

**DENR Administrative Order
No. 2001 - 34
December 20, 2001**

**SUBJECT : Implementing Rules and
Regulations of Republic Act 9003.**

Pursuant to the provisions of Section 59 of Republic Act No. 9003, otherwise known as the “Philippine Ecological Solid Waste Management Act of 2000,” and by virtue of Executive Order No. 192, Series of 1987, the Department of Environment and Natural Resources hereby adopts and promulgates the following rules and regulations

PART I GENERAL PROVISIONS

RULE I. PRELIMINARY PROVISIONS

Section 1. Title

These Rules shall be known and cited as the “Implementing Rules and Regulations of the Philippine Ecological Solid Waste Management Act of 2000.”

Section 2. Purpose

These Rules are promulgated to prescribe the procedures and guidelines for the implementation of the Philippine Solid Waste Management Act of 9003 in order to facilitate compliance therewith and achieve the objectives thereof.

Section 3. Scope

These Rules shall lay down the powers and functions of the Department of Environment and Natural Resources, the Department of Trade and Industry, all other concerned agencies and local government units, the rights and obligations of

stakeholders and the rights and duties of the people with respect to the implementation of the Ecological Solid Waste Management.

Section 4. Construction

These Implementing Rules and Regulations shall be liberally construed to carry out the national policy of adopting a systematic, comprehensive and ecological solid waste management program consistent with the pursuit of sustainable development. The Rules also cover support actions such as research and studies on solid wastes, providing technical standards and guidelines for effective waste management systems.

Section 5. Administrative and Enforcement

These Rules and Regulations shall be administered by the Secretary or his duly authorized representative or through any other department, bureau, office, agency, local government units, state university or college and other instrumentalities of the government for assistance in the form of personnel, facilities and other resources as the need arises in the discharge of its functions.

RULE II. DECLARATION OF STATE POLICY

Section 1. Declaration of Policies

It is the policy of the State to adopt a systematic, comprehensive and ecological solid waste management program which shall:

- a) Ensure the protection of public health and environment;
- b) Utilize environmentally-sound methods that maximize the utilization of valuable resources and encourage resources conservation and recovery;
- c) Set guidelines and targets for solid waste avoidance and volume reduction through source reduction and waste

minimization measures, including composting, recycling, re-use, recovery, green charcoal process, and others, before collection, treatment and disposal in appropriate and environmentally-sound solid waste management facilities in accordance with ecologically sustainable development principles;

- d) Ensure the proper segregation, collection, transport, storage, treatment and disposal of solid waste through the formulation and adoption of the best environmental practices in ecological waste management excluding incineration;
- e) Promote national research and development programs for improved solid waste management and resource conservation techniques, more effective institutional arrangement and indigenous and improved methods of waste reduction, collection, separation and recovery;
- f) Encourage greater private sector participation in solid waste management;
- g) Retain primary enforcement and responsibility of solid waste management with local government units while establishing a cooperative effort among the national government, other local government units, non-government organizations, and the private sector;
- h) Encourage cooperation and self-regulation among waste generators through the application of market-based instruments;
- i) Institutionalize public participation in the development and implementation of national and local integrated, comprehensive and ecological waste management programs; and

- j) Strengthen the integration of ecological solid waste management and resource conservation and recovery topics into the academic curricula of formal and non-formal education in order to promote environmental awareness and action among the citizenry.

RULE III. DEFINITION OF TERMS

Section 1. Definitions

For the purpose of these Implementing Rules and Regulations, the following words and phrases shall have the following meanings:

“Agricultural waste” shall refer to waste generated from planting or harvesting of crops, trimming or pruning of plants and wastes or run-off materials from farms or fields.

“Bulky wastes” shall refer to waste materials which cannot be appropriately placed in separate containers because of either its bulky size, shape or other physical attributes. These include large worn-out or broken household, commercial, and industrial items such as furniture, lamps, bookcases, filing cabinets, and other similar items.

“Bureau” shall refer to the Environmental Management Bureau.

“Buy-back center” shall refer to a recycling center that purchases or otherwise accepts recyclable materials from the public for the purpose of recycling such materials.

“Collection” shall refer to the act of removing solid waste from the source or from a communal storage point.

“Composting” shall refer to the controlled decomposition of organic matter by micro-organisms, mainly bacteria and fungi, into a humus-like product.

“Consumer electronics” shall refer to special wastes that include worn-out, broken, and other discarded items such as radios, stereos, and TV sets.

“Controlled dump” shall refer to a disposal site at which solid waste is deposited in accordance with the minimum prescribed standards of site operation.

“Department” shall refer to the Department of Environment and Natural Resources.

“Disposal” shall refer to the discharge, deposit, dumping, spilling, leaking or placing of any solid waste into or in any land.

“Disposal site” shall refer to a site where solid waste is finally discharged and deposited.

“Ecological solid waste management” shall refer to the systematic administration of activities which provide for segregation at source, segregated transportation, storage, transfer, processing, treatment, and disposal of solid waste and all other waste management activities which do not harm the environment.

“Environmentally acceptable” shall refer to the quality of being re-usable, biodegradable or compostable, recyclable and not toxic or hazardous to the environment.

“Environmentally preferable” shall refer to products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.

“Generation” shall refer to the act or process of producing solid waste.

“Generator” shall refer to a person, natural or juridical, who last uses a material and makes it available for disposal or recycling.

“Hazardous waste” shall refer to solid waste or combination of solid waste which because of its quantity, concentration, or physical, chemical or infectious characteristics may: cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

“Leachate” shall refer to the liquid produced when waste undergo decomposition, and when water percolate through solid waste undergoing decomposition. It is a contaminated liquid that contains dissolved and suspended materials.

“Life cycle assessment” shall refer to the compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle.

“Materials recovery facility” shall include solid waste transfer station or sorting station, drop-off center, a composting facility, and a recycling facility.

“Municipal wastes” shall refer to wastes produced from activities within local government units which include a combination of domestic, commercial, institutional and industrial wastes and street litters.

“Non-environmentally acceptable products or packaging” shall refer to products or packaging that are unsafe in production, use, post-consumer use, or that produce or release harmful products.

“Open burning” shall refer to the thermal destruction of wastes by means of direct exposure to fire. Furthermore, this definition shall apply to traditional small-scale methods of community sanitation “siga”.

“Open dump” shall refer to a disposal area wherein the solid wastes are indiscriminately thrown or disposed of without due planning and consideration for environmental and health standards.

“Opportunity to recycle” shall refer to the act of providing a place for collecting source-separated recyclable material, located either at a disposal site or at another location more convenient to the population being served, and collection at least once a month of source-separated recyclable material from collection service customers and to providing a public education and promotion program that gives notice to each person of the opportunity to recycle and encourage source separation of recyclable material.

“Person(s)” shall refer to any being, natural or juridical, susceptible of rights and obligations, or of being the subject of legal relations.

“Post-consumer material” shall refer only to those materials or products generated by a business or consumer which have served their intended end use, and which have been separated or diverted from solid waste for the purpose of being collected, processed and used as a raw material in the manufacturing of recycled product, excluding materials and by-products generated from, and commonly used within an original manufacturing process, such as mill scrap.

“Receptacles” shall refer to individual containers used for the source separation and the collection of recyclable materials.

“Recovered material” shall refer to material and by-products that have been recovered or diverted from solid waste for the purpose of being collected, processed and used as a raw material in the manufacture of a recycled product.

“Recyclable material” shall refer to any waste material retrieved from the waste stream and free from contamination that can still be converted into suitable beneficial use or for other purposes, including, but not limited to, newspaper, ferrous scrap metal, non-

ferrous scrap metal, used oil, corrugated cardboard, aluminum, glass, office paper, tin cans, plastics and other materials as may be determined by the Commission.

“Recycled material” shall refer to post-consumer material that has been recycled and returned to the economy.

“Recycling” shall refer to the treating of used or waste materials through a process of making them suitable for beneficial use and for other purposes, and includes any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity, and which may be used as raw materials for the production of other goods or services: Provided, that the collection, segregation and re-use of previously used packaging material shall be deemed recycling under the Act.

“Resource conservation” shall refer to the reduction of the amount of solid waste that are generated or the reduction of overall resource consumption, and utilization of recovered resources.

“Resource recovery” shall refer to the collection, extraction or recovery of recyclable materials from the waste stream for the purpose of recycling, generating energy or producing a product suitable for beneficial use: Provided, That, such resource recovery facilities exclude incineration.

“Re-use” shall refer to the process of recovering materials intended for the same or different purpose without the alteration of physical and chemical characteristics.

“Sanitary landfill” shall refer to a waste disposal site designed, constructed, operated and maintained in a manner that exerts engineering control over significant potential environmental impacts arising from the development and operation of the facility.

“Schedule of Compliance” shall refer to an enforceable sequence of actions or operations to be accomplished within a stipulated time frame leading to compliance with a limitation, prohibition, or

standard set forth in the Act or any rule or regulation issued pursuant thereto.

“*Secretary*” shall refer to the Secretary of the Department of Environment and Natural Resources.

“*Segregation*” shall refer to sorting and segregation of different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal.

“*Segregation at source*” shall refer to a solid waste management practice of separating, at the point of origin, different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal.

“*Solid waste*” shall refer to all discarded household, commercial waste, non-hazardous institutional, ports / harbour and industrial waste, street sweepings, construction debris, agriculture waste, and other non-hazardous/non-toxic solid waste. Unless specifically noted otherwise, the term “solid waste” as used in the Act shall not include:

- a) waste identified or listed as hazardous waste of a solid, liquid, contained gaseous or semisolid form which may cause or contribute to an increase in mortality or in serious or incapacitating reversible illness, or acute/chronic effect on the health of persons and other organisms;
- b) infectious waste from hospitals such as equipment, instruments, utensils, and fomites of a disposable nature from patients who are suspected to have or have been diagnosed as having communicable diseases and must therefore be isolated as required by public health agencies, laboratory wastes such as pathological specimens (i.e., all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals),

and disposable fomites that may harbor or transmit pathogenic organisms, and surgical operating room pathologic specimens and disposable fomites attendant thereto, and similar disposable materials from outpatient areas and emergency rooms; and

- c) waste resulting from mining activities, including contaminated soil and debris.

“Solid waste management” shall refer to the discipline associated with the control of generation, storage, collection, transfer and transport, processing, and disposal of solid wastes in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics, and other environmental considerations, and that is also responsive to public attitudes.

