

National Waste Management Policy

DRAFT

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National Waste Management Policy

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The National Waste Management Policy

1. Introduction

The need to develop an appropriate national policy on holistic waste management has become much felt in the country with the rapidly aggravating problems related to waste experienced at present. This policy document is a response to that need. The policy covers solid, liquid and gaseous waste aiming at providing directions within a broader framework with focused policy statements to offer guidance to the legally mandated government institutions, other service providers and all other institutions in the country. The mandatory community involvement in managing waste is recognized as a significant input to ensure that waste managers perform their duties with highest degree of responsibility and accountability throughout the country. In view of the Constitutional obligations, every person in Sri Lanka is obliged to protect the nature and conserve its riches.

The Ministry of Environment developed a National Strategy on Solid Waste Management in 2000 and a National Policy on Solid Waste Management in 2007 with a view to facilitate solid waste management in the country with more emphasis on municipal waste. Different agencies practiced different waste management activities with successes and failures. Failures were mainly due to absence of adequate and acceptable infrastructure facilities including conflict free final disposal facilities within an agreed integrated waste management system throughout the country.

Several major waste streams such as electrical and electronic waste (e-waste), healthcare waste, construction and demolished waste, and other hazardous waste have been considered in this policy as wastes that need priority attention in addition to the municipal solid waste.

Various actions have been taken in the recent past by the government to develop infrastructure facilities for treatment of these types of waste. Healthcare waste treatment facilities have been established island wide and appropriate clustering will be able to cater to the requirement of the government sector. The possibility of extending the waste treatment services for other required institutions too could be explored in order to utilization of the available capacities considering the extensive investment costs required for establishment of hazardous healthcare waste treatment and disposal facilities. Specific and related sub-sectorial policies and strategies are necessary to reach this end.

However dedicated hazardous waste final disposal facilities are required to dispose the ash generated after incineration in an environmentally sound manner as it is categorized as hazardous waste. At present the available disposal facilities are not adequate to cater to all the hazardous waste generated in the country.

It is necessary to assess where, what and how much waste is generated as premises for confirmation of the cause of waste generation and promotion of the efficient and maximum resource circulation, preventing and minimizing waste throughout the country through robust coordination and reporting systems. Principles and statements of this policy document provides guidance and directions to achieve this objective.

All these factors show the need for a strong national policy with sound legal backing to guide decisions and practice by all the stakeholders in managing waste in the country with highest degree of responsibility and accountability.

2. Justification for the need for an updated national policy

This policy document is a revision of and an extension to the National Strategy for Solid Waste Management (2000) and the National Policy on Solid Waste Management (2007) developed by the Ministry of Environment in consultation with all relevant stakeholders. It covers all three types of waste; solid, liquid and gaseous.

The policy was designed to provide more detailed focused directions for policy makers and implementers covering vertical and horizontal levels in the administrative and management structures of the country. The multiple challenges faced in the past, facing at present, and also likely to be faced in the future were considered in its design. The time span proposed is up to 2030.

One of the key challenges that has to be addressed in the policy was to overcome the system deficiencies as a whole to absorb, integrate and continue waste management activities with a higher degree of responsibility and accountability. Attractive multiple supporting inputs provided in the past were mostly fragmented and not continued as expected once the funds ceased and/or the leadership changed due to the absence of sustainable monitoring, evaluation, recording and reporting systems with access to feedback. Lack of periodical data collection and management systems to take prudent decisions in managing waste is one of the main challenges faced as a result of these system deficiencies.

Therefore, several key strategies of waste management were magnified as detailed policy statements to put the system/s in place first in the right direction and to overcome system deficiencies without deviating from sustainable solutions. Adherence to the principle of common but differentiated responsibility was critically emphasized in the policy document to secure highest degree of collaboration and accountability for sustainable waste management of the entire country through much needed social transformation.

3. Vision

Managing waste for healthy life for all.

4. Mission

Development of an eco-friendly nation by promoting resource circulation.

5. Goal

To provide coherent and comprehensive directions for waste management in the country covering solid, liquid and gaseous wastes to meet the acute short term challenges in line with medium and long term sustainable solutions up to 2030 with entrusted accountability.

6. Objectives

- 6.1 To make all the citizens and institutions legally responsible to engage in waste management activities as generators based on the degree of their involvement.
- 6.2 To sensitize citizens, institutions, waste managers and service providers continuously on the need to be accountable and responsible to manage wastes individually and collectively by preventing and minimizing its generation moving beyond compliance.

- 6.3 To ensure availability of facilities and infrastructure for treatment and final disposal of waste in an environmental sound manner assuring responsible, accountable and sustainable operation and maintenance.
- 6.4 To make every effort to minimize final disposal of waste by retaining its resource utilization value throughout the life cycle.
- 6.5 To enhance effectiveness and efficiencies of existing waste management systems/practices and promote new systems for avoidance, prevention and/or minimization of waste with appropriate technology and practices. .
- 6.6 To improve efficiencies and effectiveness of existing appropriate markets, promote new markets with appropriate innovative technologies and partnerships, and facilitate holistic integrated waste management systems/practices.
- 6.7 To reduce risks to public health, environment, and ecosystems and improve occupational health & safety of waste handlers.
- 6.8 To enhance effective partnerships to meet international obligations in waste management moving beyond compliance.

7. Guiding Principles

- 7.1 Adhering to common but differentiated responsibility of every institution and individuals of the country and involve in all aspects of waste management is a basic prerequisite in managing waste for healthy life for all.
- 7.2 Legal provisions are necessary that will gradually converge values into social systems to facilitate and empower prudent behavior out of necessity in resource utilization and waste management.
- 7.3 Steps taken to address waste management issues shall be environmentally sound, nationally appropriate, socially acceptable, and economically viable.
- 7.4 Waste management systems should be zero waste oriented linking to life cycle management of products and processes as much as possible with appropriate technology.
- 7.5 Existing internationally and nationally accepted appropriate waste management concepts shall be practiced with special emphasis on waste prevention approaches that would require 'RE-Think' as the basic prerequisite for conducive and accountable social transformation.
- 7.6 Sustainable consumption and production can significantly address the current and future challenges of waste management.
- 7.7 Application of market based instruments including 'Polluter pays principle' and 'Extended producer responsibility' throughout the life cycle of products, production, and provision of services will be recognized as effective waste management tools maximizing resource and economic efficiency.
- 7.8 Avoiding mismanagement of waste leads to a cleaner and healthy environment leading to a happy life for all.

8. Policy statements

8.1 General policy statements covering all forms of waste together

- 8.1.1 Waste is defined in this policy as any material, substance or by product eliminated or discarded or as no longer required at a particular time and a particular place or form and therefore to be used either as a resource or to be treated and disposed of in an environmentally sound manner if it does not have a utility value.

