

FOR MARINE LITTER AND PLASTIC (MAP-ML+P) MANAGEMENT IN NIGERIA



To be the leading Maritime Administration in Africa advancing Nigeria's Global Maritime Goals.



To achieve and sustain safe, secure shipping, cleaner oceans and enhanced maritime capacity in line with the best global practices towards Nigeria's economic development.





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REVISED MARITIME ACTION PLAN ON MARINE LITTER AND PLASTIC (MAP-ML+P) MANAGEMENT IN NIGERIA

ABBREVIATIONS

CBOs	COMMUNITY BASED ORGANISATIONS
CSR	CORPORATE SOCIAL RESPONSIBILITY
EFO	ECOLOGICAL FUND OFFICE
EPR	EXTENDED PRODUCER RESPONSIBILITY
FAO	FOOD AND AGRICULTURE ORGANISATION
FDA	FOOD AND DRUG ADMINISTRATION
FDD	FOOD AND DRINK FEDERATION
FMITI	FEDERAL MINISTRY OF TRADE, INDUSTRY & INVESTMENT
FMOA	FEDERAL MINISTRY OF AGRICULTURE
FMOE	FEDERAL MINISTRY OF ENVIRONMENT
FMOT	FEDERAL MINISTRY OF TRANSPORTATION
FMWH	FEDERAL MINISTRY OF WORKS & HOUSING
LGA	LOCAL GOVERNMENT AREA
MAN	MARITIME ACADEMY OF NIGERIA
MAP – ML+P	MARITIME ACTION PLAN ON MARINE LITTER AND PLASTIC MANAGEMENT IN NIGERIA
MARPOL	INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS
MDA's	MINISTRIES, DEPARTMENTS AND AGENCIES
MLVM	MARINE LITTER VOLUNTEER MARSHALS
NEMA	NATIONAL EMERGENCY MANAGEMENT AGENCY
NESREA	NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS ENFORCEMENT AGENCY
NGOs	NON-GOVERNMENTAL ORGANISATIONS
NIMASA	NIGERIAN MARITIME ADMINISTRATION AND SAFETY AGENCY
NIMET	NIGERIAN METEOROLOGICAL AGENCY
NIOMR	NIGERAIN INSTITUTE OF OCEANOGRAPHY AND MARINE RESEARCH
NIWA	NATIONAL INLAND WATERWAYS AUTHORITY
NITOA	NIGERIA TRAWLER OWNERS ASSOCIATION
NOA	NATIONAL ORIENTATION AGENCY
PPP	PUBLIC PRIVATE PARTNERSHIP

EXECUTIVE SUMMARY

he foundation of a sustainable ocean economy is healthy, productive and resilient marine ecosystems. This implies that oceans, seas and gulfs must be used in such a way that their ability to continually provide ecosystem services is not hampered. In the light of this, the United Nations, in its effort to address the human impacts on the marine environment included goals 6 (Clean Water and Sanitation) and 14 (Life Below Water) in its blueprint to achieve a better and more sustainable future for all. Indeed, the persistence and increasing amount of Litter emptying into the sea due to fast moving consumer lifestyle, manufacturing exigency, improper waste management and the danger it portends to marine biota and human health can no longer be tolerated by concerned Maritime Administrations like ours.

Recognizing the need to minimize the vulnerability of our vast maritime domain and enormous population, our Administration decisively developed the first Maritime Action plan on Marine Litter and Plastic Management in Nigeria (MAP-ML+P). The Maritime Action Plan has six (6) thematic themes in its Roadmap with an armory of activities aimed at achieving attitudinal change, extended producer accountability, innovative development of alternatives to single use plastics, eco-friendly fishing, policy and regulatory controls.

To ensure a purpose-driven implementation of the National Action Plan, a task force on Marine Litter was constituted and inaugurated to coordinate the full execution of the roadmap. The membership of the Task Force was drawn from the various sectors of ocean governance in line with SDG Goal 17 (Partnerships). This transparent involvement of relevant stakeholders including key Ministries, Departments, Agencies, Manufacturers, NGOs and littoral States is aimed at securing public stewardship and effective implementation of the Action Plan.



"The persistence and increasing amount of Litter emptying into the sea due to fast moving consumer lifestyle, manufacturing exigency, improper waste management and the danger it portends to marine biota and human health can no longer be tolerated."