“Solid waste management facility” shall refer to any resource recovery system or component thereof; any system, program, or facility for resource conservation; any facility for the collection, source separation, storage, transportation, transfer, processing, treatment, or disposal of solid waste.

“Source reduction” shall refer to the reduction of solid waste before it enters the solid waste stream by methods such as product design, materials substitution, materials re-use and packaging restrictions.

“Source separation” shall refer to the sorting of solid waste into some or all of its component parts at the point of generation.

“Special wastes” shall refer to household hazardous wastes such as paints, thinners, household batteries, lead-acid batteries, spray canisters and the like. These include wastes from residential and commercial sources that comprise of bulky wastes, consumer electronics, white goods, yard wastes that are collected separately, batteries, oil, and tires. These wastes are usually handled separately from other residential and commercial wastes.

“Storage” shall refer to the interim containment of solid waste after generation and prior to collection for ultimate recovery or disposal.

“Transfer stations” shall refer to those facilities utilized to receive solid wastes, temporarily store, separate, convert, or otherwise process the materials in the solid wastes, or to transfer the solid wastes directly from smaller to larger vehicles for transport. This term does not include any of the following:

- a) a facility whose principal function is to receive, store, separate, convert, or otherwise process in accordance with national minimum standards;
- b) a facility, whose principal function is to receive, store, convert, or otherwise process wastes which have already been separated for re-use and are not intended for disposal; and
- c) the operations premises of a duly licensed solid waste handling operator who receives, stores, transfers, or otherwise processes wastes as an activity incidental to the conduct of a refuse collection and disposal business.

“Waste diversion” shall refer to activities which reduce or eliminate the amount of solid wastes from waste disposal facilities.

“White goods” shall refer to large worn-out or broken household, commercial, and industrial appliances such as stoves, refrigerators, dishwaters, and clothes washers and dryers collected separately. White goods are usually dismantled for the recovery of specific materials (e.g., copper, aluminum, etc.).

“Yard waste” shall refer to wood, small or chipped branches, leaves, grass clippings, garden debris, vegetables residue that is recognizable as part of a plant or vegetable and other materials identified by the Commission.

PART II INSTITUTIONAL STRUCTURES AND MECHANISMS

RULE IV. OVERSIGHT ARRANGEMENTS

Section 1. Powers and Functions of the National Solid Waste Management Commission

A National Solid Waste Management Commission, hereinafter referred to as the Commission, and under the Office of the President, is hereby established. The Commission is tasked to oversee the implementation of solid waste management plans and prescribe policies to achieve the objectives of the Act. The Commission shall undertake the following activities:

- a) Prepare the National Solid Waste Management Framework;
- b) Approve local solid waste management plans in accordance with its rules and regulations;
- c) Review and monitor the implementation of local solid waste management plans;
- d) Coordinate the operation of local solid waste management boards in the provincial and city/municipal levels;
- e) To the maximum extent feasible, utilizing existing resources, assist provincial, city and municipal solid waste management boards the preparation, modification, and implementation of waste management plans;
- f) Develop a model provincial, city and municipal solid waste management plan that will establish prototypes of the content and format which provinces, cities and municipalities may use in meeting the requirements of the National Solid Waste Management Framework;

- g) Adopt a program to provide technical and other capability building assistance and support to local government units in the development and implementation of source reduction programs;
- h) Develop and implement a program to assist local government units in the identification of markets for materials that are diverted from disposal facilities through re-use, recycling, and composting and other environment-friendly methods;
- i) Develop a mechanism for the imposition of sanctions for the violation of environmental rules and regulations;
- j) Manage the Solid Waste Management Fund;
- k) Develop and prescribe procedures for the issuance of appropriate permits and clearances;
- l) Review the incentives scheme for effective solid waste management, for purposes of ensuring relevance and efficiency in achieving the objectives of the Act;
- m) Formulate the necessary education promotion and information campaign strategies;
- n) Establish, after notice and hearing of the parties concerned, standards, criteria, guidelines and formula that are fair, equitable and reasonable in establishing tipping charges and rates that the proponent will charge in the operation and management of solid waste management facilities and technologies;
- o) Develop safety nets and alternative livelihood programs for small recyclers and other sectors that will be affected as a result of the construction and/or operation of a solid waste management recycling plant or facility;

- p) Formulate and update a list of non-environmentally acceptable materials in accordance with the provisions of the Act. For this purpose, it shall be necessary that proper consultation be conducted by the Commission with all concerned industries to ensure a list that is based on technological and economic viability;
- q) Encourage private sector initiatives, community participation and investments resource recovery-based livelihood programs for local communities;
- r) Encourage all local government agencies and all local government units to patronize products manufactured using recycled and recyclable materials;
- s) Propose and adopt regulations requiring the source separation and post separation collection, segregated collection, processing, marketing and sale of organic and designated recyclable material generated in each local government unit; and
- t) Study and review the following:
 - 1. Standards, criteria and guidelines for the promulgation and implementation of an integrated national solid waste management framework; and
 - 2. Criteria and guidelines for siting, design, operation and maintenance of solid waste management facilities.

Section 2. Composition and Membership of the Commission

The Commission shall be composed of fourteen (14) members from the government sector and three (3) members from the private sector. The heads of the following agencies, in their *ex-officio* capacity, shall represent the government sector:

- a. Department of Environment and Natural Resources (DENR);
- b. Department of Interior and Local Government (DILG);
- c. Department of Science and Technology (DOST);
- d. Department of Public Works and Highways (DPWH);
- e. Department of Health (DOH);
- f. Department of Trade and Industry (DTI);
- g. Department of Agriculture (DA);
- h. Metro Manila Development Authority (MMDA);
- i. League of Provinces of the Philippines (LPP);
- j. League of Cities of the Philippines (LCP);
- k. League of Municipalities of the Philippines (LMP);
- l. Liga ng Mga Barangay;
- m. Technical Education and Skills Development Authority (TESDA); and
- n. Philippine Information Agency (PIA).

The private sectors are to be represented by the following:

- a. A representative from non-government organizations (NGOs) whose principal purpose is to promote recycling and the protection of air and water quality;
- b. A representative from the recycling industry; and
- c. A representative from the manufacturing or packaging industry.

The Department Secretary and a private sector representative of the Commission shall serve as chairman and vice-chairman, respectively. The Commission may, from time to time, call on any other concerned agencies or sectors as it may deem necessary. The Secretaries/Heads of the member agencies of the Commission shall formulate action plans for their respective agencies to complement the National Solid Waste Management Framework.

Section 3. Selection Process and Tenure of Office for the Private Sector Representatives

Representatives from the NGOs, recycling and manufacturing or packaging industries shall be nominated through a process designed by themselves and shall be appointed by the President for a term of three (3) years.

The appointment of private sector representatives shall be based on the following criteria:

- a. Integrity;
- b. High degree of professionalism; and
- c. Distinguished themselves in the environmental and resource management sector.

In any event that members of the Commission fail to complete his/her term, the successor shall also be appointed by the President but only for the unexpired portion of term.

Section 4. Meetings of the Commission

The Commission shall meet at least once a month. The presence of at least a majority of the members shall constitute a quorum. The chairman, or in his absence the vice-chairman, shall be presiding officer. In the absence of the heads of the agencies mentioned under Section 4 of the Act, they may designate permanent representatives to attend the meetings.

Section 5. Conduct of Business of the Commission

Within six (6) months upon effectivity of the IRR, the Commission shall formulate its governing rules that will define its conduct of business in carrying out the functions stipulated above.

RULE V. SUPPORT INSTITUTIONAL MECHANISMS

Section 1. Role of the National and Regional Ecology Centers

Under the Commission, a National Ecology Center is to be established headed by the Director of the EMB in his ex-officio capacity. Regional Ecology Centers will also be established headed by EMB Regional Directors in their *ex-officio* capacity. The Ecology Centers shall provide technical expertise, information, training and networking services for the implementation of the provisions of the Act. The Center shall specifically perform the following functions:

- a) Facilitate training and education in integrated ecological solid waste management through the following:
 1. formulation of training program for LGUs and private sector on the proper management of solid wastes;
 2. development of training program on the technical operations of solid waste management facilities;
 3. formulation of training program for deputized enforcers and implementers
 4. development of an accreditation and certification system for the conduct and holding of training programs on solid waste management; and
 5. in collaboration with the Department of Education (DeptEd) develop an education program that will promote an effective solid waste management systems.

- b) Establish and manage a comprehensive solid waste management information data base and dissemination system focusing, *inter alia*, on the following areas:

1. in collaboration with DTI, a solid waste generation and management techniques as well as the management, technical and operational approaches to resource recovery;
 2. in collaboration with DTI and processors/recyclers, the list of materials being recycled or brought by them and their respective prices; and
 3. in coordination with DTI information on cleaner production/cleaner technologies that promote efficient solid waste management.
- c) Promote the development of a recycling market through the establishment of a national recycling network that will enhance the opportunity for recycling;
- d) Act as the hub for networking of LGUs, NGOs and industry on voluntary compliance of the pertinent provisions of the Act;
- e) Provide or facilitate expert assistance in pilot modeling of solid waste management facilities including technologies and techniques for effective solid waste management;
- f) Develop, test and disseminate model waste minimization and reduction auditing procedures for evaluation options; and
- g) Act as the clearinghouse for cleaner production/cleaner technologies on solid waste management.

The Ecology Centers shall give primary consideration of making all the information generated, collected, recorded and stored accessible to the general public. Said information shall include data for solid waste management plans, the National Framework, the National Status Report and all other relevant information necessary to ecological solid waste management.

Section 2. Functions of the Secretariat

The Department, through the Environmental Management Bureau, shall provide secretariat support to the Commission. An Executive Director who shall be nominated by the members of the Commission and appointed by the Chairman of the Commission shall head the Secretariat. The general functions of the Secretariat shall be the following:

- a) Prepare all the documents that are to be tabled for deliberation by the Commission;
- b) Record and document all the proceedings of the meetings;
- c) Handle all the administrative requisites of the Commission;
- d) Index and keep all records used and referenced by the Commission;
- e) Serve as the clearinghouse for all projects/programs for implementation by the LGUs and/or the public or private sector;
- f) Evaluate and review proposals submitted for funding support from the Solid Waste Management Fund; and
- g) Perform all other functions as may be deemed necessary by the Commission.