- 8.1.2 Multiple strategies such as command and control regime, economic instrument, voluntarily contribution shall be used as appropriate to improve waste management systems throughout the country.
- 8.1.3 Systematic mechanisms with tracking systems shall be developed to know where, what and how much waste is generated as premises for confirmation of the cause of waste generation aiming at establishing a sound and self-responsible society with life cycle thinking in resource utilization.
- 8.1.4 The lead institutions and agencies shall develop mechanisms to identify, evaluate and report the amount of waste generation with its composition and source.
- 8.1.5 A sustainable mechanism shall be developed to prevent open dumping practices by providing suitable infrastructure facilities for disposal of waste.
- 8.1.6 Infrastructure facilities that needs a minimum continuous supply of waste for its operation shall be carefully designed considering the likely minimum generation available without being an obstacle to waste prevention strategies balancing the possible downward waste generation trends due to proper management of waste as well as unavoidable upward trends due to expansions of economic development.
- 8.1.7 Short, medium and long term strategies and action plans shall be developed by leading institutions and agencies to minimize the waste to be finally disposed of by using an appropriate waste management hierarchy throughout the life cycle.
- 8.1.8 Importation of post-consumer waste shall be prohibited.
- 8.1.9 Generators of hazardous waste shall be held responsible to ensure proper collection, storage, transportation, treatment and disposal of waste with appropriate tracking, recording and reporting systems.
- 8.1.10 Application of cleaner production techniques shall be promoted to minimize hazardous contents and improve resource efficiencies at all levels.
- 8.1.11 Leading ministries and agencies shall upgrade the existing guidelines and develop new guidelines where necessary for all waste sectors covering all waste streams for the usage at national, provincial and Local Authority levels.
- 8.1.12 Littering shall be legally prohibited in the country to maintain a cleaner and pleasant environment by CEA.
- 8.1.13 Development and implementation of occupational health and safety systems for all waste management workers shall be made mandatory for all the industries, waste management agencies, service providers and other institutions.
- 8.1.14 Development of Risk assessment plans and safety arrangements shall be made mandatory for industrial solid, gaseous and liquid waste by the generators.
- 8.1.15 Public safety shall be ensured through appropriate liability and compensation by owners of industries, waste management institutions and service providers.
- 8.1.16 Effective and sustainable resource mobilization strategies shall be developed to ensure efficient waste management island wide.
- 8.1.17 Development and implementation of sub-sectoral policies in line with the National Policy by all the leading stakeholders shall be made mandatory.
- 8.1.18 The policy statements covering all forms of waste together are applicable to semisolid waste having qualities of solid and liquid; highly viscous, as appropriate in accordance with the guidelines stipulated by CEA.

8.2 Specific policy statements related to solid, liquid and gaseous waste

8.2.1 Solid waste

1) Municipal solid waste

- a) Active involvement of all the households, institutions and other commercial entities shall be secured by the Local Authorities for proper collection of municipal waste effectively and efficiently with feedback mechanisms.
- b) Waste collection time tables shall be developed by the Local Authorities with community involvement and any time difference or delay shall be informed in advance to the community using digital technology or any other user-friendly methodology to prevent scattering and haphazard disposal of waste.
- c) Strategies shall be developed by the Local Authorities to promote prevention of generation and reduction at source followed by source separation and further segregation as appropriate to facilitate regaining the utility value of household refuse as much as possible.
- d) Organizers of festivals and other special events shall be held responsible to manage refuse arising from such events in collaboration with the Local Authorities and appropriate agreements shall be signed with the Local Authorities before the event with provisions to bear additional financial requirements.
- e) Landfilling shall be limited to non-recyclable, non-compostable and inert material generated through waste treatment processes.
- f) Development and Maintenance of databases on (1) Amounts and composition of waste collected by Local Authorities and the residences covered (2) Periodical reduction of waste, and (3) Waste to be disposed in landfill sites shall be made mandatory to all the Local Authorities.
- g) Local Authorities shall be made responsible to provide places convenient for storage and treatment facilities time to time, maintain their vehicle fleet and take all other measures and precautions to ensure that no refuse, night soil or similar matter is disposed of in such a way to cause environmental pollution and nuisance.
- h) Provincial councils shall identify and provide suitable locations to assist Local Authorities for disposal of waste by clustering of Local Authorities and ensure disposal of waste in an environmental sound manner.
- i) Local Authorities and Provincial Councils shall be guided, assisted and facilitated at National Level to ensure availability of infrastructure facilities for waste treatment and disposal in an environmentally sound manner.
- j) Appropriate tools and strategies shall be identified to apply polluter pays principal and extended producer responsibility principle to maximize resource recovery and prevent scattering and haphazard disposal of waste .
- k) Slaughter house waste shall not be mixed with general municipal waste and the generators shall be held responsible to proper management and disposal waste without causing health and environmental problems in consultation with the relevant Local Authorities.
- l) Local Authorities shall develop mechanisms for safe disposal of household sanitary related wastes in collaboration with the Provincial Council ministries of Health and the Ministry of Health.
- m) Mechanisms shall be developed by Local Authorities to collect bulk waste on demand from households and safely disposed in an environmentally sound manner in accordance with the guidelines stipulated by CEA.
- n) Waste tracking systems shall be developed to ensure that no waste is haphazardly disposed by households, institutions, commercial entities and also by the waste management institutions and service providers.
- o) Local Authorities shall develop user-friendly communication models to receive feedback on the service provided by them from households, institutions, commercial

entities, other waste managers and service providers, and action shall be taken to encourage best practices while addressing the challenges in collaboration with each other.

- p) Local Authorities shall develop time bound (short, medium and long term) action plans with performance indicators in collaboration with the Provincial Councils in line with the national policy and submit the plans to the Ministry in charge of the subject of Provincial Councils and Local Government.
- q) Local Authorities shall report their performance annually to the ministry in charge of the subject of Provincial Councils and Local Government and the Ministry shall evaluate the performance and rank the Local Authorities based on the performance reflecting accountability at all levels and publicize to make all the citizens and other stakeholders aware on the status of municipal waste management in the country.
- r) Recognition and rewarding systems shall be applied to promote best practices with attractive incentives Local Authorities shall maintain a healthy labor force throughout by adhering to occupational health and safety practices to ensure effective and efficient service to the communities without disturbances.
- s) Periodical skill development and training shall be made mandatory by the Ministry of Provincial Councils and Local Government and Provincial Councils for all the waste managers and service providers including the labor force.
- t) Overall independent annual reviews of municipal waste management shall be organized at National level, Provincial level and Local Authority level via citizens' platforms.
- u) Rehabilitation or Restoration plans as appropriate shall be developed by all the Local Authorities for existing uncontrolled dump sites with time targets under the guidance and technical assistance of CEA

2) Packaging Waste

- a) Measures to reduce the generation of packaging shall be encouraged by limiting its usage only for mandatory requirements for safety, hygiene and acceptance for the packed product by wider publicity of the standards and potential environmental and health risks associated with it
- b) Packaging shall be designed, produced and commercialized in such a way to permit its reuse, recovery and recycling and to minimize its environmental impacts during treatment and final disposal after use.
- c) Systems shall be established to promote return or collection of used packaging to effectively facilitate reuse and or recovery with targets agreed by authorities and industry covering the life cycle.
- d) Adhering to the standards for food grade packaging shall be made mandatory.
- e) Biodegradable packaging waste shall be of such a nature that it is capable of undergoing physical, chemical, thermal or biological decomposition such that most of the finished compost ultimately decomposes into carbon dioxide, biomass and water.
- f) Environmental friendly packaging shall be encouraged at all times wherever possible, instead of plastic packaging.
- g) Nationally appropriate standards shall be developed by SLSI to guide packaging industry.

3) Industrial waste

- a) Traditionally separate industries shall be facilitated to engage in a collective approach to competitive advantage involving physical exchange of material, energy, water and/or byproducts effectively in an environmental sound manner (industrial symbiosis).
- b) Clustering industrial units in Estates or Parks shall be promoted with common treatment fasciitis wherever possible with sound performance monitoring.
- c) Industrial waste shall be collected separately from the other domestic waste and special precautions shall be taken for hazardous waste in line with the hazardous waste regulations.

- d) Declaration of overall waste handling and processing information shall be made mandatory for all industries annually to the Central Environmental Authority including a monitoring and tracking system for waste treatment and disposal.
- e) User-friendly system/s shall be made available for the industries to declare and involve in waste exchange programs effectively with effective data management and reporting systems.
- f) Special precautions shall be taken to minimize the hazardous contents during industrial processes and to ensure proper treatment and disposal in an environmentally sound manner with systematic recording and reporting systems.
- g) Sludge from the treatment plants shall be considered as hazardous waste and disposed of in a hazardous waste disposal facility.
- h) Owners of industrial zones and parks shall be held responsible to provide reasonable spaces for collection, storage, treatment and other management facilities as appropriate and ensure safe disposal by themselves or in collaboration with other service providers.
- i) Ministry in charge of the subject of Industry shall be responsible for performance monitoring on Industrial waste management in collaboration with CEA and all the stakeholders to identify challenges and facilitate environmentally sound waste management.
- j) Ministry in charge of the subject of industry shall report the performance of industrial waste management and publish annually with access to feedback mechanisms.
- k) Ministry in charge of the subject of industry shall develop and maintain databases on industrial waste and publish annually.