Also, our Agency has continued to embark on the clean-up of identified marine litter hot-spots and the distribution of sanitation equipment, tools, waste receptacles to coastal communities.

Moreover, the coastal youths who have been engaged as Marine Litter Volunteer Marshals will be enabled to serve as field underlings for the implementation of Maritime Action Plan on Marine Litter and Plastics Management in Nigeria. Finally, the Agency is determined to achieve sustainable socio-economic development in the maritime sector through partnerships and policies that will preserve our oceans, seas and marine resources.

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DR. BASHIR JAMOH Director General/CEO, NIMASA

INTRODUCTION

1.0 INTRODUCTION

1.1 THE PROBLEM

Nigeria's coastline of about 853km is prevalent with indentations that create easy settlement for Marine Litter and also makes it difficult to clean Shorelines. The accumulation of this floating litter, 80% of which is from upland interferes with luminosity of marine habitat depleting oxygen supply thereby causing ecosystem imbalance. Marine birds and mammals also eat up plastic particles resulting to biodiversity loss and contamination of the food chain. These contamination goes up the trophic levels endangering and affecting human health.

Marine litter physically transports disease-causing pathogens and invasive species, which displaces indigenous benthic species. Shipping and other marine activities, such as fishing, and tourism are hampered thereby affecting Nigeria's socio-economic goals. Due to the Paucity of public waste management infrastructure and data, inadequate awareness among stakeholders, lack of regulatory framework, increasing plastic production and fast-moving lifestyle make it difficult to manage these nonbio-degradable materials.

This plan is intended to be implemented for a period of five years, after which it will be reviewed in line with emerging trends.

1.2 OBJECTIVES

- 1. To sustainably reduce marine litter in Nigeria's Maritime domain to levels where they do not endanger the marine environment.
- 2. To achieve a behavioural change of coastal communities and urban dwellers on the dangers of marine litter.
- 3. To achieve cleaner and healthy oceans through collaborations with stakeholders
- 4. To enhance Nigeria's growth through harnessing of the blue economy as one of the economic strategies.

2.0 THE ROAD MAP

The following thematic sections represent the road map describing the actions, activities, timelines and expected outcomes in accordance with the objectives, strategies and principles of the Maritime Action Plan on Marine Litter and Plastics (MAP-ML+P). These plans are based on the findings of the initial UNEP-GPA and NIMASA study on main items, materials, quantity and sources of marine litter. The action plan is divided into six components:

- i. Actions to combat land-based sources of marine litter
- ii. Actions to combat sea-based sources of marine litter

- iii. Actions for Legislation, Policies and Enforcement
- iv. Actions for Monitoring and Research Programmes
- v. Actions for Education and Advocacy on the issues of marine litter.
- vi. Actions to encourage Extended Producer Responsibility (EPR) and Green Purchasing
- 2.1 ACTION 1: ACTIONS TO COMBAT LAND- BASED SOURCES OF MARINE LITTER

80% of Marine Litter is said to originate upland. To tackle the problem of Marine Litter from upland is therefore considered a reasonable preventive action (UNEP, 2009).

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.1.1	General Improved Waste Prevention and Management	i) Development of National Waste Prevention and Management Plan with inclusion of Marine Litter issue.	1-2 years	FMEnv, SMEnv and NIMASA	Developed National Waste Management Plan in place.
		ii) Provision of adequate infrastructure by relevant authorities for the efficient collection / management of waste in coastal and urban communities	3-5 years	FMEnv, SMEnv, NIMASA, LGA.	Adequate waste management infrastructure is put in place.
			1-2 years	FMEnv, SMEnv, EFO NIMASA	Established MoU with relevant stakeholders on monitoring of the designated dumpsite/landfill.

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.1.2	Storm Water Management	i) Encourage Federal/ States and LGA to put infrastructure in place for Storm Water Management in order to prevent litter (including micro litter) from entering the Marine Environment.	2-5 years	NIMASA, FMEnv, SMEnv, LGA. Ministry of Works (Drainage Department) NGOs & CBOs NIMET FMOA	Infrastructure in place for storm water management.
		ii) Identification of upland point and non-point sources of litter;	1 уеаг	FMEnv, SMEnv, LGA,	Established land based sources of marine Litter.
		iii) Installation of barricades, litter separators.	1-2 years	Min of Works & Housing, NGOs FMEnv, SMEnv, LGA.	Identified land sources of marine litter barricaded.
		iv) Development of administrative controls with regards to Storm Water Management.	1-2 years	FMEnv, SMEnv, NGOs & LGAs	Monitoring procedures is in place to lessen the threat of storm water.