Section 3. Role of the Department

For the furtherance of the objectives of the Act, the Department shall have the following functions:

- a) Chair the Commission created pursuant to the Act;
- b) Prepare an annual National Solid Waste Management Status Report;
- c) Prepare and distribute information, education and communication materials on solid waste management;
- d) Establish methods and other parameters for the measurement of waste reduction, collection and disposal;
- e) Provide technical and other capability building assistance and support to the LGUs in the development and

- implementation of local solid waste management plans and programs;
- f) Recommend policies to eliminate barriers to waste reduction programs;
 - g) Exercise visitorial and enforcement powers to ensure strict compliance with the Act;
 - h) Issue rules and regulations to effectively implement the provisions of the Act; and
 - i) Perform such other powers and functions necessary to achieve the objectives to the Act.

Section 4. Visitorial Powers of the Department

- a) Reports and records requirements

The Department or its duly authorized representative shall have access to, and the right to copy therefrom, all records required to be maintained pursuant to the provisions of the Act.

- b) Right of entry, inspection and investigation

The Secretary or the duly authorized representative shall likewise have the right to enter the premises of any generator, recycler or manufacturer, or other facilities any time to question any employee or investigate any fact, condition or matter which may be necessary to determine any violation of the provisions of the Act. The Department within three (3) months following the effectivity of this Rules and Regulations shall issue the specific protocols that will be observed in involving visitorial powers authorized under the Act.

Section 5. Licenses and Permits Issued by the Department

No persons, entity or company will be allowed to construct or operate any SWM facility until the said person or entity has applied for and obtained valid permits and licenses to operate. The Bureau, in coordination with the relevant agencies and local government units, shall identify the specific permitting and

licensing requirements under its existing regulatory functions for each of the corresponding phases of the SWM. The listing of permitting and licensing requirements shall be published within six (6) months following the effectivity of these Rules and Regulations.

RULE VI. CREATION OF LOCAL SOLID WASTE MANAGEMENT BOARDS

Section 1. Creation of the Provincial Solid Waste Management Boards

Local Solid Waste Management Boards shall be created and established in each of the concerned LGUs. At the provincial level, a Provincial Solid Waste Management (SWM) Board shall be established with the governor as the chair. Correspondingly, for cities and municipalities, City/Municipality Solid Waste Management (SWM) Boards is also created. Within six (6) months upon effectivity of this rules and regulations all LGUs are mandated to already establish their respective Boards. The Department, in collaboration with DILG shall assist the LGUs in facilitating the setting up of the Boards.

Section 2. Functions of the Provincial Solid Waste Management Board

The Provincial SWM Board shall have the following functions and responsibilities:

- a) Develop a provincial solid waste management plan from the submitted solid waste management plans of the respective city and municipal solid waste management boards herein created. It shall review and integrate the submitted plans of all its component cities and municipalities and ensure that the various plans complement each other, and have the requisite components.

The Provincial Solid Waste Management Plan shall be submitted to the Commission for approval

The Provincial Plan shall reflect the general program of action and initiatives of the provincial government in implementing a solid waste management program that would support the various initiatives of its component cities and municipalities.

- b) Provide the necessary logistical and operational support to its component cities and municipalities in consonance with subsection (f) of Section 17 of the Local Government Code.
- c) Recommend measures and safeguards against pollution and for the preservation of the natural ecosystem.
- d) Recommend measures to generate resources, funding and implementation of projects and activities as specified in the duly approved solid waste management plans.
- e) Identify areas within its jurisdiction, which have common solid waste management problems and are appropriate units for planning local solid waste management services in accordance with Section 41 hereof.
- f) Coordinate the efforts of the component cities and municipalities in the implementation of the Provincial Solid Waste Management Plan.
- g) Development of an appropriate incentive scheme as an integral component of the Provincial Solid Waste Management Plan.
- h) Convene joint meetings of the provincial, city and municipal solid waste management boards at least every quarter for purposes of integrating, synchronizing, monitoring and evaluating the development and

implementation of its provincial solid waste management plan.

- i) Represent any of its component city or municipality in coordinating its resource and operational requirements with agencies of the national government.
- j) Oversee the implementation of the Provincial Solid Waste Management Plan.
- k) Review every two (2) years or as the need arises, the Provincial Solid Waste Management Plan for purposes of ensuring its sustainability, viability, effectiveness and relevance in relation to local and international developments in the field of solid waste management.
- l) Allow for the clustering of LGUs for the solution of common solid waste management problems.

Section 3. Membership in the Provincial SWM Board

The Provincial SWM Board is to be chaired by the governor and comprised by the following as members:

- a) All the mayors of its component cities and municipalities;
- b) One (1) representative from the Sangguniang Panlalawigan to be represented by the chairperson of either the Committees on Environment or Health or their equivalent committees, to be nominated by the presiding officer;
- c) The provincial health and/or general services officers, whichever may be recommended by the governor;
- d) The provincial environment and natural resources officer;
- e) The provincial engineer;
- f) Congressional representative(s) from each congressional district within the province;
- g) A representative from the NGO sector whose principal purpose is to promote recycling and the protection of air and water quality;

- h) A representative from the recycling industry;
- i) A representative from the manufacturing or packaging industry; and
- j) A representative of each concerned government agency possessing relevant technical and marketing expertise as may be determined by the Board.

The Provincial SWM Board may, from time to time, call on any other concerned agencies or sectors as it may deem necessary.

Representatives from the NGOs, recycling and manufacturing or packaging industries shall be selected through a process designed by themselves and shall be endorsed by the government agency representatives of the Board.

In the case of the Province of Palawan, the Board is to be chaired by the chairman of the Palawan Council for Sustainable Development, pursuant to Republic Act No. 7611.

In the case of Metro Manila, the Board shall be chaired by the chairperson of the MMDA and its members shall include:

- a) All mayors of its component cities and municipalities;
- b) A representative from the NGO sector whose principal purpose is to promote recycling and the protection of air and water quality
- c) A representative from the recycling industry; and
- d) A representative from the manufacturing or packaging industry.

Section 4. Creation of a City and Municipal Solid Wastes Management Board

The City and Municipal SWM Boards shall have the following duties and responsibilities:

- a) Develop the City or Municipal Solid Waste Management Plan that shall ensure the long-term management of solid waste, as well as integrate the various solid waste management plans and strategies of the barangays in its area of jurisdiction. In the development of the Solid Waste Management Plan, it shall conduct consultations with the various sectors of the community;
- b) Adopt measures to promote and ensure the viability and effective implementation of solid waste management programs in its component barangays;
- c) Monitor the implementation of the City or Municipal Solid Waste Management Plan through its various political subdivisions and in cooperation with the private sector and the NGOs;
- d) Adopt specific revenue-generating measure to promote the viability of its Solid Waste Management Plan;
- e) Convene regular meetings for purposes of planning and coordinating the implementation of the solid waste management plans of the respective component barangays;
- f) Oversee the implementation of the City or Municipal Solid Waste Management Plan;
- g) Review every two (2) years or as the need arises the City or Municipal Solid Waste Management Plan for purposes of ensuring its sustainability, viability, effectiveness and relevance in relation to local and international developments in the field of solid waste management;
- h) Develop the specific mechanics and guidelines for the implementation of the City or Municipal Solid Waste Management Plan;

- i) Recommend to appropriate local government authorities specific measure or proposals for franchise or build-operate-transfer agreements with duly recognized institutions, pursuant to RA 6967, to provide either exclusive or non-exclusive authority for the collection, transfer, storage, processing, recycling or disposal of municipal solid waste. The proposals shall take into consideration appropriate government rules and regulations on contracts, franchises and build-operate-transfer agreements.
- j) Provide the necessary logistical and operational support to its component cities and municipalities in consonance with subsection (f) of Section 17 of the Local Government Code;
- k) Recommend measures and safeguards against pollution and for the preservation of the natural ecosystem; and
- l) Coordinated the efforts of its component barangays in the implementation of the city or municipal Solid Waste Management Plan.

The Bureau shall provide advisory technical assistance in setting up of the local solid waste management boards. The Commission shall provide the policy directions for the Local Solid Waste Management Boards pursuant to Section 8 of these Rules and Regulations.

It shall be the duty of the LSWMBs and municipalities, to assist barangays in their solid waste management, where the barangay cannot financially or adequately manage all waste segregation, sorting, recovery, recycling and composting, conducted at the MRF.

LGUs may assist the barangay either financially, technically or in any other manner deemed necessary in order to achieve the waste diversion goal of section 20 of the Act. Provided that within 45

days of the effectivity of the IRRs, the Liga Ng Mga Barangay shall assess and thereby determine, those barangays requiring assistance from their respective LGUs. The LNB shall subsequently inform the respective LSWMBs of its findings.

Section 5. Membership of the City and Municipal SWM Board

The City and Municipals SWM Board shall be composed of the city or municipal mayor as chair with the following as members:

- a) One (1) representative of the Sangguniang Panlungsod or the Sangguniang Bayan, preferably chairpersons of either the Committees on Environment or Health, who will be designated by the presiding officer;
- b) President of the Association of Barangay Councils in the municipality or city;
- c) Chairperson of the Sangguniang Kabataan Federation;
- d) A representative from NGOs whose principal purpose is to promote recycling and the protection of air and water quality;
- e) A representative from the recycling industry;
- f) A representative from the manufacturing or packaging industry; and
- g) A representative of each concerned government agency possessing relevant technical and marketing expertise as may be determined by the Board.

The City or Municipal Solid Waste Management Board may, from time to time, call on any concerned agencies or sectors as it may deem necessary.

Representatives from the NGOs, recycling and manufacturing or packaging industries shall be selected through a process designed by themselves and shall be endorsed by the government agency representatives of the Board.

Section 6. Creation of a Barangay Solid Waste Management Committee

The Barangay SWM Board shall have the following functions and responsibilities:

- a) Formulate solid waste management program consistent with city municipality plan
- b) Segregation and collection of biodegradable, compostable, reusable wastes
- c) Establish materials recovery facility
- d) Allocate barangay funds; look for sources of funds
- e) Organize core coordinators
- f) Submit monthly report to city or municipality

Section 7. Membership of the Barangay Solid Waste Management Committee

The Barangay SWM Board shall be composed of the barangay captain as chair with the following as members:

- a) One (1) Kagawad
- b) SK chair
- c) Presidents of Home Owners Association
- d) Public/private school principals or representative
- e) One (1) Parents and Teachers Association president or representative
- f) One (1) Religious organization representative
- g) One (1) Bus community representative
- h) One (1) environmental NGO representative
- i) President of Market Vendors Association; One (1) representative from junkshop owners' association

Section 8. Encouraging the Setting up of Multi-purpose Environmental Cooperative or Association in LGUs

Multi-purpose cooperatives and associations shall be encouraged and promoted in every LGU. The DENR and DTI, through their appropriate bureaus, and with the involvement of the National Ecology Center, shall provide technical assistance and advisory guidance to any interested parties duly supported by the LGUs intending to set up the multi purpose environmental cooperatives or associations.

