers and 1 driver available for the management of sewage/fecal sludge.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> Currently, the state operates an unfenced dumpsite open to scavengers. Wastes are collected from households and transported to the dumpsite where segregation is done (there is a waste sorting area for plastics and other solid waste at the dumpsite) before final disposal. Plans has been put in place by the state government to have a post impact assessment of dumpsites on the people living around the vicinity and the environment.</p> <p>The licensed PSP evacuates sewage/fecal sludge and transports it to a designated site for final disposal, however it is unfenced and unregulated. There is no fecal treatment plant available in Ekiti State.</p> <p><u>Waste Management Trainings:</u> There has been no training on waste management conducted in Ekiti State</p>
3.	Gombe State	<p><u>Waste Management Systems:</u> There is no form of waste management systems or framework/plan being implemented across the water supply and sanitation chain in Gombe State</p> <p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> There is a temporary waste collection center where households, schools, HCF etc gathers solid waste. The solid waste is been collected from the temporary waste collection center by Gombe State Environmental Protection Agency (GOSEPA) and disposed at a designated dumpsite.</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u></p>

FINAL REPORT

Waste Management Framework
WMF

SURWASH

Nigeria Sustainable Urban and Rural Water Supply,
Sanitation and Hygiene Program
FMWR

S/N	NG - SURWASH Participating State	Baseline Waste Management Practice
		<p>For Urban and Small Town, GOSEPA is responsible for the evacuation/management of fecal sludge in HCF, schools, households and other government/private organizations. Whenever evacuation services are needed by either HCF, Schools, households or other government/private organizations, GOSEPA is contacted and a date is fixed for the evacuation process</p> <p>For RUWASSA, Community Led Total Sanitation (CLTS) approach and/or the traditional management methods are adopted for managing open defecation and fecal sludge in the rural communities.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> Waste is collected from a temporary waste collection center by the GOSEPA before transported to an approved designated unfenced dumpsite for final disposal (no sorting or treatment is done before final disposal).</p> <p><u>Waste Management Trainings:</u> There has been no training on waste management conducted in Gombe State</p>
4.	Imo State	<p><u>Waste Management Systems:</u> There is no waste management systems or framework/plans being implemented in the WASH sector in Imo State</p> <p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> Solid waste is evacuated by Imo State Waste Management Agency (ISWAMA) and some licensed PSPs (ENTRACO). Whenever evacuation services are needed by either HCF, Schools, households or other government/private organizations, either ISWAMA or Imo Environmental Transformation Commission (ENTRACO) is contacted. There are seven trucks used for the evacuation of solid waste. After evacuation, the solid waste is transported and disposed in a government approved dumpsite</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u> Liquid waste (Fecal sludge and chemical waste is evacuated/managed by ENTRACO. Whenever evacuation services are needed by either HCF, Schools, households or other government/private organizations, ENTRACO is contacted, a date is fixed for evacuation.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> There is no sanitary landfill in the state, transfer of waste is done. Waste is collected from households, HCFs, schools, and other government/private organizations and transported to an approved designated dumpsites where sorting and final disposal takes place. For liquid (fecal sludge and chemical) wastes, the waste is collected and transported to an open site where it is disposed. There is no fecal sludge waste treatment plant available in Imo State.</p> <p><u>Waste Management Trainings:</u> No information available on waste management training in Imo State</p>
5.	Kaduna State	<p><u>Waste Management Systems/Policies/Guidelines:</u> There is no waste management framework/plans specifically for the WASH sector in Kaduna State, however, there is a general framework available in the Kaduna Environmental Protection Agency (KEPA) Law (2010).</p> <p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> Solid waste is evacuated by some licensed PSPs within Kaduna State. Whenever evacuation services are needed by either HCF, Schools, households or other government/private organizations, these PSPs are contacted.</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u> Faecal sludge is evacuated/managed by registered PSPs within the state. Whenever evacuation services are needed by either HCF, Schools, households or other government/private organizations, these PSPs are contacted, and a date is fixed for evacuation.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> Kaduna State signed a contract with waste management service providers responsible for waste collection, transportation and disposal at the state designated dumpsites. Sorting is done at both the point of collection and dumpsites by scavengers working for waste recycling companies. For instance, AAM and Metro plastics have over 500 scavengers within the city and informal sectors.</p> <p>For faecal sludge, the current practice is an unconventional system where KEPA registered PSPs evacuate from institutions, households, industries, and other regulated premises, transport and dispose off at designated dumpsites.</p> <p><u>Waste Management Trainings:</u> There has been training conducted on waste management for KEPA in Kaduna State and they include: Waste management on faecal sludge management conducted by Bencat in 2018, Solid waste management conducted by Head of Service in 2019, Hazardous waste management; Environmental Impact Assessment and Environmental Audit by Budget Commission in 2020.</p>
6.	Katsina State	<p><u>Waste Management Systems:</u> There is no form of waste management framework/plan being implemented across the WASH sector in Katsina State.</p>