2.2 ACTION 2: ACTIONS TO COMBAT SEA-BASED SOURCES OF MARINE LITTER

Sea-based sources which account about 20% of marine litter emanate from activities such as shipping, fishing and recreation. In order to effectively tackle the sea-based source of marine litter, actions are required to implement and enforce MARPOL ANNEX V and London Protocol. This can be achieved by providing adequate port and offshore waste reception facilities as well as Integrated waste management system.

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.2.1	Actions Addressing Ship / Vessels/ Marine Platforms	1. Ensure strict implementation of MARPOL Annex V (Regulations for the Prevention of Pollution by Garbage from Ships):	1-2 years	NIMASA, NPA & NIWA	• Compliance with Regulations
	Generated Waste	2. Deploy Integrated Waste Management Systems for Ports, Coastal, Offshore activities	1-3 years	NIMASA NPA NIWA	• Effective management system in place.
		i) Audit the adequacy of existing; Port/ Offshore/ Non- Convention Vessels Waste Reception Facilities	Yearly	FMOT, NIMASA & NIWA	• Improved compliance to the provision of reception facilities in line with regulations.
		ii) Develop Guidelines and Requirements for the end-of-life management of pleasure boats and small crafts	1 year	NIMASA & NIWA.	• Developed guidelines is in place
		iii) Establish a system to monitor the collection and recycling of bottles, containers and cans (glass, plastics and aluminum), on passenger ships and related harbors.	1-2 years	NIMASA, NPA & NIWA	An established system in place for monitoring the activities.
2.2.2	Actions Addressing Waste Related to Fishing and Aquaculture	i. NIMASA will collaborate with Federal Ministry of Agriculture in developing a fishing gear and fishing technology management policy	1-3 years	FMOA, NIMASA, NIOMR NIWA & SMEnv	• Fishing gear and fishing technology management policy
		ii. Implement London Protocol for fish waste management	1-3 years	NIMASA, FDF & PPP with (Trawler Association)	• Generated data on utilization or disposal of fish waste
		iii. Conduct Sensitivity Index mapping of the marine environment and designate dumpsites for fish waste	1-2 years	NIMASA, NITOA, NIOMR	• Designated dumpsites for fish waste.

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.2.3	Removal / Remediation of fishing aquaculture related waste	i) Conduct the removal of identified lost and abandoned fishing gear and fish farming implements	Annually for 5 years.	NIMASA & FDF Trawler Association Coastal Communities	• Reduction in entanglement of Marine Mammals
		ii) Collaborate with relevant stakeholder to organise Annual/ Regular clean-up of coastal communities and marine litter hotspots	1-5 years	NIMASA, NGOs & CBDs Terminal & Jetty owners FMGC producers	• Reduction in biodiversity loss especially for endangered species .

2.3 ACTION3: ACTION FOR LEGISLATION, POLICIES AND ENFORCEMENT

Enforcement and penalties are important. However, a sense of environmental stewardship by everyone and not only ocean users are essential for laws to be effective (Isaac et al, (2005). Presently there are no specific national regulations and policies that address marine litter management in Nigeria; thus, the need to accelerate the implementation of the Marine Litter and Plastics Action Plan (MAP-MLP), for sustainable national development.

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.3.1	Evaluation of Existing Legislations, and Regulations	i) Propose the review of existing waste management Legislations to make elaborate room for Marine Litter Management at National, State and Local Government levels	2 years	FMEnv, NIMASA & Expert Working Group.	• Proposed Legislation forwarded to National Assembly for a review.
		ii) Introduction of new Legislation and support of new policies (like plastic lifecycle, fishing gear and fishing technology where necessary, dealing specifically with Marine Litter Management	1-3 years	National Assembly, FMOT, NIMASA, FMEnv, NESREA and other relevant Agencies.	New legislation on waste management with marine litter issue