PART III COMPREHENSIVE SOLID WASTE MANAGEMENT SYSTEM

RULE VII. PLANNING AND PROGRAMMING POLICY FOR SOLID WASTE MANAGEMENT

Section 1. The National Solid Waste Management Framework (NSWMF)

The Commission shall consider and adopt appropriate mechanisms that will facilitate the completion of the Framework. The Framework shall be updated every five years and integrated in the Medium Term Development Plan. The framework shall reflect, among others the following elements:

- a) Assessment of SWM situation
 - 1. Analysis and evaluation of the current state, trends projections of solid waste management on the national, provincial and municipal levels;
 - 2. Identification of critical solid waste facilities and local government units which will need closer monitoring and/or regulation;
 - 3. Characteristics and conditions of collection, storage, processing, disposal, operating methods, techniques and practices, location of facilities where such operating

methods, techniques and practices are conducted, taking into account the nature of the waste;

4. The profile of sources, including industrial, commercial, domestic and other sources.

b) Analysis of Options

1. Practical applications of environmentally sound techniques of waste minimization such as, but not limited to, resource conservation, segregation at source, recycling, resource recovery, including waste-to-energy generation, re-use and composting;
2. A technical and economical description of the level of performance that can be attained by various available solid waste management practices which provide for the protection of public health and the environment;
3. Methods of closing or upgrading open dumps for purposes of eliminating potential health hazards;
4. Appropriate solid waste facilities and conservation systems;
5. Recycling programs for the recyclable materials, such as but not limited to glass, paper, plastic and metal.

c) Mandatory Program of Actions

1. Waste diversion goal pursuant to Section 20 of the Act;
2. Schedule for the closure and/or upgrading of open and controlled dumps pursuant to Section 37 of the Act;

d) Public participation and IEC campaign

1. Venues for public participation from all sectors at all phases/stages of the waste management program/project;
2. Information and education campaign strategies.

e) Aspects for standardization and measuring performance

1. A description of levels of performance and appropriate methods and degrees of control that provide, at the

minimum, for protection of public health and welfare through:

- i) Protection of the quality of groundwater and surface waters from leachate and run-off contamination;
 - ii) Disease and epidemic prevention and control;
 - iii) Prevention and control of offensive odor; and
 - iv) Safety and aesthetics.
2. Minimum criteria to be used by the local government units to define ecological solid waste management practices. As much as practicable, such guidelines shall also include minimum information for use in deciding the adequate location, design and construction of facilities associated with solid waste management practices, including the consideration of regional, geographic, demographic and climatic factors; and
 3. The method and procedure for the phase-out and the eventual closure of existing open dumps and/or sanitary landfills located within an aquifer, groundwater reservoir or watershed area.

Section 2. The Local Government Solid Waste Management Plan (LGSWMP) Formulation and Programming

The preparation of the LGSWMP shall consider the planning cycles embodied in the relevant provisions of RA7160 and shall also integrate other mandatory plans pursuant to the relevant provisions of other existing rules and regulations. Under the overall direction of the Commission, the DENR, DILG, NEDA and the various leagues of local governments, shall develop a coordinative mechanism that will ensure that LGUs are significantly guided in the preparation of LGSWMP. The Commission shall promulgate and standardize a process for LGUs to follow in having their respective LGSWMP approved.

Section 3. Components and Elements of Local Government Solid Waste Management Plans

The thrust of the LGSWMP shall be the identification of implementable strategies and activities that encourage the re-use, recycling and composting of wastes generated in their respective jurisdictions with specific schedules and timetables, targets and measurable indicators of achievements. Subject to the guidelines that will be subsequently issued by the Commission, the preparation of the Local Solid Waste Management Plans shall reflect, among others, the components enumerated under Section 17 of the Act which is enumerated below. The Commission, through the Secretariat and the DILG shall develop a coordinative mechanism that will assist the appropriate units/offices of LGUs tasked to develop their respective solid waste management plans.

a) Background Information

1. City or Municipal Profile – The plan shall indicate the following background information on the city or municipality and its component barangays, covering important highlights of the distinct geographic and other conditions:
 - i) Estimated population of each barangay within the city or municipality and population projection for a 10-year period;
 - ii) Illustration or map of the city/municipality, indicating locations of residential, commercial, and industrial centers, and agricultural area, as well as dump sites, landfills and other solid waste facilities. The illustration shall indicate as well, the proposed sites for disposal and other solid waste facilities;
 - iii) Estimated solid waste generation and projection by source, such as residential, market, commercial, industrial, construction/demolition, street waste,

agricultural, agro-industrial, institutional, other wastes;
and

- iv) Inventory of existing waste disposal and other solid waste facilities and capacities; including an inventory of existing equipment used for collection and the number of people involved in solid waste management, in order that the budget required to implement plans and cost estimations, be calculated.

b) Waste Characterization

For the initial source reduction and recycling element of a local waste management plan, the LGU waste characterization component shall identify the constituent materials which comprise the solid waste generated within the jurisdiction of the LGU. The information shall be representative of the solid waste generated and disposed of within that area. The constituent materials shall be identified by volume, percentage in weight or its volumetric equivalent, material type, and source of generation, which includes residential, commercial, industrial governmental, or other sources. Future revisions of waste characterization studies shall identify the constituent materials, which comprise the solid waste, disposed of at permitted disposal facilities. Appendix A sets the general guide in the conduct of waste characterization.

c) Source Reduction

The source reduction component shall include a program and implementation schedule which shows the methods by which the LGU will, in combination with the recycling and composting components, reduce a sufficient amount of solid waste disposed of in accordance with the diversion requirements of Section 20 of the Act.

The source reduction component shall describe the following:

1. strategies in reducing the volume of solid waste generated at source;
2. measures for implementing such strategies and the resources necessary to carry out such activities;
3. other appropriate waste reduction technologies that may also be considered, provided that such technologies conform with the standards set pursuant to this Act;
4. the types of wastes to be reduced pursuant to Section 15 of this Act;
5. the methods that the LGU will use to determine the categories of solid wastes to be diverted from disposal at a disposal facility through re-use, recycling and composting; and
6. new facilities and of expansion of existing facilities which will be needed to implement re-use, recycling and composting.

The LGU source reduction component shall include the evaluation and identification of rate structures and fees for the purpose of reducing the amount of waste generated, and other source reduction strategies, including but not limited to, programs and economic incentives provided under Section 45 of the Act to reduce and use of non-recyclable materials, replace disposable materials and products with reusable materials and products, reduce packaging, and increase the efficiency of the use of paper, cardboard, glass, metal, and other materials. The waste reduction activities of the community shall also take into account, among others, local capability, economic viability, technical requirements, social concerns, disposition of residual waste and environmental impact. Projection of future facilities needed and estimated cost shall be also incorporated in the plan.

d) Recycling

The recycling component shall include a program and implementation schedule which shows the methods by which the LGU shall, in combination with the source reduction and

composting components, reduce a sufficient amount of solid waste disposed of in accordance with the diversion requirements set in Section 20 of the Act and Section 7 Rule VII of these IRR.

The LGU recycling component shall describe the following:

1. The types of materials to be recycled under the programs;
2. The methods for determining the categories of solid wastes to be diverted from disposal at a disposal facility through recycling; and
3. New facilities and expansion of existing facilities needed to implement the recycling component.

The LGU recycling component shall describe methods for developing the markets for recycled materials, including, but not limited to, an evaluation of the feasibility of procurement preferences for the purchase of recycled products. Each LGU may determine and grant a price preference to encourage the purchase of recycled products.

The five-year strategy for collecting, processing, marketing and selling the designated recyclable materials shall take into account persons engaged in the business of recycling or persons otherwise providing recycling services before the effectivity of the Act. Such strategy may be based upon the results of the waste composition analysis performed pursuant to this Section or information obtained in the course of past collection of solid waste by the local government unit, and may include recommendations with respect to increasing the number of materials designated for recycling pursuant to the Act.

The LGU recycling component shall evaluate industrial, commercial, residential, agricultural, governmental, and other curbside, mobile, drop-off, and buy-back recycling programs, manual and automated materials recovery facilities, zoning, building code changes and rate structures which encourage

recycling of materials. The Solid Waste Management Plan shall indicate the specific measures to be undertaken to meet the waste diversion specified under Section 20 of the Act and Section 7 Rule VII of these IRR.

Recommended revisions to the building ordinances, requiring newly-constructed buildings and buildings undergoing specified alterations to contain storage space, devices or mechanisms that facilitate source separation and storage of designated recyclable materials to enable the local government unit to efficiently collect, process, market and sell the designated materials. Such recommendations shall include, but shall not be limited to separate chutes to facilitate source separation in multi-family dwellings, storage areas that conform to fire and safety code regulations, and specialized storage containers.

The Solid Waste Management Plan shall indicate the specific measures to be undertaken to meet the recycling goals pursuant to the objectives of the Act.

e) Composting

The composting component shall include a program and implementation schedule which shows the methods by which the LGU shall, in combination with the source reduction and recycling components, reduce a sufficient amount of solid waste disposed of within its jurisdiction to comply with the diversion requirements of Section 20 of the Act and Section 7 Rule VII of these IRR.

The LGU composting components shall describe the following:

1. The types of materials which will be composted under the programs;
2. The methods for determining the categories of solid wastes to be diverted from disposal at a disposal facility through composting; and

3. New facilities, and expansion of existing facilities needed to implement the composting component.

The LGU composting component shall describe methods for developing the markets for composted materials, including, but not limited to, an evaluation of the feasibility of procurement preferences for purchase of composted products. Each LGU may determine and grant a price preference to encourage the purchase of composted products.

f) Collection and Transfer

The plan shall take into account the geographic subdivisions to define the coverage of the solid waste collection area in every barangay. The barangay shall be responsible for ensuring that a 100% collection efficiency from residential, commercial, industrial and agricultural sources, where necessary within its area of coverage, is achieved. Toward this end, the plan shall define and identify the specific strategies and activities to be undertaken by its component barangays, taking into account the following concerns:

1. Availability and provision of properly designed containers or receptacles in selected collection points for the temporary storage of solid waste while awaiting collection and transfer to processing sites or to final disposal sites;
2. Segregation of different types of solid waste for re-use, recycling and composting;
3. Hauling and transfer of solid waste from source or collection points to processing sites or final disposal sites;
4. Issuance and enforcement of ordinances to effectively implement a collection system in the barangay; and
5. Provision of properly trained officers and workers to handle solid waste disposal.