4) Construction and Demolition waste

- a) No person shall litter or deposit construction and demolition waste to obstruct traffic or the public or the drains.
- b) Construction and demolition waste shall be separately collected from other waste.
- c) The government shall facilitate to establish infrastructure facilities with public, private, and 'private-public' partnerships as appropriate for storage, processing, reuse and recycling facilities in an environmental sound manner to maximize re-use of used material.
- d) Waste generators shall submit their waste management plans to the Local Authorities before obtaining approvals for construction, demolition or re-modeling work.
- e) Waste generators and service providers shall develop and implement plans to address likely environmental and safety issues in all the operations.
- f) Waste generators and service providers shall develop and implement plans to remove all debris in consultation with the related Local Authorities on their own or through any responsible agency.
- g) Local Authorities shall develop plans and implement to collect and remove construction and demolition waste on demand at regular intervals.
- h) Construction Industry Development Authority (CIDA) shall develop guidelines, code of practices and standards for the construction and demolished material/products to facilitate material/product exchange systems.
- i) CEA shall develop guidelines related to environmentally sound management of construction and demolition waste.

5) Healthcare waste

- a) Hazardous and non-hazardous waste shall be collected, treated and disposed of separately to minimize waste management costs and improve resource utilization efficiencies.
- b) Available capacities of existing waste treatment facilities shall be used to its maximum to treat all the healthcare wastes in the country by clustering of hospitals as appropriate and establishing proper collection networks.

- c) Waste treated by steam sterilization (autoclave technology) shall be finally disposed of with municipal wastes to maximize cost effectiveness as it is non-hazardous after proper treatment with confirmed tests in line with the standards.
- d) Waste management plans shall be developed and implemented by all the healthcare institutions including dispensaries in the country irrespective of its scale of operation with especial emphasis on clinical waste with proper recording and reporting systems enabling performance monitoring by the authorities.
- e) Special precautions shall be taken to handle, safe treatment and disposal of waste arising from cancer treatment.
- f) Appropriate environment friendly and economically viable technologies shall be selected by health institutions depending on the quantity of waste generated.
- g) Clear and user-friendly guidelines shall be developed by the Ministry of Health on healthcare waste management for all the healthcare institutions including dispensaries in the country in line with the CEA regulations.
- h) Waste collection networks shall be developed island wide to prevent haphazard disposal of clinical waste and mixed with other waste streams.
- i) Waste collectors and disposers shall be registered in Local Authorities in addition to the Ministry of Health and the Central Environmental Authority.
- j) Infectious and other health related bulk waste shall be treated and disposed of in environmentally sound manner.

6) Electrical and Electronic waste (e-waste)

- a) e-waste management shall be considered as part of the integrated solid waste management of the country taking into consideration of the inheriting hazardous characteristics of e-waste.
- b) Quantitative and qualitative targets shall be set to promote e-literacy integrating the possible environmental impacts of mismanagement of e-products.
- c) Importation of usable used (second hand) electrical and electronic equipment shall be regulated to prevent and minimize generation of e-waste.
- d) Mechanisms shall be developed to prevent outdated/used products reaching Sri Lanka through the mechanisms of gifts, donations and any other means.
- e) A mechanism shall be established to formalize and upgrade the capacities of the informal sector involved in repair and maintenance sector.
- f) e-waste collection networks shall be established island wide to prevent haphazard disposal of e-waste and mixed with other waste streams.
- g) Infrastructure facilities shall be made available to dispose non-recyclable e-waste.
- h) Resource mobilization strategies shall be developed to ensure efficient e-waste management systems at Provincial and Local Authority Levels covering life cycle management.
- i) Importer/ Producer/ Agent shall be held responsible for the final disposal of obsolete electronic items.

7) Radio-active waste

- a) Solid Radio-active waste shall be managed by the Atomic Energy Board and the Atomic Energy Regulatory Council in collaboration with all the generators and the Central Environmental Authority.
- b) Proper management plans shall be developed to identify the source of generation, transportation, storage, and disposal of radioactive waste with recording and reporting systems for performance monitoring.

8) **Marine waste**

- a) A comprehensive action plan shall be developed for marine related waste including but without limiting to marine waste, ship generated waste, and fishery harbor waste by MEPA, CEA, CCD and, Ministry of Ports and Shipping in line with the IMO and other related conventions assigning ownership and responsibility of its implementation.
- b) Respective lead agencies shall monitor and record performance of marine waste management periodically and report annually to the Ministry of Environment, and the Ministry of Environment shall review overall performance and publish annually.

9) **Food, Agriculture and Livestock Waste**

- a) A comprehensive strategies and action plans shall be developed by the Ministries of Agriculture, Trade, Tourism, Local Government, Health and, Education to minimize the amount of food, agriculture and livestock waste to be finally disposed, in collaboration with the relevant stakeholders.
- b) Respective leading agencies shall monitor and record performance of waste management periodically and report annually to the Ministry of Environment, and the Ministry of Environment shall review overall performance and publish annually.

8.2.2 **Liquid waste**

1) **Sewage**

- a) National baseline surveys shall be carried out for the assessment of waste water generation in different categories such as households, commercial, hotel, restaurant, industry, health, agricultural and livestock, service station, landfill sites and other public and private institutions to promote preventive strategies and ensure proper treatment and disposal systems in an environmental sound manner.
- b) All the generators including households shall be held responsible to manage sewage in consultation with relevant LAs and NWSDB, MOH/PHIs/Ministry of Health as appropriate to prevent health and environmental problems.
- c) Local Authorities and MOH/PHIs/Ministry of Health shall be held responsible to ensure sufficient toilet facilities to the community and prevent contamination of land and water with sewage as non-point sources.
- d) Standards for sewage effluent discharge and waste water management guidelines shall be developed for different sectors by CEA in collaboration with the NWSDB to prevent pollution of water bodies, lands and other sensitive ecosystems causing public health and environmental problems.
- e) Sludge generated from treatment plants shall be finally dispose of in an environmentally sound manner.

2) **Industrial waste, Chemical waste, Leachate and Service Station effluent**

- a) All the generators shall be held responsible to develop their own management plans and implement in consultation with relevant authorities with annual performance monitoring and reporting mechanisms.
- b) Common waste treatment facilities both onsite or outside shall be encouraged wherever possible while onsite treatment facilities are mandatory when common treatment is not feasible.
- c) Appropriate mechanisms shall be introduced for Chemical tolerable limit management through supplier and supply chain of the hazardous liquid chemical waste.

3) Contamination of runoff with petroleum residues, healthcare waste effluent and other emerging contaminants

- a) All the generators shall be held responsible to develop their own management plans and implement in consultation with relevant authorities with annual performance reporting systems preventing contamination of runoff as appropriate.
- b) Appropriate mechanisms shall be introduced for Chemical tolerable limit management through supplier and supply chain of the hazardous chemical waste.
- c) Lead institutions and agencies shall be held responsible to develop plans for environmentally sound management of waste at point sources to prevent contamination of sensitive eco systems and areas with waste constituents as non-point sources.

4) Food handling establishments and Kitchen waste (grey water)

- a) All the generators shall be held responsible to develop their own management plans and implement in consultation with relevant authorities to prevent health and environmental problems.
- b) Guidelines shall be developed for food and agriculture waste prioritizing waste minimization covering all sectors with standards as appropriate to prevent contamination of water bodies and lands causing health and environmental problems.

5) Liquid Radioactive waste.