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.3.2	Establish Government Sponsored Marine Litter Patrols and Campaign	i) Establish "Marine Litter Volunteer Marshals" initiative in order to enforce anti-litter practices in coastal communities, using education and outreach campaigns to foster compliance	1 уеаг	NIMASA & Marine Litter Marshals, Police and LGA.	Improved compliance, attitudinal change and deterrent to offenders.
2.3.3	Evaluate National Emergency Management Plans	i) Encourage the integration of litter and ecosystem health issues into the national emergency management plans and procedures, to address pollution that may occur as a result of natural disasters.	1-2 years	FMoH, NIMASA, NEMA, NIOMR, FMEnv, SEMA (Coastal States)	• A coordinated and participative approach to disaster preparedness
		ii) Develop emergency intervention programmes for marine litter	1-2 years	NEMA, NIMASA, SEMA, LGA	Coordinated programmes of emergency intervention available.
2.3.4	Technical Co- operation & International Partnerships	i) Develop strategy for technical co- operation and collaboration amongst government Agencies to secure funding and partnerships with Regional and International organisations	1 year	FMEnv, NIMASA, ML NTF, NGOs Ecological Fund IMO UNEP	Enhanced efficiency through improved frame work and capacity
2.3.5	Sanctions and Penalties	Enforcement activities	1-5 years continues	NIMASA, NIWA, NPA, NESREA, NAVY and MARINE POLICE	Improved compliance, attitudinal change and deterrent to offenders.

2.4 ACTION 4: ACTION FOR MONITORING AND RESEARCH PROGRAMMES

A national marine litter-monitoring programme can support an expanded understanding of the problem and function as an on-going component of management strategies that deal with pollution by marine litter (Earll et al., 2000). Periodic and consistent monitoring can be used to further understand the types, sources, pathways and the impacts of marine litter.

Data obtained on marine litter research can be used to help formulate policies which must in turn be implemented by regulatory agencies with support from the community, the private sector and other groups (Isaac et al, (2005).

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.4.1	Marine Litter Monitoring	i) Design and implement Marine Litter-Monitoring Programmes.	1 уеаг	NIMASA, NIOMR, NPA & NIWA Coastal States & LGAs, NTF on marine litter	Improved compliance to regulations
2.4.2	Research and Development of Database for Marine Litter	i) Gathering and collating data on Marine Litter	1-5 years continues	NIMASA, NIOMR Academic instutions MAN-ORON	Improved programme implementation and understanding of marine litter trend.
		ii) Research on impact of marine litter on marine-life, socio-economic activities, public health and environment.	1-5 years continues	NIMASA, NIOMR, Academic institutions including MAN ORON	Primary data Information for improved programme implementation.

2.5 ACTION 5: ACTIONS FOR EDUCATION AND ADVOCACY ON THE ISSUES OF MARINE LITTER

ARegional/NationalStrategyneedstobe developed for a marine litter education and awareness campaign that can be accessed by government agencies, NGO's and other related organizations in the region (Bowman, Manor-Samsonov & Golik, 1998). This campaign should be implemented through a variety of avenues, including radio and television advertisements, documentaries, web accessible materials, social media use and printed educational materials that can be used by government agencies, NGOs, business and industry groups.

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.5.1	Education/ Sensiti zation Campaign	i) Educate/ sensitize manufacturers, importers of plastics and FMCG Producers.	1 уеаг	NIMASA, NPA, London Protocol NTF, FMTI and Nigeria Customs.	Enhanced compliance on plastics reduction policies and legislation.
		ii) Encourage regular marine litter clean- up campaigns.	Annually for 5 years	NIMASA, FMEnv, SMEnv, NPA, NIWA, NGOs.	Cleaner and Healthy oceans.
		iii) Raise public awareness, for children, youths, market women groups, NURTW and consumers on the prevalence and prevention of marine litter.	Annually for 5 years	NIMASA, NOA, FMEdu, FMH, SMH, Media Houses and NGOs.	Improved awareness.
2.5.2	Education Progra mmes on Marine Litter	i) Develop and promote curriculum for marine related education programmes, targeted at professional seafarers, fishermen, and recreational sector, highlighting the marine litter problem in cooperation with relevant organizations including IMO	1-3 years	NIMASA, FMEdu, FMEnv, NIOMR, SMEdu,NGOs & CBOs	Improved Awareness and Capacity
		ii) Specialized educational programmes for subsistence and commercial fishing to help address derelict fishing equipment issues related to wildlife entanglements and habitat damage	3-5 years	NIMASA, NIWA, FM Agric, FMEDuc, SMEDUC (Coastal states)	special educational programme developed for fishing sector. Best fishing practice put
		iii) Promote and disseminate best practice in relation to all relevant aspects of waste management within the fishing sector	1-2 years	FM-Agric, NIOMR, NIMASA, NIWA	in place