The plan shall define and specify the methods and systems for the transfer of solid waste from specific collection points to solid waste management facilities.

g) Processing

The plan shall define the methods and the facilities required to process the solid waste, including the use of intermediate treatment facilities for composting, recycling, conversion and other waste processing systems. Other appropriate waste processing technologies may also be considered provided that such technologies conform with internationally acceptable and other standards set in other laws and regulations.

h) Solid Waste Facility Capacity and Final Disposal

The solid waste facility component shall include, but shall not be limited to, a projection of the amount of disposal capacity needed to accommodate the solid waste generated, reduced by the following:

1. Implementation of source reduction, recycling, and composting programs required in this Section or through implementation of other waste diversion activities;
2. Any permitted disposal facility which will be available during the 10-year planning period; and
3. All disposal capacity which has been secured through an agreement with another LGU, or through an agreement with a solid waste enterprise.

The plan shall identify existing and proposed disposal sites and waste management facilities in the city or municipality or in other areas. The plan shall specify the strategies for the efficient disposal of waste through existing disposal facilities and the identification of prospective sites for future use. The selection and development of disposal sites shall be made on the basis of internationally accepted standards and on the guidelines set in Sections 41 and 42 of the Act.

Strategies shall be included to improve said existing sites to reduce adverse impact on health and the environment, and to extend life span and capacity. The plan shall clearly define

projections for future disposal site requirements and the estimated cost for these efforts.

Open dumpsites shall not be allowed as final disposal sites. If an open dumpsite is existing within the city or municipality, the plan shall make provisions for its closure or eventual phase out within the period specified under the framework and pursuant to the provisions under Section 37 of the Act. As an alternative, sanitary landfill sites shall be developed and operated as a final disposal site for solid and, eventually, residual wastes of a municipality or city or a cluster of municipalities and/or cities. Sanitary landfills shall be designed and operated in accordance with the guidelines set under Sections 40 and 41 of the Act.

i) Education and Public Information

The education and public information component shall describe how the LGU will educate and inform its citizens about the source reduction, recycling, and composting programs.

The plan shall make provisions to ensure that information on waste collection services, solid waste management and related health and environmental concerns are widely disseminated among the public. This shall be undertaken through the print and broadcast media and other government agencies in the municipality. The DECS and the Commission on Higher Education shall ensure that waste management shall be incorporated in the curriculum of primary, secondary and college students.

j) Special Wastes

The special waste component shall include existing waste handling and disposal practices for special waste or household hazardous wastes, and the identification of current and

proposed programs to ensure the proper handling, re-use, and long-term disposal of special wastes.

k) Resource Requirement and Funding

The funding component includes identification and description of project costs, revenues, and revenue sources the LGU will use to implement all components of the LGU solid waste management plan.

The plan shall likewise indicate specific projects, activities, equipment and technological requirements for which outside sourcing of funds or materials may be necessary to carry out the specific components of the plan. It shall define the specific uses for its resource requirements and indicate its costs. The plan shall likewise indicate how the province, city or municipality intends to generate the funds for the acquisition of its resource requirements. It shall also indicate if certain resource requirements are being or will be sourced from fees, grants, donations, local funding and other means. This will serve as basis for the determination and assessment of incentives which may be extended to the province, city or municipality as provided for in Section 45 of the Act.

l) Privatization of Solid Waste Management Projects

The plan shall likewise indicate specific measures to promote the participation of the private sector in the management of solid wastes, particularly in the generation and development of the essential technologies for solid waste management. Specific projects or component activities of the plan which may be offered as private sector investment activity shall be identified and promoted as such. Appropriate incentives for private sector involvement in solid waste management shall likewise be established and provided for in the plan, in consonance with Section 45 hereof and other existing laws, policies and regulations; and

m) Incentive Programs

A program providing for incentives, cash or other wise, which shall encourage the participation of concerned sectors shall likewise be included in the plan.

Section 4. Considerations of local government SWM Plans prior to the Act's effectivity

Acknowledging that a number of LGUs have initiated efforts in preparing their respective solid waste management plan, prior to the effectivity of the Act, these efforts shall be recognized as works complying with the pertinent provisions of the Act; provided that, earlier developed plans shall be made consistent with the elements prescribed in Section 3 under Rule VII of this rules and regulations. Said plan upon its validation and adjustments shall be subject to approval by the Commission.

Section 5. Clustering of Common Solid Waste Management Problems

The Department shall publish guidelines for the identification of areas which have common solid waste management problems and are appropriate units for clustered solid waste management services. The guidelines shall be based on the following considerations:

- a) the size and location of areas which should be included;
- b) the volume of solid waste which would be generated;
- c) the available means of coordinating local government planning between and among the LGUs and for the integration of such with the national plan;
- d) possible lifespan of the disposal facilities; and
- e) common waste treatment and disposal facilities

The Commission shall recommend to concerned local government units to consolidate and coordinate efforts, services and resources

for jointly addressing solid waste management issues. Furthermore, technical guidelines, criteria for joint activities and projects, and a set of incentive systems for LGUs opting to consolidate efforts by jointly planning and implementing a comprehensive SWM programs for their respective areas of jurisdictions shall be subsequently specified and regularly updated by the Department.

Mandatory public hearings for the national framework and local government solid waste management plans shall be undertaken by the Commission and the respective Boards. Provided that, the Commission and respective Boards ensure that at least three (3) weeks notice, prior to the hearing is given to the public. Such notice shall include an explanation of the hearing process, location, and any other factor, either the Commission or respective Boards consider relevant.

The Commission shall formulate standard rules and procedures for the conduct of public hearings. However, each hearing shall be of a substantive nature. It shall include more than just a description of the National Framework and local government solid waste management plans, by the Commission and respective Boards.

Every citizen shall be given the right and opportunity to comment on the Framework, and solid waste management plans, preferably in writing.

All records of the proceedings of said hearings shall be filed with the Commission and the respective boards; and that they shall be readily available and accessible to the public. The Commission and respective boards shall formulate their decision whether to adopt, reject or revise the reviewed plans on the basis of materials and information, provided their knowledge and experience, in addition to the materials adduced in public hearings.

Section 7. Establishing Mandatory Solid Waste Diversion

Each LGUSWM plans shall include an implementable schedule which shows that within five (5) years after the effectivity of the Act, the LGU shall divert at least 25% of all solid waste from waste disposal facilities through re-use, recycling and composting activities and other resource recovery activities. The baseline for the 25% shall be derived from the waste characterization results which each LGUs are mandated to undertake. Subsequently the waste diversion goals shall be increased every three (3) years thereafter. Nothing in this IRR however, prohibits a local government unit from implementing re-use, recycling and composting activities designed to exceed the 25% goal.

RULE VIII. IMPLEMENTATION OF THE ECOLOGICAL SOLID WASTE MANAGEMENT SYSTEMS

Section 1. Overall Policy

It shall be the overall policy of the Department to strictly implement the provisions of the Rules and Regulations of the Act. The implementation of the ecological solid waste management shall fundamentally take into account the management of waste in the following hierarchy:

- a) Source reduction and minimization of wastes generated at source;
- b) Resource recovery, recycling and reuse of wastes at the barangay;
- c) Efficient collection, proper transfer and transport of wastes by city/municipality; and
- d) Efficient management of residuals and of final disposal sites and/or any other related technologies for the destruction/reuse of residuals.

Section 2. Implementation of the Ecological Solid Waste Management Systems

The Local Government Code, the LGUs shall be primarily responsible for the implementation and enforcement of the ecological solid waste management systems within their respective jurisdictions.

Waste segregation and collection shall be conducted at the barangay level specifically for biodegradable/compostable and reusable/recyclable wastes. The collection and disposal of non-recyclable/non-recoverable materials and special wastes shall be the responsibility of the city or municipality.

RULE IX. WASTE SEGREGATION AT SOURCE

Section 1. Waste Segregation and Volume Reduction at Source

Volume reduction at the source shall be the first priority of the ecological SWM system. All LGUs shall actively promote among its constituencies the reduction and minimization of wastes generated at source; responsibility for sorting and segregation of biodegradable and non-biodegradable wastes shall be at the household level and all other sources.

Section 2. Minimum Requirements for Segregation and Volume Reduction

The following shall be the minimum requirements for segregation and storage of solid waste pending collection:

- a) There shall be a separate container for each type of waste from all sources. For bulky waste, it will suffice that the same be collected and placed in a separate container and in designated areas;

- b) The solid waste container depending on its use shall be properly marked or identified for on-site collection as “compostable,” “recyclable” or “special waste,” or any other classification as may be determined by the Commission; and
- c) For premises containing six (6) or more residential units, the LGUs shall promulgate ordinances and regulations requiring the owner or person in charge of such premises to:
 - 1. Provide for the residents a designated area and containers in which to accumulate source separated recyclable materials to be collected by the barangay or private collector; and
 - 2. Notify the occupants of such buildings of the requirements of the Act and the regulations promulgated pursuant thereto.
- d) For all commercial, institutional and industrial establishments, the LGUs shall promulgate ordinances requiring the owner or head of the institutions to:
 - 1. Provide a designated area and containers in which to accumulate source separated recyclable materials to be collected by the barangay or private collector;
 - 2. Notify all workers, employees, and entities working in the premises of the requirements of the Act and the regulations promulgated pursuant thereto; and
 - 3. No scavenging or unauthorized collection in designated segregation containers or areas shall be allowed.