- a) Liquid Radio-active waste shall be managed by the Atomic Energy Board, and the Atomic Energy Regulatory Council in collaboration with all the generators, the Central Environmental Authority, and National Water Supply and Drainage Board.
- b) Proper management plans with guidelines shall be developed to identify the source of generation, transportation, storage, and disposal of liquid radioactive waste with recording and reporting systems for performance of waste management annually.

8.2.3 Gaseous waste

- a) All the generators shall be held responsible to develop their own strategies and action plans in line with the Clean Air 2016- 2025 action plan covering industrial, vehicular, ship, marine and fisheries, incinerator, landfills, septic tanks, and other sewage treatment plants with annual performance monitoring and reporting systems.
- b) Open burning and indoor air pollution shall be prevented and/or minimized to prevent health and environmental problems.
- c) Mechanisms shall be established to secure regional cooperation to address transboundary gaseous pollution.
- d) Mechanisms shall be established to record and report ambient air quality of risk related areas and key locations where significant emission sources exist continuously.
- e) Ministry of Environment shall record and report overall annual performance of implementation of the Clean Air 2016- 2025 action plan with additional information covering sources that have not been reflected in the action plan.
- f) Standards shall be developed and enforced by CEA for emission of gaseous waste from industrial emissions including mobile and stationary sources taking into consideration ambient air quality levels.
- g) Financial mechanisms shall be established to promote industries to adopt technologies that reduce emission of gaseous pollutants.

- h) Mechanisms shall be developed to evaluate the feasibility of introducing a licensing/quota system to control emissions from industrial sources to ensure that a healthy ambient air quality is maintained in the country.
- i) Risk assessment plans and safety arrangements for industrial gaseous waste shall be developed with hazard indices and periodically verified to implement early warning systems and disaster mitigation.

8.3 Policy statements related to Knowledge Management and Capacity building

8.3.1 Education and Awareness creation

- a) Life cycle issues related to products and its usage shall be incorporated into the school curriculum system from the primary level up to the higher levels with practical sessions with special emphasis on e-waste, food waste and waste arising from packaging.
- b) Life cycle issues of products shall be incorporated in to the university and technical education curriculum systems covering environment, economic and social aspects to ensure availability of sufficient knowledgeable human capital for effective waste management throughout the country.
- c) Mechanisms shall be developed to enhance general education and awareness of all the citizens and institutions periodically on multiple interconnected issues related to waste management and related social costs of not taking timely action.
- d) Robust mechanisms shall be developed to make all categories of policy makers aware periodically on the interrelated waste management issues and possible risks of being not taking action on time to prevent disasters.
- e) Media shall be encouraged and guided to include multiple education and awareness programs periodically for various target groups in all aspects of waste management.

8.3.2 Skills development, Training, Research & Development

- a) A focused and dedicated Skills Development, Training, Research and Development Center shall be established in a cost effective manner covering all the related aspects of waste management with special emphasize on municipal waste initially to ensure efficient and effective waste management at National, Provincial and Local Authority levels with highest degree of responsibility and accountability.
- b) Research and Development related to environmental, economic and social aspects of entire waste management cycle shall be made mandatory by the proposed center to promote and recognize innovation and best practices.
- c) A Research fund shall be established to encourage research on waste, new innovations, innovators, product and process developments/modifications with funding from taxes and levies based on polluter pays principle.
- d) NVQ qualifications shall be made mandatory by the respective leading institutions for the waste managers and labor force as appropriate.
- e) The NVQ system shall be strengthened to provide periodical skills development and training by bridging the gaps of possible natural capital deficiencies in waste management.
- f) Waste Management Authority of the Western Province shall be strengthened to deliver required services in the western province and also to provide services to the other provinces and Local Authorities too on demand.

8.3.3 Technology development, Usage and Transfer

- a) Ministry of Environment and other related National Focal Points shall impart to identify technology needs in collaboration with all the stakeholders to fulfill the national commitments in implementation of the Multilateral Environmental Agreements (MEAs) signed by Sri Lanka .

- b) Technology development usage and transfer shall exclusively focus on holistic integrated waste management systems considering the inter-linkages with waste forms to prevent transfer of pollution from one source to the other and maximize resource utilization.
- c) Technology development for waste recycling and resource recovery shall be promoted with appropriate partnerships covering the entire life cycle.
- d) Development of appropriate, low cost, affordable waste treatment facilities shall be encouraged and made available for waste managers.
- e) Ministry of Environment and other related National Focal Points shall take action to strengthen technical capacities of other leading institutions to fulfil the obligations of the country.
- f) A sustainable financial mechanism shall be established to support technology development, usage and transfer for entrepreneurship and agencies based on their competency and accountability.
- g) New innovations shall be recognized, promoted and followed up periodically to verify their competency in delivering the expected service/s by regular performance monitoring, recording and reporting.
- h) Traditional industries shall be supported in waste minimization, handling, treatment and disposal by upgrading their technology, technical capacity and infrastructure development.

8.3.4 Infrastructure development

- a) Waste treatment and disposal facilities shall be established in an environmentally sound manner at strategic locations covering the entire country.
- b) Infrastructure development for industrial and healthcare waste management shall be the responsibility of the line ministries in charge of the subject of Industry and Commerce, Health and Provincial Councils and Local Government respectively; special precautions shall be taken for hazardous waste in line with the regulations and guidelines developed by CEA.
- c) CEA shall guide and facilitate e-waste management infrastructure facilities by developing and incorporating appropriate tools to apply polluter pays principle and extended producer responsibility principle.
- d) A dedicated and sustainable institutional mechanism shall be developed to provide infrastructure facilities for municipal waste management securing ownership with highest degree of responsibility and accountability for operation, maintenance and management with private and 'public-private' partnerships as appropriate.
- e) Extensive island wide storage, collection and transportation systems shall be established to make recycling/recovery systems economically viable.
- f) Private, Public, and 'Private-Public' partnerships shall be encouraged to establish recycling, treatment and disposal systems as appropriate in an environmentally sound manner with monitoring and annual performance reporting systems.
- g) Potential sites for medium and large scale waste treatment and disposal shall be identified and developed on a countrywide basis and the necessary clearances should be obtained through IEE and EIA studied as required by law to prevent negative impacts to the environment and related ecosystems.
- h) Common treatment facilities for liquid and solid waste shall be encouraged to improve efficiency and effectiveness of resource utilization, minimize pollution and reduce costs of compliance.
- i) Provincial councils and National Government shall provide, guide, assist and guide Local Authorities for development and maintenance of cluster based disposal facilities covering all the Local Authorities.
- j) Competent, experienced, skillful professionals shall be employed in infrastructure development by assigning results oriented targets and standards to comply with.
- k) Waste tracking systems using digital technology or any other appropriate technology shall be used to prevent haphazard disposal of waste and illegal dumping in the country.

- l) Proper record keeping of material balance and annual publication shall be made mandatory for the owners of infrastructure.
- m) Model agreements shall be developed to avoid risks of violations of conditions of operation and maintenance of infrastructure facilities with appropriate penalty clauses to ensure highest degree of accountability of the waste managers and service providers.

8.3.5 Integration with other supporting policies and national action plans

- a) Mechanisms shall be developed to implement the National Green Procurement policy and the Sustainable Consumption and Production Policy with performance monitoring and reporting.
- b) Mechanisms shall be developed to strengthen the implementation of the National Green Reporting System with effective performance based evaluations and publications.
- c) Mechanisms shall be developed to update and implement the National Cleaner Production Policy and the Sectoral Cleaner Production Policies already developed.
- d) Holistic Integrated Waste Management Systems shall be promoted considering the inter-linkages with waste forms preventing transfer of pollution from one source to the other and maximizing resource utilization.