FINAL REPORT

Waste Management Framework
WMF

SURWASH

Nigeria Sustainable Urban and Rural Water Supply,
Sanitation and Hygiene Program
FMWR

S/N	NG - SURWASH Participating State	Baseline Waste Management Practice
		<p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> There are seven zonal officers in Katsina. Household solid waste is managed by sales/distribution of sanitary containers and a strategic location is designated for disposal/dump on waste. On a daily basis, a truck is sent to evacuate the waste in some areas that are densely populated especially in Katsina metropolis. There are manual (those responsible for loading the trucks on a daily basis) and mechanized labourers. For other LGAs such as Funtua, Malumfashi, Daura etc., when they require evacuation services, KTSEPA sends trucks to evacuate the waste for about 3-5 days.</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u> For Urban and Small Town, KTSEPA evacuates/manages faecal sludge from households, HCFs, schools, and other government and private organizations. The frequency is usually based on request. For RUWASSA, Community Led Total Sanitation (CLTS) approach and/or the traditional management methods are adopted for managing open defecation and fecal sludge in the rural communities.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> Solid waste is collected from households, HCF, schools, and other government and private organizations and transported to the government approved dumpsites (there are about 28 trucks within the state for collection of waste and 3 dumpsites which are situated along Batsari, Jibia road and Dutsinma road). Waste is transported from the dumpsites to a material recovery plant which is along Jibia road. Sorting takes place at the recovery plant. The metals are taken out, plastics are recycled, manure is separated and sold to the farmers. For faecal sludge management, there is no faecal treatment plant for managing this. However, there is a temporary designated site along Batsari road for dumping the evacuated fecal sludge and hospital waste. When it dries up, farmers buy the manure as fertilizers. Also, there is a PSP in Katsina prison yard that offers waste management services.</p> <p><u>Waste Management Trainings:</u> There has been a training for Katsina State Environmental Protection Agency (KTSEPA) workers on the use of Personal Protective Equipments (PPEs). There has also been a sanitation and waste management training conducted by UNICEF for communities.</p>
7.	Plateau State	<p><u>Waste Management Systems:</u> There is no form of waste management systems or framework/plan being implemented across the water supply and sanitation chain in Plateau State. However, there are guidelines for waste management specifying procedure for collection (dust bins and designated locations for temporary storage prior to disposal by Plateau Environmental Protection and Sanitation Agency (PEPSA)).</p> <p><u>Solid Waste Management Practice (Urban/Small Towns/Rural Areas):</u> Plateau State has acquired dumpsites, however these dumpsites are currently inaccessible due to the distance and topography of the terrain. Five Temporary dumpsites have been made available by private owners, but this has proved insufficient for the waste generated by the state.</p> <p><u>Sewage/Fecal Sludge Management Practice (Urban/Small Towns/Rural Areas):</u> Currently, JSWC does not manage sewage as result of lack of infrastructure. Sewage is evacuated by PEPSA and transported to temporary dumpsites for disposal.</p> <p><u>Waste Collection, Sorting, Storage, Transportation and Final Disposal:</u> Waste is collected from a temporary waste collection center by PEPSA before transported to a temporary dumpsite for final disposal.</p> <p><u>Waste Management Trainings:</u> There has been no training on waste management conducted in Plateau state.</p>



ES 7: Waste Identification and Categorization

For the implementation of the NG - SURWASH program, two waste categories have been identified. These include: i) **Hazardous waste** and ii) **Non-hazardous waste**. During implementation of the program and majorly implementation of activities which enable states obtain financing associated with DLI 3, 4 and 5; the likely areas where significant waste generation is envisaged include:

- From daily running and activities in the FPIUs, SPIUs, IAs corporate/administrative offices
- During rehabilitation and construction of WASH facilities in schools, HCFs and offices
- During rehabilitation and construction of hand pumps, water kiosks and boreholes
- During rehabilitation of booster stations
- During rehabilitation and replacement of water distribution networks
- During the operation of WASH facilities in schools, HCFs and offices
- During the rehabilitation of water treatment plants and other planned intervention works

Waste Categories	Waste Streams
Hazardous waste	<ul style="list-style-type: none"> • Exhaust fumes (from generators/vehicles). • Cement dust – from rehabilitation and construction works. • Disused asbestos pipes – from replacement of water distribution networks. • Faecal / sewage sludge – from evacuation of septic tanks in schools, healthcare facilities, offices. • Used and disused chemicals – from disinfection of septic tanks, sanitary facilities and offices, water treatment laboratories, painting. • Slurry/wastewater – from water treatment plants. • Electrical/ electronic waste – from offices, booster stations, etc.
Non-hazardous waste	<ul style="list-style-type: none"> • Plastics • Paper • Metals (solid form) • Glass • Wood/ wood shavings • Packaging • Unused concrete mix • Ceiling boards • Organic waste (food, cut grass, shrubs from land clearing for construction works)

ES 8: Waste Management Plan (WMP)

The consolidation of all steps and strategies aimed at managing wastes generated under the NG - SURWASH program lies in the development, implementation, monitoring and evaluation of a Waste Management Plan (WMP). At the state level, site specific WMPs may be developed by the SPIUs and IAs depending on the nature of the sub-projects/ intervention works and the envisaged waste streams. Such site-specific WMPs would require harmonization of institutional responsibilities aimed at mitigating the adverse impact of Hazardous wastes as well as monitoring effectiveness of proffered mitigation measures. Refer to Chapter 8 for WMP.

ES 9: WMF Implementation Arrangements

For successful and coordinated implementation of the provisions in this WMF, specially with regards to Waste Management aspects of the proposed activities associated with DLIs 3, 5 and 7 the implementation arrangement is presented below.

S/N	Institution	WMF Roles and Responsibilities
1.	FMEnv	At a national level, the FMEnv will assist the NG - SURWASH program in complying to the National Waste Management policies, guidelines and regulations such the National Policy on Solid Waste Management (2020), National Environmental Protection Regulation on Management of Solid and Hazardous Wastes (1991) and (National Environmental Sanitation and Waste Control Regulation (2009). The Department of pollution control and environmental health undertakes issues of solid waste management, sewage and air emissions management, hazardous waste management, environmental health, and sanitation as well as marine pollution management. The FMEnv will be responsible for

FINAL REPORT

Waste Management Framework
WMF

SURWASH

Nigeria Sustainable Urban and Rural Water Supply,
Sanitation and Hygiene Program
FMWR