RULE X. COLLECTION, TRANSPORT AND HANDLING OF SOLID WASTES

Section 1. Minimum standards for the collection, transport and handling of Solid Wastes

The following shall be the minimum standards and requirements for the collection, transport and handling of solid waste:

- a) All collectors and other personnel directly dealing with collection of solid waste shall be equipped with personal protective equipment and paraphernalia such as, but not limited to gloves, masks and safety boots, to protect them from the hazards of handling solid wastes.
- b) The City or Municipal Health Officer shall provide necessary training to the collectors and personnel to ensure that the solid wastes are handled properly in accordance with the guidelines pursuant to the Act. The Commission through the National Ecology Center, in coordination with the DOH shall develop training guidelines.
- c) Collection of solid waste shall be done in a manner that prevents damage to the container and spillage or scattering of solid waste within the collection vicinity.
- d) The equipment used in the collection and transportation of solid waste (or materials which have been separated for the purpose of recycling) shall be constructed, operated and maintained in such a manner as to minimize health and safety hazards to solid waste management personnel and the public.
- e) Equipment shall be maintained in good condition and kept clean to prevent the propagation or attraction of vectors and the creation of nuisances.

- f) The use of separate collection schedules and/or separate trucks or haulers shall be required for specific types of wastes. Otherwise, vehicles used for the collection and transport of solid wastes shall have the appropriate compartments to facilitate efficient storing of sorted wastes while in transit. The waste compartment shall have a cover to ensure the containment of solid wastes while in transit.
- g) Vehicles shall be designed to consider road size, condition and capacity to ensure the safe and efficient collection and transport of solid wastes.
- h) For the purpose of identification, vehicles shall bear the body number, the name, and telephone number of the contractor/agency collecting solid waste.

Section 2. Minimum Requirements for Establishing and Operating Transfer Stations

Transfer stations shall be designed and operated for efficient waste handling capacity and in compliance with environmental standards and guidelines set pursuant to the Act, these IRRs and other regulations. In addition the design and operation of transfer stations shall conform to the following standards and criteria:

- a) Leachate and Drainage Control – Facilities shall be designed such that waste shall not come into contact with run-off and to prevent the generation of leachate.
- b) Provisions for vector, odor, litter and dust control shall be included.
- c) The siting of the transfer station shall consider the land use plan, proximity of collection area, and accessibility of haul routes to disposal facility. The design shall give primary consideration to size and space sufficiency in order to

accommodate the storage of waste, and vehicles for the loading and unloading of wastes.

- d) The following records shall be kept and maintained, such records shall be submitted to the Department upon request:
 - 1. Record of daily weights or volumes of waste received and transferred accurate to within ten percent (10%) and adequate for overall planning purposes and tracking of waste volumes
 - 2. Daily logbook or file of the following information shall be maintained: fires, special occurrences, unauthorized loads, injury and property damage
- e) Waste shall be removed from the transfer station within twenty-four (24) hours of its receipt.

RULE XI. MATERIALS RECOVERY FACILITIES AND COMPOSTING

Section 1. Operations of a Materials Recovery Facility

Barangays shall be responsible for the collection, segregation, recycling of biodegradable, recyclable, compostable and reusable wastes. MRFs will be established in every barangay or cluster of barangays.

The facility shall be established in a barangay-owned or leased land or any suitable open space to be determined by the barangay through its Sanggunian. For this purpose, the barangay or cluster of barangays shall allocate a certain parcel of land for the MRF. The determination of site and actual establishment of the facility shall likewise be subject.

The MRF shall receive biodegradable wastes for composting and mixed non-biodegradable wastes for final segregation, re-use and

recycling. Provided, that each type of mixed waste is collected from the source and transported to the MRF in separate containers.

The resulting residual wastes shall then be transferred to a long-term storage or disposal facility or sanitary landfill.

Materials recovery facilities shall be designed to receive, sort, process and store compostable and recyclable material efficiently and in an environmentally sound manner. The facility shall address the following considerations:

- a) The building and/or land layout and equipment must be designed to accommodate efficient and safe materials processing, movement and storage;
- b) The building must be designed to allow efficient and safe external access and to accommodate internal flow;
- c) If the MRF includes a composting operation, it shall comply with the provisions of Section 2 and of Rule XI of this IRR applicable to composting and composts;
- d) The following records shall be kept and maintained, such records shall be submitted to the Department upon request:
 - 1) Record of daily weights or volumes of waste received, processed and removed from site accurate to within ten percent (10%) and adequate for overall planning purposes and tracking of success of waste diversion goals; and
 - 2) Daily logbook or file of the following information shall be maintained: fire, special occurrences, unauthorized loads, injury and property damage

Section 2. Guidelines for Compost Quality

Organic fertilizers derived from compost and intended to be distributed commercially shall conform with the standards for organic fertilizers set by the Fertilizer and Pesticide Authority of the Department of Agriculture. Compost products intended for

commercial or non-commercial distribution shall be free from hazardous/toxic constituent above permissible levels, and shall be tested for such constituents using the Toxicity Characteristic Leaching Procedure (TCLP) test method developed by the United States Environmental Protection Agency (USEPA).

Section 3. Inventory of Markets for Composts

Within six (6) months after the effectivity of this Act, the DA shall publish an inventory of existing markets and demands for composts. Said inventory shall thereafter be updated and published annually: Provided that composting of agricultural wastes, and other compostable materials, including but not limited to garden wastes, shall be encouraged.

Section 4. Minimum Requisites for Operating Composting Facilities

Composting facilities shall conform to the following siting, design and operating standards and criteria:

- a) The Facility shall not be sited in areas subject to frequent flooding, unless engineering controls are provided in the design to prevent inundation of the facility.
- b) Leachate and Drainage Control
 1. Facilities shall be designed such that compost piles, windrows, residues and processed material will not come in contact with surface storm run-off.
 2. Where excess leachate storage is provided, discharge of leachate into any body of water is prohibited unless such discharge meets the limits prescribed by the DENR standards for effluents. Where leachate needs to be stored, it shall comply with the provisions of Section 1(k) of Rule XIV of this IRR. Provisions shall be made such that

leachate is re-circulated back into compost piles or windrows as much as possible.

- c) Provisions for vector, odor, litter and dust control shall be included
- d) Records keeping shall be maintained at all times in accordance with Section 2(b) of Rule XIV of this IRR.
- e) Residues shall be managed as solid waste and shall be disposed of as such.
- f) Temperatures of compost piles, curing piles and processed composts shall be maintained in safe levels to prevent spontaneous combustion.
- g) Aerobic conditions shall be maintained to prevent creation of dangerous gases such as methane.

Provided that, individual household backyard composting shall be exempted from the provisions of Section.

All technical reports, technical documents, plans and specifications pertaining to the engineering of the facility and other waste management facilities shall be certified based on EMB requirements.

RULE XII. IMPLEMENTING A RECYCLING PROGRAM

Section 1. Formulating a Recycling Program (Eco-labeling, Reclamation, Buy Back Mechanism)

The DTI shall, in cooperation with the Department, DILG/LGUs, sectors practicing recycling and other concerned agencies, shall undertake a study of existing markets for processing and purchasing recyclable materials, and the potential steps necessary to expand these markets.

When developing the market for recycled goods, an investigation of markets should be made for each recyclable material, as defined in the Act, by the Commission, DTI, DOF and the NEC, and should include at a minimum:

- a) identifying potential purchasers of the recovered material through standard market research techniques;
- b) directly contacting buyers and determining the buyers quality specifications, potential transportation agreements and any minimum quantity criteria.

All information from the investigation of markets, including a list of prospective buyers of recycled products, and a list of procedures, standards and strategies to market recyclable materials and develop local markets, shall be easily accessible by the public, through the solid waste management information database, formulated by the National Ecology Center.

Section 2. Environmentally Preferable Purchasing

The Commission, DTI, DOF, NPS and the NEC, shall encourage national and local governments to purchase environmentally preferable products and services.

All government personnel shall seek to reduce the environmental damages associated with their purchases by increasing their acquisition of environmentally preferable products and services to the extent feasible, consistent with price, performance, availability and safety considerations.

Responsibility for environmentally preferable purchasing shall be shared among the program, acquisition and procurement personnel of government agencies.

The principles of pollution prevention, life cycle perspective/multiple environmental attributes, comparison of environmental impacts – recovery time and geographic scale, differences among competing products’ environmental

performance and human health shall all be considered in environmentally preferable purchasing.

Section 3. Specifications, Product Descriptions and Standards

It shall be the responsibility of the DTI to conduct a study into product standards for recyclable and recycled materials. Such a study shall consider and include, through not be limited to any existing standards on recycled and recyclable products and existing international practices. In the formulation of such a study, DTI shall consult with affected industries and other concerned agencies; provided that, the results of such a study and any subsequent guidelines or standards formulated, shall be easily accessible to the public through the NEC database.

Section 4. Eco-labeling

The Department of Trade and Industry – Bureau of Product Standards (DTI-BPS) shall formulate and implement a coding system for packaging materials and products to facilitate waste recycling and re-use. The coding system shall initially be based on ISO 14020 series standards, particularly, ISO standard 14024, “Environmental Labeling – Practitioner Programs – Guiding Principles, Practices and Certification Procedures of Multiple Criteria (type 1) Programs’, with criteria to be determined on the basis of life cycle assessment of the product group.

The criteria shall be regularly reviewed to ensure their appropriateness and currency in light of scientific and technical progress, and of the experience gained in this area, and to ensure consistency with relevant, internationally recognized standards.

DTI shall clarify the principles for establishing the effectivity level of the eco-label, in order to facilitate consistent and effective implementation of the scheme.

The eco-label shall include simple, accurate, non-deceptive and scientifically based information on the key environmental aspects which are considered in the award of the label in order to enable consumers to make informed choices. Provided DTI shall make relevant information about the attributes of the products available to purchasers, and that information on the process and methodologies used in the eco-labeling process, shall be available to all interested parties.

Section 5. Non-Environmentally Acceptable Products

The Commission should decide which products or packaging are non-environmentally acceptable. Provided, that this criteria is regularly reviewed to ensure its appropriateness and currency, in light of scientific and technical progress, and of the experience gained in this area.

Prohibiting non-environmentally acceptable products, any decision to prohibit certain packaging types and products must be supported by available scientific, environmental, technical and economic information and technical studies through, but not limited to life cycle assessment and economic analysis. Provided that the Commission consults representatives from affected industries and subject to public notice and hearing.

Further, in making such decisions, the Commission shall make every effort to reach agreement by consensus. If all efforts at consensus have been exhausted, and no agreement reached, such decisions shall, as a last resort, be adopted by a two-thirds majority vote of the Commission.

Based on the assessments made, the Commission may decide:

- a) which products should be added to or removed from the list of non-environmentally acceptable products;
- b) the mechanism, scope and timing of the control measures that should apply to those products;

- c) possible alternatives to controlled products as defined in RA 6969;
- d) costs and benefits of relevant control strategies; and
- e) the specific measures to be undertaken to comply with Section 29 of the Act.