8.4 Policy statements related to Institutional mechanisms, Coordination and Communication

8.4.1 National, Provincial and Local Authority levels

- a) Existing national level coordinating mechanisms of all the international treaties signed by Sri Lanka related to waste and chemicals shall be strengthened and expanded to disseminate updated knowledge and information on waste management to Provincial Councils and Local Authorities.
- b) Two national level coordinating mechanisms/committees shall be established for municipal waste that; (1) meets quarterly and/or every six month co-chaired by the Secretary of Ministry of Environment and the Secretary of the Ministry of Provincial Council and Local Government (2) meets monthly chaired by the Secretary of the Ministry of Provincial Councils and Local Government with 9 provincial councils and other relevant stakeholders. The later shall facilitate and guide Provincial Councils and Local Authorities in municipal waste management in accordance with their action plans and the former shall evaluate overall performance as against the set targets in line with the national policy.
- c) A robust institutional mechanism shall be developed to build consensus and agreement through collaborative decision making to secure conflict free waste treatment and disposal sites.
- d) A Mechanism shall be developed to build consensus on an effective and efficient resource mobilization strategy to ensure sustainable waste management in the entire country reflecting the highest accountability in delivering the expected service at all levels with transparent reporting and feedback systems.
- e) Mechanisms shall be developed to facilitate Provincial Councils and Local Authorities to comply with the waste management regulations island wide with transparent reporting and feedback systems.
- f) Local Authorities shall establish waste management units that are responsible and accountable in waste management with direct daily communicating facilities and feedback systems with the communities.

8.4.2 Public and Private sector

- a) Mechanisms shall be developed to build capacity of the informal sector on proper handling, storage and other waste management activities linking them to the main stream of integrated waste management.

- b) Mechanisms shall be developed by the respective lead institutions and agencies to collaborate with public and private sector securing vertical and horizontal level integration throughout the country with highest degree of responsibility and accountability in waste management.
- c) Mechanisms shall be established to promote, improve and strengthen intelligent responses of citizens/communities in waste management considering **‘the Happy Family’** as the focus in their day-to-day life wherever they are, in collaborating with each other.

8.4.3 Community and other Non-governmental organizations

- a) Information and communication systems shall be developed by respective lead institutions and agencies to facilitate easy access to information with feedback for the general public.
- b) Mechanisms shall be developed by the respective lead institutions and agencies to secure highest corporation and collaboration with the community and non-governmental organizations securing accountability and transparency of the services and responses.

8.4.4 Building partnerships

- a) Mechanisms shall be developed to promote, build and strengthen sustainable partnerships with all concerned to maximize their involvement in effective waste management at all levels by identifying clear responsibilities securing accountability and transparency in service delivery.
- b) Mechanisms shall be developed to recognize and publish best practices and lessons learned from successful partnerships.

8.4.5 Clean up and Waste management at Disaster Situations

- a) Disaster prevention plans shall be made available by all the institutions at appropriate levels based on the risk levels and its effectiveness shall be verified and record regularly to minimize disasters.
- b) User-friendly guidelines/ Standard Operational Practices (SOPs) shall be developed by CEA in collaboration with the Ministry of Disaster Management and other relevant stakeholders to manage waste arising from accidents and natural disasters to minimize further risks and vulnerabilities and to speed up cleaning activities with minimum disturbances to the community around.
- c) Special precautions shall be taken in managing hazardous wastes and sanitary related waste during disaster situations minimizing health and environmental problems.

8.5 Policy statements related to Monitoring, Evaluation, Feedback and Reporting

8.5.1 Waste management processes/systems performance

- a) Sustainable systematic data collection and waste tracking systems shall be developed using GPS and other digital systems by relevant authorities as appropriate to ensure efficient and effective waste management and prevent illegal practices throughout the country.
- b) Sustainable user friendly reporting systems shall be established by the leading waste management institutions and agencies with access to feedback mechanisms to ensure periodical performance based monitoring linking with the entire life cycle of material/products flow.
- c) Performance of waste management shall be recorded and published annually for municipal waste management, e-waste management, healthcare waste management, hazardous waste management, and construction and demolition waste management by relevant leading institutions and authorities.

- d) Provincial Level and Local Authority level performance based monitoring systems shall be linked into the National level monitoring system to evaluate overall performance of waste management in the country.

8.5.2 Performance of Waste management institutions and other Service providers

- a) All the waste management institutions and service providers shall develop and maintain comprehensive service standards as part of the management system to ensure efficiency and effectiveness of both upward and downward accountability of the service.
- b) The Service standards shall be published for information of the general public annually.
- c) User-friendly feedback mechanisms shall be developed by waste management institutions and service providers to obtain feedback on the performance from the general public and any other related institutions.
- d) Performance of waste management shall be monitored, recorded and publish annually as in the case of annual financial audit reports.

8.5.3 Performance of Enforcement Authorities

- a) Standards and performance indicators shall be developed by enforcement agencies as part of the management system to ensure sufficiency, efficiency and effectiveness of both upward and downward accountability of the service.
- b) Mechanisms shall be developed to obtain feedback on the performance from the general public and any other institutions to ensure upward and downward accountability of the service.
- c) Status of the quality of environment and cleanliness of the country shall be observed, recorded and reported periodically to encourage citizens, waste management institutions, service providers and all other institutions to move beyond compliance.

8.5.4 Contribution and satisfaction of Citizens, Civil societies, Community organizations and Community representatives

- a) Community groups shall be motivated and promoted to actively involved in waste management activities at house hold level considering the 'Happy Family' as the center of focus.
- b) Innovation, creative thinking and exchange of views of the community groups shall be promoted among themselves on the positive outcomes of community contributions in waste management and negative implications of not taking timely action.
- c) Actions shall be taken to promote citizen consultations and develop Citizens' reports annually on the performance of waste management in the country with positive outcomes and impacts as well as negative outcomes and impacts with chain reactions at national and local levels.

8.5.5 Cleanliness of the entire country and esthetic appearance

- a) Lead agencies shall be made mandatory to report and publish information on the cleanliness and esthetic appearance minimizing visual pollution of the entire country at local, district, provincial and national levels.
- b) Citizens' contribution in waste management shall be recognized based on the cleanliness at local levels in the entire country by motivating them to enhance and sustain positive outcomes.

8.6 Policy statements related to Legal and Enforcement mechanisms

- 8.6.1 All the citizens and institutions shall be made legally responsible to engage in waste management activities as generators based on the degree of their involvement.
- 8.6.2 Effective law enforcement shall be ensured as means of enhancing the upstream and downstream accountability of citizens, institutions, waste managers and service providers throughout the life cycle of products, production processes and related services.
- 8.6.3 The Ministry of Environment shall carry out a comprehensive revision of the relevance, sufficiency, efficiency and effectiveness of the existing laws and regulations to support implementation of the national policy to achieve required transformation deviating from 'linear waste management approaches' (means make, use, dispose) and moving forward to 'circular systems' (means keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of its service life which is referred as 'circular economy').
- 8.6.4 A comprehensive legal system shall be developed by updating and upgrading the provisions available in the existing legal systems at all levels taking into consideration of the present situation and future trends.
- 8.6.5 Every attempt shall be made to improve, strengthen and reformulate the existing regulations and bylaws in short and medium term while taking steps to revise the Acts and Ordinances as appropriate as long term solutions.
- 8.6.6 Existing enforcement mechanisms shall be further strengthened and extended to cover the entire island by strengthening the Environmental Police network with annual performance monitoring, recording and reporting systems at Local Authority, Provincial and National levels.
- 8.6.7 Robust conflict resolution mechanisms shall be developed to address (1) Local level waste related disputes and (2) International level trans-boundary movements of waste related disputes within the country to ensure environmental safety.