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.5.3	Stakeholders Engage ments at Local Govt, States and National Levels	i) Engage and partner with NGOs, CBOs other Government Agencies, producers of FMCG and regional intergovernmental organizations	1-3 years	NIMASA, NPA	Secured commitment of stakeholders
2.5.4	International Co-operation	i) Partner with International marine based organizations such as UNEP -GPA, IMO & International marine focused NGOs	1-2 years	FMEnv and NIMASA	Adequate supply of resources (Human, Financial and material)

2.6 ACTION 6: ACTIONS TO ENCOURAGE EXTENDED PRODUCERS RESPONSIBILITY (EPR) AND GREEN PURCHASING

Marine Litter is primarily a result of poor solid waste management. However, existing national solid waste management strategies do not include specific requirements for EPR and Green Purchasing. It is therefore critical to integrate EPR Policy / principles within existing and/or proposed national solid waste management strategies and Environmental Laws. An effort to coordinate waste management strategies, resources and industry would yield economic and environmental benefits (Earll et al., 2000).

SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.6.1	Producer Respon- sibility Strategies	i) Collaborate with FMEnv and SMEnv to include EPR Policy in National Environmental Laws	1-2 years	FMEnv , NIMASA, FMT&I, Manufacturers	Producers take responsibility for their environmental footprints
		ii) Promote Extended Producer Responsibility Strategies requiring producers, manufacturers, brand owners and first importers to be responsible for the entire life-cycle of the product with measures prioritizing the hierarchy of waste management	2-3 years	Federal Ministry of Trade and Industry. Manufacturers of FMCG	Sustainable economic growth.
		iii) Encourage companies to design products with long durability for reuse, recycling and materials reduction in weight and toxicity to the environment.	3-5 years	Bank of Industry, Recycling companies.	Development of new products from recycling and up cycling.
		iv) Enhance resource efficiency by bringing together producers of waste and recycling companies to transit from linear to circular economy	1-3 years		Enhanced economic growth in line with best practice,



SN	ACTION	ACTIVITIES	TIMELINE	ACTION BY	EXPECTED OUTCOME
2.6.2	Expended Polyst- yrene (Polyst- yrene Foam)	i) Compile information on the sources of Expended Polystyrene Foam (EPS) in the marine environment and engage producers on the establishment of restoration systems and reduction in packaging.	1-2 years	Federal Ministry of Trade and Industry, NIMASA and plastic Plastic Manufacturers	Reduction in Non bio- gradable plastics and impacts of Marine Litter
2.6.3	Implem- entation of policies on phasing out the use of Plastic Bags	 i) Partnership with the industry and consumers, to support appropriate incentives to reduce the consumption of plastic bags, by phasing out or reducing single-use-plastic bags. ii) Establish an annual reduction target, taking into account the voluntary agreements with retailers and supermarkets on reduction of plastic bags consumption. 	1-5 years continuous	NIMASA, Manufacturers Federal Ministry of Trade and Industry FMEnv	Reduction in the volume of marine litter including microplastics and Improved aesthetic value of the environment.

3.0 FUNDING OF THE MARITIME ACTION PLAN ON MARINE LITTER AND PLASTIC MANAGEMENT IN NIGERIA

Activities of the Task Force is expected to be provided for in the annual budget of designated Ministries, Departments, Agencies as well as the Littoral States. Also, financial support from International and National Donor Agencies will be utilized.

3.1 PROPOSED PROJECTS FOR FUNDING BY THE AGENCY AND OTHER DONOR AGENCIES

- i. Nationwide clean-up of identified hotspots and accumulated marine litter
- ii. Nationwide Awareness campaigns in collaboration with MDA's CBO's and NGO's incorporating factors such as cultural, level of education, vocation, age-groups etc.
- iii. Collaboration with agencies responsible

for management of waste from ships and state municipal waste management bodies responsible for proper management of waste upland.

- iv. Sensitization campaign to educate industries on the importance of proper litter management as a way of demonstrating Corporate Social Responsibility (CSR).
- v. Inclusion of litter management in the civic syllabus of educational institutions of all tiers especially those in the littoral communities.