The list on non-environmentally acceptable products shall be made available to the public through the solid waste management information database.

Prior to each annual revision and update of the list of non-environmentally acceptable products, the Commission shall seek information from the appropriate experts qualified in the fields mentioned and in any other field deemed necessary to the revision. Notice of the updated list will also be given to the public and affected industries and at least 60 days shall be allocated for comment of the public and affected industries. Any written comments may be submitted to the Commission.

Provided, the list of non-environmentally acceptable products and the schedule for their phase-out, shall be included in the solid waste management information database, formulated by the National Ecology Center.

Section 6. Reclamation Programs and Buy-back Centers

The NEC shall assist LGUs in establishing and implementing deposit or reclamation programs in coordination with manufacturers, recyclers and generators to provide separate collection systems or convenient drop-off locations for recyclable materials and particularly for separated toxic components of the waste stream like dry cell batteries and tires to ensure that they are not incinerated or disposed of in landfill.

In assisting LGUs in the establishment of buyback centers and reclamation programs, the NEC shall conduct a detailed study on feasible reclamation programs and buyback centers. The NEC shall also assist in implementing such programs and centers, by

cooperating with respective LGUs in the formulation of related ordinances.

RULE XIII OPERATIONS OF CONTROLLED DUMPSITES

Section 1. Controlling the Operation of Open Dumpsites

No open dumpsites shall be established and operated by any person or entities, including the LGUs, will be allowed. Within three (3) years following the effectivity of the Act, all open dumpsites shall be converted to controlled dumpsites to operate only within five (5) years and beyond the said period shall consider these facilities as deemed closed and phased out. The Commission through the Department shall issue subsequent guidelines that will classify controlled dumpsites according to the following considerations:

- a) Volume of wastes received;
- b) Types and character of wastes received; and
- c) Cost requirements for operating the facilities.

Section 2. Minimum Requirements for Operation of Controlled Dumpsites

The following minimum requirements shall be applied in siting, designing and operation of controlled dumpsites:

- a) Daily cover consisting of inert materials or soil of at least 6 inches in thickness shall be applied at the end of the working day; where there is a lack of onsite soil material, other alternative materials may be used subject to the prior written approval of the enforcement authority and the Department;
- b) Drainage and runoff control shall be designed and managed such that storm water does not come in contact with waste and that discharge of sediments into the receiving body of water is minimized. Appropriate erosion protection shall be installed at storm discharge outfalls;

- c) Provision for aerobic and anaerobic decomposition shall be instituted to control odor;
- d) Working areas shall be minimized and kept at no more than a ratio of 1.5 square meter (sqm) or less per ton/day (tpd) of waste received on a daily basis, e.g. 30 sqm working area for a 20 tpd facility;
- e) Security fencing shall be provided to prevent illegal entries, trespassing and large animal entries. Large animals shall include but not limited to adult domesticated or feral animals such as dogs, cats, cattle, pigs, carabaos and horses. Provisions for litter control including the use of litter fences and daily picking of litter shall be included;
- f) Basic record keeping including volume of waste received daily, special occurrences such as fires, accidents, spills, unauthorized loads (maintain record of unauthorized and rejected loads, name and address of hauler and generator of such unauthorized waste), and daily waste inspection logs;
- g) Provision of maintained all-weather access roads;
- h) Controlled waste picking and trading, if allowed by owner/operator, in order to facilitate daily covering and compliance to Subsections (a) through (e) above;
- i) Provision of at least 0.60 m final soil cover at closure, and post-closure maintenance of cover, drainage and vegetation; Post-closure maintenance shall be for a period of ten (10) years;
- j) Site shall not be located in flood plains and areas subject to periodic flooding and it shall be hydro-geologically suitable, i.e., adequate separation or clearance between waste and underlying groundwater and any surface body of water shall be provided. Engineering controls shall be provided otherwise.

- k) Open dumpsites that do not comply with siting requirements of this Section shall be closed immediately. A replacement facility shall be, at a minimum, a controlled dump and shall meet the requirements of Rule XIII, and other applicable provisions of the IRR

RULE XIV OPERATIONS OF SANITARY LANDFILLS

Section 1. Minimum Considerations for Siting and Designing Sanitary Landfills

The following guidelines, standards and criteria shall be applied in siting and designing sanitary landfills:

- a) The location of the facility shall be consistent with the overall land use plan of the LGU.
- b) The site shall be accessible from major roadways and thoroughfares, provided that if it is not accessible, the project design shall include means of access.
- c) The site shall have an adequate quantity of earth cover material that is easily handled and compacted; as an alternative, an offsite guaranteed source of cover material shall be identified.
- d) If the site is located within two (2) kilometers of an airport runway, it shall not pose a bird hazard to aircraft. The Owner/Operator shall institute a bird control program so as to prevent hazards to aircraft if bird population becomes significant due to the operation of the landfill. The site shall comply with other requirements for safety of flying aircraft in terms of height of structures, such as provisions for obstruction lights, if required.
- e) Locations of public water supply intakes located within one (1) kilometer from the facility, including active public drinking water supply wells, shall be shown on a facility map.

- f) The facility shall not be constructed within 75 meters from a Holocene fault or known recent active fault.
- g) If significant archaeological and cultural resources are present at the site, such resources shall be protected and preserved.
- h) If the site is a habitat of listed endangered species, mitigation measures for protection of the species as required by applicable laws shall be included in the project proposal.
- i) The site shall be chosen with regard to the sensitivities of the community's residents. The Sangguniang Bayan/Lungsod of the host LGU shall adopt a resolution confirming compliance with the pertinent siting, design criteria and standards. The resolution shall be deemed as having fully satisfied the public sensitivity requirement of this section.
- j) Except as provided by Section (m) of Rule XIV, for landfills located in sensitive resources areas, landfills shall be provided with a base liner system consisting of clay and/or geosynthetic membranes (geomembrane). If clay is used, it shall have a minimum thickness of 0.75m and permeability of 1×10^{-6} cm/sec or less. Geomembranes shall be at least 1.5 mm thick with a permeability of 1×10^{-14} cm/sec or less; Geosynthetic Clay Liners (GCL) shall have a thickness of at least 64 mm and a permeability of 1×10^{-9} cm/sec or less. If composite liner is used (clay under geo-membrane), the thickness of the clay liner may be reduced to 0.60 m. The overlying geomembrane shall have the same properties as stated above. In the design of geosynthetic liners, international standards (e.g. Geosynthetic Research Institute, or applicable ASTM standards) shall be used for its design and specifications in terms of properties, manufacturing and construction quality assurance and testing procedures.
- k) Leachate collection and removal system shall be provided and designed such that leachate buildup in the landfill will be minimized. For design purposes, an allowable leachate level of

not more than 0.60 meter over the liner system shall be maintained. If leachate is discharged to a receiving body of water, the discharge shall meet effluent discharge and water quality criteria prescribed by DENR.

- l) Leachate storage facilities shall be designed with containment systems to prevent leachate from spillage and its migration into underlying groundwater or nearby surface body of water. For leachate impoundment ponds, the design shall include a geomembrane liner system, underlain by a low permeability soil layer of at least 0.30 m thick. The geomembrane liner shall be at least 1.5 mm thick with a permeability of 1×10^{-14} cm/sec or less; Liner specifications, CQA and engineering certification requirements shall be per provisions of Section 1m of Rule XIV. Adequate freeboard including allowance for rainfall volume and other safeguards shall be provided to prevent pond overflowing.

- m) The site shall be located in an area where the landfill's operation will not detrimentally affect environmentally sensitive resources such as aquifers, groundwater reservoir or watershed area, by provision of the following special mitigation measures and additional criteria:
 1. The facility shall be a minimum 50 meters away from any perennial stream, lake or river.
 2. The site shall be evaluated for presence of geologic hazards, faults, unstable soils, its foundation stability, and its hydrogeologic character. The site shall not be located in a floodplain.
 3. It shall be provided with a composite base liner system consisting of a minimum 1.5 millimeter (mm) thick high density polyethylene liner (HDPE) underlain by a soil liner with a minimum thickness to 0.60 meter (m) and maximum permeability of 1×10^{-6} centimeter/second (cm/sec).
 4. A Geosynthetic Clay Liner (GCL) with a minimum thickness of 6.4 mm and permeability of 1×10^{-9} cm/sec or less, may be substituted for the soil liner. Likewise, the

design of the final cap shall be equivalent to its liner system in terms of permeability. The thickness of the final cover system shall be at least 1.5 m including a minimum 0.60 m thick soil foundation layer, its final cap, a drainage layer, and a vegetative layer of at least 0.30 m thick. If the thickness of the equivalent final cap makes the entire cover system less than 1.5 m thick, the deficiency shall be made up by increasing the thickness of the foundation layer.

5. Strict liner and final cap construction quality assurance (CQA) and testing shall be performed by a third party experienced in earthwork, clay and geosynthetic liner installation, quality assurance supervision, testing and inspection. The lead CQA person, as a minimum qualification or experience, must have supervised the installation of at least 100,000 square meters each of clay and geosynthetic liner system; the CQA person or firm shall submit a construction completion report within 60 days of liner or final cap construction completion to the Department, certifying that construction of each liner system was performed and completed in accordance with its plans and specifications. The CQA report shall be certified by a registered Civil or Geotechnical Engineer or other registered Engineer, provided that the certifying Engineer shall have at least designed or supervised the installation of soil and geosynthetic liners of quantities similar to those of the lead CQA person.
- n) The design of the landfill shall be statistically stable and shall be able to withstand the effects of a ground acceleration generated by an earthquake of 100-year or more recurrence interval.
 - o) A separation of at least two (2.0) meters shall be maintained between the top of the liner system and underlying groundwater.
 - p) A temporary impoundment for drainage runoff shall be provided with a detention time sufficient for sediment removal and/or reduction, prior to its discharge.