8.7 Policy statements related to Financial mechanisms and Non-financial incentives

- 8.7.1 Appropriate market mechanisms and tools shall be developed to improve the cost effectiveness of waste management with suitable private public partnerships.
- 8.7.2 Principles of Polluter pays and extended producer responsibility shall be applied to generate revenue and ensure efficient and effective management of products as appropriate.
- 8.7.3 The revenue generated from polluter pays principle and extended producer responsibility shall be used to improve the system efficiencies in entire waste management cycle.
- 8.7.4 Mechanisms shall be developed to provide tax concessions as appropriate for machinery and Technology importation in environmental friendly sustainable waste management.
- 8.7.5 Appropriate financial mechanisms shall be developed to encourage waste management local industries based on their commitment and accountability in environmental friendly sustainable waste management.
- 8.7.6 Low interest Loans and grants shall be introduced for waste minimizing technology development and usage.
- 8.7.7 Sustainable Financial Mechanisms for waste management shall be developed by the relevant stakeholder ministries and other institutions in consultation with the Ministry of Finance.
- 8.7.8 An integrated financial mechanism shall be developed by the Ministry of Finance to facilitate effective waste management at all levels by securing ownership and accountability in service delivery.
- 8.7.9 Environmental compliance shall be made conditional for the government incentive regimes.
- 8.7.10 Financial incentives shall be extended based on the best practices and system improvements in waste management.

8.8 Policy statements related to Compliance with International treaties/Conventions

- 8.8.1 Commitments to the international treaties and conventions ratified by Sri Lanka shall be honored with targets to moving beyond compliance in collaboration with the international community.
- 8.8.2 Existing legal mechanisms shall be further strengthened where necessary to ensure compliance.
- 8.8.3 Information dissemination systems shall be developed by the relevant authorities to make the general public and other institutions aware on the local commitments to the international treaties ratified by Sri Lanka and the role of citizen's in compliance.
- 8.8.4 Information dissemination systems shall be developed to make the international communities aware on the Sri Lankan best practices, achievements and lessons learned.

8.9 Policy statements related to The way forward

- 8.9.1 Strategies shall be developed to facilitate effective and efficient implementation of the policies developed covering all the waste sectors and streams with action plans aiming at specific targets set for short, medium and long term action.
- 8.9.2 Sustainable coordination, communication and reporting systems shall be established for municipal waste management as a priority action with robust mechanisms for verification of the system performances periodically with annual performance reporting to general public within 3 months.
- 8.9.3 Performance Reporting formats shall be developed by all the leading institutions in collaboration with the Ministry of Environment within 3 months.
- 8.9.4 A strategy and a short term action plan for municipal waste management shall be developed with specific time targets to address the present problems that require immediate action.
- 8.9.5 Time bound action plans shall be developed by the relevant institutions for the implementation of the national policy with key performance indicators not later than one year after the approval of this policy.
- 8.9.6 Provincial Councils shall identify and legally designate suitable lands in collaboration with Local Authorities for treatment and disposal of municipal waste within one year.
- 8.9.7 The Form and the Structure of the focused and dedicated Skills development, Training, Research and Development Center shall be developed in a cost effective manner within 6 months after approval of this policy with special focus on guiding the waste managers on infrastructure development in an environmentally sound manner using appropriate technology.

Annex 1: Stakeholder responsibilities and relationships to waste management

Annex 2: List of Abbreviations

Annex 3: Definitions

National Waste Management Policy

Stakeholder responsibilities and relationships to waste management

Preamble

Adherence to the principle of common but differentiated responsibility is critically emphasized in the policy document to secure highest degree of collaboration and accountability for sustainable waste management of the entire country through much needed social transformation.

Annex 1 provides information related to the stakeholders who have been assigned to take responsibilities and be accountable to those responsibilities in implementation of this national policy. All other institutions (public, private, non-governmental and any other) and the community at large have its individual and collective responsibilities in realization to the objectives, goals and the mission of this policy.

A) Stakeholder responsibilities to waste management:

a) Ministry in charge of the subject of Environment

Development of National Policies, and coordination and facilitation of its implementation; Coordination, international collaboration and transmission of information in relation to the international conventions signed by the country as the focal point (Basel Convention, Stockholm Convention on POPs, Minamata, Montreal Protocol, UNFCCC and any other emerging international conventions as decided by the government in future) to fulfill the obligations of the country. Development of time bound results oriented master plans with key performance indicators. Overall performance monitoring, evaluation and publication of performance periodically including environmental quality in collaboration with the other lead institutions.

b) Central Environmental Authority (CEA):

Overall enforcement of law at national level covering solid liquid and gaseous waste.

Other specific commitments

- Hazardous waste management (Regulations: covering clinical, e-waste, industrial chemicals and other industrial waste)
- Fulfil the obligations as the National Competent Authority in relation to Basel Convention, Rotterdam Convention on PIC, SICAM and any other relevant international conventions as decided by the government in future.

c) Marine Environment Protection Authority

Development of sectoral/sub sectoral policies in line with the national policy, strategies and action plans, Facilitation of implementation, data collection, performance monitoring and evaluation, reporting and transmission of information including progress with feedback mechanisms.

- Implementation of the MAPOL Convention.

d) Coast Conservation Department

Development of strategies and action plans in line with the national policy for Management/Monitoring/co-ordination covering liquid solid and gaseous waste within the purview of Coast Conservation Department, with special emphasis on waste prevention and management at source (Eg. Hotels, visitors to the beach including other commercial activities etc). Performance monitoring, evaluation and reporting, transmission of information on the performance.

e) Ministry in charge of the subject of Provincial Council and Local Government

Development of sectoral/sub sectoral policies in line with the national policy, Facilitation of implementation of the national policies at national, provincial and local authority level, , Development of strategies for human, financial and technical resource mobilization covering all provincial councils and local authorities avoiding duplication, Conducting research on human resource and financial resource management and good governance practices in waste management periodically on MSW waste management, Development of time bound master plans for MSW management, Performance monitoring, evaluation and reporting, transmission of information on the performance of municipal waste management with feedback mechanisms.

f) Provincial Councils

Develop strategies and action plans to facilitate implementation of the national policy covering solid, liquid and gaseous waste as appropriate with the provincial line ministries; Performance monitoring, recoding evaluation and annual reporting with feedback mechanisms; Develop strategies and action plans to provide essential resources to local authorities for implementation of the national policy such as required Cadre, Vehicles, Machinery & Equipment etc and build the capacity of relevant staff periodically including administrative, managerial and skills development based on the capacity of local authorities; Provide infrastructure facilities such as lands for waste storage, treatment and disposal; Public education and awareness creation in continuous basis; Performance monitoring and evaluation of the local authorities and reporting performance annually for the information of the general public; Introduction of performance appraisal schemes to recognize and disseminate best practices. Designate cleanest areas in the province to recognize the cleanest areas and its sustainability; Ensure sufficient budgetary provisions annually for the local authorities linking with strict monitoring and evaluation of the performance of accountability in delivering the services.

g) Local Authorities

Development of strategies and action plans for management of Municipal waste including night soil in line with the national policy and facilitate implementation of other waste management activities at local level to fulfil the objectives of the national policy in collaboration with respective institutions at local, provincial and national level; Provide infrastructure facilities for storage, treatment and disposal of waste; Maintain cleanliness of the area in collaboration with the general public; Ensure no waste is haphazardly disposed causing environmental and health problems and public nuisance; Introduce incentive schemes in order to maximization of citizen's participation and minimization of waste generation in their respective areas Monitor and evaluate performance and report progress periodically to the national authorities and to the general public with access to feedback.

h) Western Province Waste Management Authority

Waste management in the Western Province in accordance with the WPWM Act and the constitution of Sri Lanka.

i) North Western Province Environmental Authority

Enforcement of Law in the North Western Province in accordance with the Constitution of Sri Lanka

j) Ministry in charge of the subject of Health

Development of sectoral/sub sectoral policies in line with the national policy, strategies and action plans, Facilitation of implementation; Facilitation of implementation at national, provincial and local authority levels; Human resource development and capacity building, development of guidelines and periodical update, periodical data collection, performance monitoring and evaluation, reporting and transmission of information including progress with access to feedback..