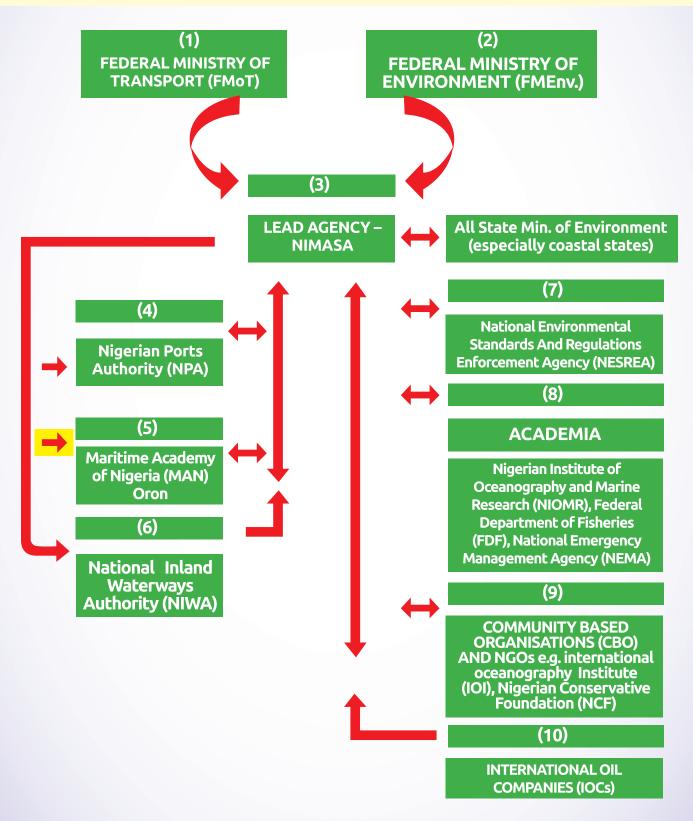
4.0 CONCLUSION

This Document titled **'The Maritime** Action Plan for Marine Litter and Plastics Management in Nigeria (MAP-ML+P)' is critical for the transition of the country from a linear to circular economy and the development of a sustainable Blue Economy.





NATIONAL TASK FORCE ON MARINE LITTER (NTF-ML) MEMBERS (Responsible for coordination of marine litter prevention and control activities at the national level in line with MARPOL ANNEX V,LONDON PROTOCOL and SDG GOALS 6,11,12,13,14 &17)





FUNCTIONS AND RESPONSIBILITIES OF RELEVANT ENTITIES

1. FEDERAL MINISTRY OF TRANSPORTATION (FMoT)

- Formulates, harmonizes and supervises implementation of policies relevant to shipping and protection of the marine environment.
- b) Supervises the Lead Agency (NIMASA), Nigerian Ports Authority (NPA), Maritime Academy of Nigeria Oron (MAN-Oron), Nigerian Inland Waterways Authority (NIWA)
- c) Assists the Lead Agency in dealing with inter agency and ministerial issues

2. FEDERAL MINISTRY OF ENVIRONMENT (FMoE)

- a) Formulates and supervises the implementation of policies on the conservation of the environment
- b) Assists in awareness raising, training and research programmes
- c) Liaises and co-operates with the Lead Agency in enforcement of Marine Litter Management

3. NIGERIAN MARITIME ADMINISTRATION & SAFETY AGENCY – NIMASA Lead Agency)

- a) Gives effect to the environmental functions under the Act establishing it
- b) Implements Marine Environment Management Policies.
- c) Co-ordinates the activities of the NTF on Marine Litter Management
- d) Creates awareness campaigns
- e) Liaise with the academia and scientific research institutions on Marine Litter Management issues
- f) Co-ordinate education and training, capacity building programmes in support of research work on Marine Litter Management
- g) Initiate National and International programmes on Marine Litter Management
- h) Executes the Marine Litter inspections and surveys
- i) Establishes scientific study and monitoring

regime of marine biological assessment

- j) Responds to incidences and emergencies concerning marine litter
- k) Monitor availability and adequacy of Port Reception Facilities (PRF)

4. NIGERIAN PORT AUTHORITY (NPA)

- a) Providing standard and adequate Port Reception Facilities (PRF) for ship generated waste
- b) Report to Lead Agency cases relating to marine litter
- c) Designating possible areas for waste collection
- d) Responds to incidents of marine litter in collaboration with the Lead Agency

5. MARITIME ACADEMY OF NIGERIA, ORON

- a) Review syllabus for the education and training of officers in charge of watch and masters to include the knowledge required for the control of marine litter
- b) Designing in collaboration with the Lead Agency and NTF-ML tailor made courses that would improve activities on Marine Litter Management
- c) Assisting research institutes under the programme in areas of human capacity development
- d) Coordinating training and education, including short courses with other institutions both national and international in order to bench mark human capabilities on matters concerning Marine Litter Management
- e) Responding to incidents of marine litter

6. NIGERIAN INSTITUTE OF OCEANOGRAPHY AND MARINE RESEARCH (NIOMR)

- a) Assisting capacity building, research and development programmes
- b) Co-ordinating training and education including short courses with other regional and international institutions.