S/N	Institution	WMF Roles and Responsibilities
		monitoring compliance with waste management regulations as well as provide support in training on waste management.
2.	NESREA	The NESREA will directly be responsible for the enforcement of all laws, guidelines, policies, and standards on environmental matters including waste management requirement across all relevant sectors including the WASH sector.
3.	FPIU	The NG - SURWASH FPIU is an established Unit, experienced in the implementation of Bank supported projects and programs in the water sector and precisely the WASH sub-sector. The FPIU consists of Project Engineers, Procurement Specialists, Safeguards Unit, Monitoring and Evaluation Specialists etc. who will provide expert technical guidance on the matters concerning the IPF component and its TA related activities. Specifically, the FPIUs Safeguards Specialists and Safeguards Officers will provide technical assistance and advisory in the implementation of the provisions of this WMF at the level of the FPIU and the SPIUs/States; mainly in the preparation of WMPs for proposed sub-projects. It will collaborate with FMEnv accordingly and liaise directly with the Bank on issues concerning ESF compliance and relevant ESSs applicability to NG - SURWASH. Importantly, the Safeguards Unit will be directly responsible for disclosure of all waste management instruments prepared in fulfilment of IPF requirements.
4.	SPIUs (Safeguards Units)	The SPIUs will perform similar functions as the FPIU in assuring WMF implementation; but at a state-level. Importantly, the SPIU Safeguards Units shall assist in waste management, and develop or guide the development of WMPs, AMPs etc for proposed intervention works/sub-projects. The SPIUs will enforce compliance to the provisions in this WMF and in the respective WMPs.
5.	Implementing Agencies - E&S Safeguards Officers in the IAs	On the basis of this WMF, the IAs through their Safeguards Officers shall directly supervise all their Contractors procured to implement proposed intervention works/sub-project and ensure compliance enforcement to the respective WMPs that will be prepared for each sub-project. Additionally, the Safeguard Officers shall report to the SPIU Safeguards Unit on all waste related issues and maintain a cordial relationship with beneficiaries and communities where proposed intervention works will be carried out.
6.	SEPAAs - (GOSEPA, KEPA, EKSEPA, PEPSA, KTSEPA)	These are responsible for the enforcement of all environmental legislations and abatement of all forms of environmental degradation and nuisance.
7.	SWMAs - (DSWMB, EKSWAMA, ISWAMA)	These are responsible for the collection, transportation, treatment and final disposal of waste generated in the NG - SURWASH program, as well as play regulatory roles in pollution emission and management. They will work directly with the IAs at the state level to ensure the collection, transportation, treatment and environmentally safe and sound disposal of solid and liquid wastes generated throughout the duration of the NG - SURWASH program.
8.	Private Sector Provider (PSPs)	These have the mandate of the SEPAs/SWMAs to engage in solid and sewage collection, transportation, treatment and disposal in the states. In line with established regulations by the respective SEPAs, they may be engaged at some point by the Contractors for the evacuation of wastes generated during the sub-project implementation.
9.	Independent Verification Agent (IVA)	The IVA will undertake verification of the achievement of DLIs across the RAs in all participating states. The results of the annual verification exercise as submitted by the IVA and validated by the FMWR will serve as a basis of annual disbursement after the World Bank task team has provided necessary concurrence. In addition, the IVA will provide a quarterly report on the progress of E&S risk management activities to assess compliance with relevant policies and requirements, including implementation of the WMF/WMPs and CESMPs to be prepared by the contractors.
10.	Contractors	Contractors shall keep to all waste management requirements established in the bidding documents and contract agreements. They shall keep to the Code of Conduct, comply to the provisions in the WMPs.
11.	Independent Consultants	Independent Consultant(s) will be procured by the FPIU and SPIUs to undertake the preparation of required waste management instruments, and other requisite reports. They will liaise with the Safeguards Specialists and Officers at the FPIU and SPIUs respectively.
12.	CBOs, NGOs	These are interested parties that may be involved in public sensitization and awareness, advocacy, and capacity buildings, etc. as regards waste management in local/rural communities.
13.	The World Bank	The World Bank has overall responsibility to ensure that its ESF and ESSs are complied with. In addition, the Bank will be responsible for the final review and clearance of the WMF; as well as the giving of a "no objection" to the Terms of Reference for instruments (WMPs, AMPs, PMPs etc.).



ES 10: WMF Technical Assistance (TA) and Capacity Building Estimates

The total Technical Assistance (TA) and capacity building estimate to support implementation of the WMF over the six year NG - SURWASH program implementation is estimated at Three Hundred and Forty Seven Thousand, Eight Hundred and Forty-Nine **US Dollars Only (USD 347,849)**. This is equivalent to One Hundred and Sixty Million Naira Only (**NGN 160,000,000**) derived at a rate of N459.97 to \$1 (USD).

See below.

WMF Overall Estimate

S/N	Item	Responsibility	Estimated Cost (NGN)	Estimated Cost (US\$)
1.	Mitigation Measures	Contractors and other parties involved in implementing controls	TBD	TBD
2.	Monitoring	Safeguards Units, IAs	TBD	TBD
Sub-total			Nil	Nil
3.	Capacity Building	FPIU, SPIUs, IAs	160,000,000	347,849
4.	Preparation of requisite Waste Management instruments	FPIU, SPIUs	TBD	TBD
TOTAL			160,000,000	347,849

Note: USD to Naira exchange rates as at April, 2023 (1 USD = 459.97 Naira) was applied and figures rounded