k) Ministry in charge of the subject of Indigenous Medicine

Development of sectoral/sub sectoral policies in line with the national policy, strategies and action plans, Facilitation of implementation; Facilitate development of appropriate waste treatment technologies; Performance monitoring and evaluation, reporting and transmission of information including progress with feedback mechanisms.

l) Ministry in charge of the subjects of industrial development and commerce

Development of sectoral/sub sectoral policies in line with the national policy, strategies and action plans; Facilitation of implementation; promote waste exchange programs; promote clustering of industrial units to use common treatment facilities; capacity building; technology development and transfer; research and development; waste related data collection performance evaluation and reporting with access to feedback, Recognition of best practices and publication; Rewarding for best practices.

m) Board of Investment

Facilitate implementation of the national policies on waste management; Infrastructure development; promote waste exchange programs; integrate waste management as a basic prerequisite in project planning and development; clustering of industrial units and support development of common treatment plants; capacity building; technology development and transfer; research and development; waste related data collection; performance monitoring and evaluation; reporting performance with feedback mechanisms, Recognition of best practices and publication, Rewarding for best practices.

n) Ministry of Enterprise Development

Implementation of the sectorial policies by Promoting establishment of environmental friendly enterprise development and establishment of enterprises in the waste sector in an economically viable and sustainable manner.

o) Industrial Development Board

Implementation of the Sectoral policy on waste management in line with the national policy and facilitate integration of good environmental practices including waste management to all existing and upcoming projects, and development of infrastructure facilities, waste exchange programs, capacity, technology, research development for industries, data collection, improving monitoring and evaluation for sustainable industrial growth.

p) Ministry of Power & Energy

Development of relevant sectoral policies on waste management related to power and energy sector and ensure its implementation. Development of required infrastructure for waste management, capacity development of the staff, data collection, overall monitoring, and evaluation and reporting periodically.

q) Ceylon Electricity Board

Implementation of the relevant sectoral policies on waste management and development and maintenance of required infrastructure for waste management, capacity development of the staff, data collection, monitoring, and evaluation and reporting periodically.

r) Ministry in charge of the subjects of Transport and Aviation

Development of sectoral/sub sectoral policies in line with the national policy, strategies and action plans, Facilitation of implementation; periodical data collection; research and development; performance monitoring, evaluation and reporting with access to feedback; transmission of information including progress with feedback mechanisms,.

s) Department of Motor traffic

Implementation of the vehicle emission testing program; technology development; research and development; performance monitoring, evaluation and reporting with access to feedback; transmission of information including progress with feedback mechanisms,.

t) Airport and Aviation

Development of sub sectoral policies, strategies and action plans in line with the national policy and implementation to manage waste in airports and aviation; data collection; performance monitoring and evaluation; reporting and transmission of information including progress with feedback mechanisms; research and development.

u) Ministry of Finance

Development of sustainable financial mechanisms; financial resource mobilization for National, Provincial and Local Authority levels minimizing duplication; Development of appropriate market based instruments (MBIs) for revenue generation linking to polluter pays principle and supporting implementation of sustainable waste management in the country; Make environmental considerations conditional in funding for waste management programs.

v) Ministry of Agriculture

Development of sectoral/sub sectoral policies in line with the national policy; strategies and action plans; Facilitation of implementation; data collection; performance monitoring and evaluation, reporting and transmission of information including progress with feedback mechanisms.

w) Department of Agriculture

Facilitation of implementation of the national and sectoral/sub sectoral policies; technology development and transfer; data collection; performance monitoring and evaluation; reporting and transmission of information including progress with feedback mechanisms; research and development.

x) Pesticide Registration Office

Development of sectoral/sub sectoral policies in line with the national policy, strategies and action plans, Facilitation of implementation, data collection, performance monitoring and evaluation, reporting and transmission of information including progress with feedback mechanisms.

- Implementation of the Rotterdam Convention on PIC.

y) Fertilizer Secretariat

Regulate use of toxic fertilizers to minimize/ hazardous waste (Toxic waste comes mixed with fertilizers)

z) Ministry in charge of the Urban Planning and Development

(Ministry of Megapolis & Western Development : Implementation of Mega Projects (for western province & under UDA for other areas).

Provision of infrastructure facilities in urban planning, Facilitation of implementation of the national policies on waste management, periodical evaluation of the challenges related to haphazard waste disposal practices and take necessary action to prevent such incidences in collaboration with relevant stakeholders with feedback mechanisms, Publication of cleanliness and esthetic appearances.

aa) Urban development Authority

Provision of infrastructure facilities in urban planning; Facilitation of implementation; data collection; performance monitoring and evaluation; reporting and transmission of information including progress with feedback mechanisms; Publication of cleanliness and esthetic appearances.

ab) National water Supply and Drainage Board

Development of infrastructure facilities for sewage treatment. Performance monitoring, evaluation with feedback mechanisms.

ac) Atomic Energy Authority/ Atomic Energy Board

Provide Guidance in establishing Atomic waste treatment facilities, performance monitoring and reporting, Provide guidelines with early warning systems.

ad) Environmental Police

Facilitate implementation of the waste management laws, regulations and prevent illegal waste disposal; performance monitoring and evaluation; reporting and transmission of information including progress with access to feedback mechanisms

ae) NGOs and Community based organizations Citizen groups and public at large

Implementation of the national policy at appropriate levels; independent monitoring, evaluation, reporting and feedback;. Support compliance; Prevent noncompliance as well as act mediators to prevent conflicts and disturbances as appropriate.

af) Private Sector

Intergrade provisions for successful implementation of the national policy on waste management at all levels; Promote technology development and transfer; Monitor and evaluate performance of private sector input for implementation of the national policy moving beyond compliance; Publish best practices.

ag) Ministry of Mass Media

Continuous general awareness creation for knowledge and information dissemination on waste sector island wide to support required social transformation.

ah) Department of Customs

Development and implementation of strategies for the control of trans-boundary movements of wastes and prevention of wastes entering into the country under the pretext of products and resources and other related illegal traffic.

ai) Department of Import and Export Control

Development and implementation of strategies and specific regulations for the control of trans-boundary movements of wastes and prevention of wastes entering into the country under the pretext of products and resources and other related illegal traffic.

B) Stakeholder relationships linking to waste streams

General and specific policies	Responsibility
Overall environmental aspects	Ministry of Environment/CEA
Policies covering solid, liquid and gaseous waste	
Solid Waste	
Municipal waste	M/PC & LG , PCs, LAs, WPWMA, NWPEA, CEA, M/Health, M/MD&E, UDA, E/ Police
Packaging waste	M/Envt.,CEA, Packaging Institute, CPA, M/Health, SLSI, ITI LAs, PCs, M/Education
Industrial waste	M/Industry, M/DS&IT, M/Enterprise Development, BOI, CEA, M/Envt., IDB, CEB, M/Power & Energy, Dept. of Customs, Department of Import and export control
Construction and Demolition waste	CEA, UDA, CIDA, LAs, Construction Industry Institutions, CECB, M/SD&VT, TVEC, M/Envt.
Healthcare waste	M/Health, Dept. Ayurveda, CEA, WPWMA, LAs, PCs, Medical and other relevant Faculties/ Veterinary Institutions/Clinics, Pharmaceutical Corporation, Other healthcare institutions, M/Envt.
Electrical and Electronic waste (e-waste)	M/Envt., CEA, BOI, M/Industries, M/Telecommunication, Dept.of Customs, Dept of I&EC, M/Education, Universities/ Educational Institutions, LAs, PCs
Radioactive waste	SLAEB, SLAERC, CEA, M/Envt, Dept.of Customs, Depat. Of Import &Export Control
Marine waste	MEPA, CEA, M/P&S, CCD
Food, Agriculture and Livestock waste	M/Agriculture, Dept.of Agriculture, LAs, CAA, M/PC&LG, M/Health, M/Envt.
Liquid waste	
Sewage	NWSDB, LAs, CEA, UDA, CECB, M/Health, M/Envt, M/ST&R, PCs
Industrial waste, chemical waste, Leachate and Service Station effluent	CEA, M/Industries, M/DS&IT, BOI, IDB M/ST&R, M/ Education, M/HE&CA(Laboratories),M/Enterprise Development, Research Institutions, Laboratories, M/ Agriculture, Service stations, M/Envt.
Contamination of runoff with petroleum residues, healthcare waste effluent and other emerging contaminants	M/Agriculture, ROP, CEYPETCO, CEA, M/Health, LAs, M/Envt.
Food handling establishments and Kitchen waste (grey water)	CEA, NWSDB, LAs, UDA, M/Health, PCs, M/Tourism Development, Hotel Industries, M/Envt.
Radioactive waste	SLAEB, SLAERC, CEA, M/Envt.
Liquid Gaseous waste	
Industrial	M/ENVT, CEA, M/Industries, M/DS&IT, IDB, BOI, PCs, LAs, CEB, M/Power & Energy
Vehicular	Dept.of Motor traffic, M/Envt.,CEA,
Incinerators	CEA , M/ Industries, M/Health, LAs, Private Sector and other service providers, M/Envt.
Landfills	CEA, LAs, UDA, PCs, M/Envt, M/PC&LG
Septic tanks/Sewage	NWS&DB, LAs, CEA, Private Sector and other service