7. NIGERIAN INLAND WATERWAYS AUTHORITY (NIWA)

- a) Report the observation of marine litter hotspots to the Lead Agency
- b) Carry out control measures to tackle marine litter build-up in the marine environment and waterways
- c) Carry out research and development on marine litter
- d) Capacity building in matters relating to Marine Litter Management within their jurisdiction
- e) Responding to incidences of marine litter in inland waterways within their jurisdiction

8. NATIONAL ENVIRONMENTAL STANDARDS REGULATORY AGENCY (NESREA)

- Collaboration with NIMASA on issues of extended producer responsibility and green purchasing
- b) Notify Lead Agency on any observations concerning marine litter in the marine environment

9. ACADEMIA & NIGERIAN INSTITUTE OF MARINE RESEARCH (NIOMR)

- a) Carry out research on marine litter trajectory / prevalence and proffer strategic solutions to the Lead Agency
- b) Assist with reviews of the Maritime Marine Litter Strategy and introduce changes where necessary
- c) Responding to incidents of marine litter and pollution in collaboration with the Lead Agency, NGOs AND CBOs
- d) Co-operating with Regional and International research institutions through the Lead Agency

10. NON-GOVERNMENTAL ORGANISATIONS (NGOs) AND COMMUNITY BASED ORGANISATIONS (CBOs)

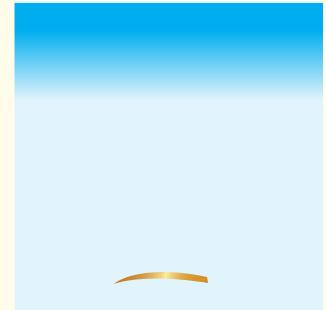
- a) Raising awareness on the harmful impacts of marine litter
- b) Raise alarm for any hidden violations
- c) Assist in capacity building and community mobilization

DOCUMENT CONCEPTION AND REVIEW

The conceptualisation of this plan started partnership of UNEP-NIMASA Pilot Project under the lead of Dr (Mrs) F.C Mogo on water clean-up and identification of hot spots in Nigeria in the year 2016. The draft Maritime Action Plan for Marine Litter was developed by NIMASA, approved by UNEP-GPA and peer-reviewed by the following:

- 1. DR.(Mrs) FELICIA CHINWE MOGO -COORDINATOR /CHAIRPERSON
- 2. DR. MABEL YARHERE -INTERNATIONAL OCEAN INSTITUTE NIG/ NIOMR
- 3. MRS AGBENLA O.O. FEDERAL MINISTRY OF ENVIRONMENT
- 4. Dr. A.S. YAKUBU BIO/OCEAN NIOMR
- 5. MR. UCHENDU C. NIGERIAN PORT AUTHORITY (NPA)

- 6. MR. IGBO McDENNIS NIMASA
- 7. DR. AWWAL BAMANGA NIMASA
- 8. MRS AISHATU DIKKO ATIYAYE NIMASA
- 9. MRS DANIELS CHIBUZO. NIMASA
- 10. MISS IFY IZAGBO NIMASA
- **11. MISS CHINENYE AJA NWACHUKWU** NIMASA



THIS DOCUMENT IS REVISED BY THE FOLLOWING MEMBERS:

- 1. MR. UBONG ESSIEN - SA DG NIMASA
- 2. MR. MUSA MUDI - DD MEM - Ag.H, MEM, NIMASA
- 3. MR. IGBO McDENNIS - AD MEM, NIMASA
- 4. DR. AWWAL BAMANGA - C MEMO, NIMASA
- 5. ENGR. TAIWO MOSHOOD AKINWUNMI – *P-MEMO, NIMASA*



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HEAD OFFICE Maritime House, 4, Burma Road, Apapa, P.M.B 12861, G.P.O, Marina, Lagos, Nigeria. () (n) (2) info@nimasa.gov.ng www.nimasa.gov.ng

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