treatment plants	providers, CECB, PHIs/MOH, M/Envt.
Open burning	CEA, LAs , PHIs, MOH, M/Envt.
Ship and Marine/Fisheries waste	MEPA , M/Fisheries, Dept.of Fisheries, M/P& S
Small scale hazardous industries.	CEA, M/Envt.
General Policies under other Institutional, Administrative and Management aspects	
Knowledge Management and Capacity building	
Education and Awareness creation	M/Envt, M/PC & LG, M/ Education , M/Higher Education, M/Mass media
Skills development, Training, Research & Development	M/ENVT, M/PC&LG, M/Mass Media, Proposed Training Institute , M/SD&VT, TVEC
Technology development, Usage and Transfer	M/ENVT, M/Finance, M/Industries, M/DS&IT, /ST&R, MEPA, M/Agriculture, M/Fisheries, M/FA, NCPC,CEA
Infrastructure development	M/PC&LG, UDA, M/Megapolis, M/CP&WS, M/ENVT, M/Industries, M/DS&IT, M/Health , M/Finance , , PCs, LAs
Integration with other supporting policies and National Action Plans	M/ENVT, M/Finance M/PC&LG , NPC, M/Health, M/Agriculture, M/Fisheries, M/Tourism,
Institutional mechanisms, coordination and communication	
National, Provincial and Local Authority levels	M/Envt, M/PC&LG , PCs, LAs, , M/FA, Focal points of MEAs, M/Finance M/Mass Media and other leading institutions
Public & Private Sector	M/Envt, M/PC&LG, , M/Health, M/Industries, M/DS&IT, M/Finance , M/Media and other leading institutions
Community and other Non-governmental organizations	M/Envt, M/PC&LG , and other leading institutions
Building partnerships	M/Envt, M/PC&LG , and other leading institutions
Clean up and Waste management at Disaster Situations	M/Envt, M/PC&LG , M/Health, M/DM, CEA, MEPA, District and Divisional Secretariats
Monitoring, Evaluation, Feedback and Reporting	
Waste management processes/systems performance	M/PC&LG, M/Envt, M/Health, M/Industries, M/DS&IT , CEA, PCs, LAs and other leading institutions
Performance of Waste management institutions and other Service providers	M/PC&LG, M/ENVT, M/Health, M/Industries, M/DS&IT , CEA, PCs, LAs and other leading institutions
Performance of Enforcement Authorities	M/Envt, M/PC&LG , CEA, E/Police , PCs, LAs
Contribution and satisfaction	M/Envt, M/PC&LG, M/ Mass Media , PCs, LAs, civil

of Citizens, Civil societies, Community organizations and Community representatives and organizations	Societies and other leading institutions
Cleanliness of the entire country and Esthetic appearance	UDA, LAs, M/Envt, M/PC&LG, CEA, M/Mass media, other leading institutions
Legal and Enforcement mechanisms	M/Envt., CEA, E/Police, M/PC&LG
Financial mechanisms and Non-financial incentives	M/Finance, M/MD&E, M/PC&LG, and other leading institutions
Compliance with International treaties/Conventions	M/Envt. and other Focal Pints to MEAs,
The way forward	M/Envt, M/PCs&LG, other leading institutions

DRAFT

Abbreviations

BOI	Board of Investment
CAA	Consumer Affairs Authority
CCD	Department of Coast Conservation Coastal Resource Management
CEA	Central Environment Authority
CEB	Ceylon Electricity Board
CECB	Central Engineering Consultancy Bureau
CEYPETCO	Ceylon Petroleum Corporation
CIDA	Construction Industry Development Authority
CPA	Consumer Protection Authority
Dept.Customs	Department of Customs
Dept.Import & Export Control	Department of Import and Export Control
E/Police	Environment Police
IDB	Industrial Development Board
IMO	International Maritime Organizations
ITI	Industrial Technology Institute
LAs	Local Authorities
MEPA	Marine Environment Pollution Agency
M/Agriculture	Ministry of Agriculture
M/CP&WS	Ministry of Water Supply and City Planning
M/DS&IT	Ministry of Development Strategies and International Trade
M/DM	Ministry of Disaster Management
M/Education	Ministry of Education
M/F&MM	Ministry of Finance and Mass Media
M/Fisheries	Ministry of Fisheries and Aquatic Resource Development
M/FA	Ministry of Foreign Affairs
M/Health	Ministry of Health, Nutrition and Indigenous Medicine
M/HE&CA	Ministry of Higher Education and Cultural Affairs
M/Industries	Ministry of Industries and Commerce
M/E	Ministry of Mahaweli Development and Environment
M/Meapolis	Ministry of Mega and Western Development
M/P& E	Ministry of Power and Energy
M/PC&LG	Ministry of Provincial Councils and Local Government
M/P&S	Ministry of Prots and Shipping
M/SD&VT	Ministry of Skills Development and Vocational Training
M/ST&R	Ministry of Science Technology and Research
NPC	National Procurement Commission
NSWMS	National Solid Waste Management Support Centre
NWEA	North Western Environmental Authority
NWSDB	National Water Supply and Drainage Board
PCs	Provincial Councils
PHI	Public Health Inspector
ROP	Registrar Of Pesticides
SLAEB	Sri Lanka Atomic Energy Board
SLAERC	Sri Lanka Atomic Energy Regulatory Council
SLSI	Sri Lanka Standards Institute
TVEC	Tertiary and Vocational Education Commission
UDA	Urban Development Authority
WPWMA	Western Province Waste Management Authority

Definitions

Waste is defined in this policy as any material, substance or by product eliminated or discarded or as no longer required at a particular time and a particular place or form and therefore to be used either as a resource or to be treated and disposed of in an environmentally sound manner if it does not have a utility value

Environmentally sound management of waste means taking all practicable steps to ensure that waste is managed in a manner which will protect human health and the environment against the adverse effects which may result from such waste.

Life Cycle Management (LCM) aims to minimize the environmental and socio-economic burdens associated with product or product portfolio throughout its entire life cycle and value chain (a set of interrelated activities a company uses to create a competitive advantage).

Appropriate technology is the technology best fits with the community it serves to meet the need.

The '**Polluter pays**' principle is the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment.

Extended Producer Responsibility (EPR) is an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle.

Holistic integrated waste management means integrated waste management that includes inter-linkages with waste forms.

The happy family means the family happiness with credible satisfaction.

GPS system means “global positioning system”.