- q) The site shall be large enough to accommodate the community's waste for a period of five (5) years or more during which people must internalize the value of environmentally sound and sustainable waste disposal.
- r) The site chosen shall facilitate developing a landfill that will satisfy budgetary constraints, including site development, operation for many years, closure and post-closure care and possible remediation costs.
- s) Operating plans shall include provisions for coordinating with recycling and resource recovery projects.
- t) Designation of a separate containment area for household hazardous wastes.
- u) A gas control system shall be provided when the volume of waste in the landfill has reached 0.5 million metric tons. The owner/operator shall consider recovery and conversion of methane gas into usable energy if economically viable. Prior to installation of gas control facilities, perimeter boundary gas monitoring shall be performed in accordance with Section 2(b) of Rule XIV.
- v) Groundwater monitoring wells shall be placed at appropriate locations and depth for taking water samples that are representative of groundwater quality and for predicting groundwater flow.
- w) Cover shall consist of a daily soil cover at least 6 inches in thickness applied at the end of each workday. Alternative Daily Cover (ADC), maybe used provided that the owner/operator can demonstrate to the Department in writing, the equivalency of the proposed ADC in controlling infiltration, vector, odor and litter based on technical research or studies. In areas within the landfill that will not be used for at least 180 days, an additional interim soil cover of 6 inches thick shall be placed over the existing daily cover. The final

cover shall consist of, from bottom to top, the foundation layer (consisting of 0.60m thick soil layer including interim cover), a final cap with an equivalent permeability as that of its liner system. A drainage layer and a vegetative layer. Installation of final cover shall be completed within six (6) months from the last receipt of waste.

- x) Closure of the landfill shall be completed within one year of cessation of landfill operation.
- y) Post-closure care shall be for a period of fifteen (15) years. DENR shall establish post-closure guidelines and requirements for financial assurance mechanisms within one year.
- z) Small facility exemption from specific standards of this Section. The DENR will establish criteria for exemption within one (1) year from approval of the IRR.
- aa) All technical reports, technical documents, plans and specifications pertaining to the engineering of the facility shall be certified and sealed by a licensed Engineer with relevant experience and expertise.

Section 2. Minimum Considerations for Operating Sanitary Landfills

In the operation of sanitary landfills, each site operator shall maintain the following minimum operating requirements:

- a) Disposal site records of, but not limited to:
 - 1. Records of weights or volumes accepted in a form and manner approved by the Department. Such records shall be submitted to the Department upon request, accurate to within ten percent (10%) and adequate for overall planning purposes and forecasting the rate of site filling;

2. Records of excavations which may affect the safe and proper operation of the site or cause damage to adjoining properties;
 3. Daily logbook or file of the following information: fire, landslides, earthquake damage, unusual and sudden settlement, injury and property damage, accidents, explosions, receipt or rejection of non-permitted wastes, flooding and other unusual occurrences;
 4. Record of personnel training; and
 5. Copy of written notification to the Department, local health agency, and fire authority of names, addresses and telephone numbers of the operator or responsible party of the site.
- b) Water quality monitoring of surface and ground waters and effluent, and gas emissions shall be performed in frequencies prescribed by the Department on a project by project basis; Parameters for groundwater, effluent and surface waters shall be as prescribed by the Department in the facility's permit. For landfills sited under Section 1m of Rule XIV of this IRR, groundwater, perimeter gas monitoring and receiving surface water monitoring shall be on a quarterly basis and treated leachate effluent discharge shall be monitored for pH, 5-day Biochemical Oxygen Demand (BOD5) and Total Suspended Solids (TSS) concentrations on a weekly basis or when discharged if discharge is not on a daily basis, and shall not exceed limits prescribed by the Department according to the classification of the receiving body of water. Other parameters to be monitored and their respective frequencies shall be in accordance with the facility's permit. Owners/Operators of Section 1m of Rule XIV facilities shall submit monitoring and inspection reports on a quarterly basis to the designated enforcement authority with a copy furnished to the Department and other relevant agencies. The report shall be certified as to its correctness and accuracy by the owner/operator or his designated (in writing) representative. For other facilities, reporting frequencies shall be specified by the Department but

in no case will it be more frequent than quarterly basis unless the facility is in a state of verification/assessment monitoring.

- c) Groundwater Sampling Protocol – The DENR shall establish requirements and guidelines within one year from approval of this IRR.
- d) Background Groundwater Quality Monitoring Statistical Data Evaluation and Establishment of Concentration Limits for Contaminant Indicators – The DENR shall establish requirements and guidelines within one year from approval of IRR.
- e) Detection Groundwater Monitoring Data Statistical Analysis, Verification Monitoring – The DENR shall establish requirements and guidelines within one year from approval of IRR.
- f) Assessment Monitoring and Corrective Action – The DENR shall establish requirements and guidelines within one year from approval of IRR.
- g) Documentation of approvals, all reports, certification, plans and specifications, as built drawings, determinations and other requirements by the Department and other pertinent and relevant documents shall be kept in the facility's operating record.
- h) Signs:
 - 1. Each point of access from a public road shall be posted with an easily visible sign indicating the facility name and other pertinent information as required by the Department;
 - 2. If the site is open to the public, there shall be an easily visible sign at the primary entrance of the site indicating the name of the site operator, the operator's telephone number and hours of operation; and easily visible sign at an appropriate point shall indicate the schedule of charges and

the general types of materials which will be accepted or not;

3. If the site is open to the public, there shall be an easily visible road sign and/or traffic control measures which direct traffic to the active face and other areas where wastes or recyclable materials will be deposited; and
 4. Additional signs and/or measures may be required at a disposal site by the Department to protect personnel and public health and safety.
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- i) The site shall be designed to discourage unauthorized access by persons and vehicles by using a perimeter barrier or topographic constraints. Areas within the site where open storage or ponding of hazardous materials occurs shall be separately fenced or otherwise secured as determined by the Department. The Department may also require that other areas of the site to be fenced to create an appropriate level of security.
 - j) Roads within the permitted facility boundary shall be designed to minimize the generation of dust and the tracking of materials onto adjacent public roads. Such roads shall be kept in safe condition and maintained such that vehicle access and unloading can be conducted during inclement weather.
 - k) Sanitary facilities consisting of adequate number of toilets and handwashing facilities shall be available to personnel at or in the immediate vicinity of the site.
 - l) Safe and adequate drinking water supply for the site personnel shall be available.
 - m) The site shall have communication facilities available to site personnel to allow quick response to emergencies.
 - n) Where operations are conducted during hours of darkness, the site and/or equipment shall be equipped with adequate lighting

as approved by the Department to ensure safety and to monitor the effectiveness of operations.

- o) Operating and maintenance personnel shall wear and use appropriate safety equipment as required by the Department.
- p) Personnel assigned to operate the site shall be adequately trained in subject pertinent to the site operation and maintenance, hazardous materials recognition and screening and heavy equipment operations, with emphasis on safety, health, environmental controls and emergency procedures. A record of such training shall be placed in the operating record.
- q) The site operator shall provide adequate supervision of a sufficient number of qualified personnel to ensure proper operation of the site in compliance with all applicable laws, regulations, permit conditions and other requirements. The operator shall notify the Department and local health agency in writing of the names, addresses, and telephone number of the operator or responsible party. A copy of the written notification shall be placed in the operating record.
- r) Any disposal site open to the public shall have an attendant present during public operating hours or the site shall be inspected by the operator on a regularly scheduled basis, as determined by the Department.
- s) Unloading of solid wastes shall be confined to a small area as possible to accommodate the number of vehicles using the area without resulting in traffic, personnel, or public safety hazards. Waste materials shall normally be deposited at the toe of the fill, or as otherwise approved by the Department. For practical purposes, a working area shall be limited to 1.5 square meter or less per ton/day (tpd) of waste received on a daily basis, e.g. 30 sqm working area for a 20 tpd facility.
- t) Solid waste shall be spread and compacted in layers with repeated passages of the landfill equipment to minimize voids

within the cell and maximize compaction. The loose layer shall not exceed a depth approximately 0.60 m or two feet before compaction. Spreading and compacting shall be accomplished as rapidly as practicable, unless otherwise approved by the Department.

- u) Covered surfaces of the disposal area shall be graded to promote lateral runoff of precipitation and to prevent ponding. Grades shall be established of sufficient slopes to accost for future settlement of the fill surface. Other effective maintenance methods may be allowed by the Department.
- v) Cover material or native material unsuitable for cover, stockpiled on the site for use or removal, shall be placed so as not to cause problems or interfere with unloading, spreading, compacting, access, safety, drainage or other operations.

PART IV SOLID WASTE MANAGEMENT FINANCING, INCENTIVES AND COST RECOVERY

RULE XV. FINANCING OF SOLID WASTE MANAGEMENT INITIATIVES

Section 1. National Solid Waste Management Fund

There is hereby established a National Solid Waste Management Fund (SWMF), also known as the Fund which shall be a special account in the National Treasury, and administered by the Commission. The fund shall be a catalytic fund which shall initiate bigger and wider SWM engagements in the future. LGUs may avail of the Fund and accordingly, the Commission shall develop the scheme or guidelines for the Fund administration. Reporting on the status of such Fund shall be transparent and shall be annually published by the Commission in collaboration with the Commission on Audit, four (4) months after the end of each fiscal year.

Section 2. Sources and Use of the National SWM Fund

The Fund shall be sourced from the following:

- a) Donations, endowments, grants and contributions from domestic and foreign sources.
- b) Amounts specifically appropriated for the Fund under the annual General Appropriations Act.
- c) Fines collected under Sec. 49 of the Act shall be allocated based on a sharing scheme between the Fund and the LGU concerned which shall be formulated by the Commission.

The Fund shall be used to support endeavors, which enhance the implementation of the Act. These shall include activities on the following:

- a) Products, facilities, technologies and processes to enhance proper solid waste management
- b) Awards
- c) Incentives
- d) Research programs
- e) Information, education, communication and monitoring activities
- f) Technical assistance
- g) Capability building activities

Section 3. Criteria for Availing the National SWM Fund

Subject to the availability of funds, the Fund may be made available to the SWM project/activities of LGUs on the basis of a set of criteria formulated through a consultative process, duly published and copied to all LGUs. Such criteria shall be reviewed and updated as necessary. Henceforth, the criteria for availment of the Fund shall include but not be limited to the list as follows:

- a) The SWM Plan of the proponent LGU from which the project/activity was designed has been duly approved by the Commission.

- b) Funding request for project/activity does not exceed PHP1,500,000; provided however, the Commission Secretariat shall review the funding level every three years. Only one (1) project/activity per LGU shall be eligible for support.
- c) Project/activity types under the following categories shall be considered:
 - 1. SWM projects which shall catalyze investment from the private sector and/or other investors
 - 2. Innovative SWM approaches
 - 3. Prototyping SWM models
- d) The LGU may avail of the SWM Fund once in every three (3) years, but not for the same project/activity
- e) The LGU does not have another outside fund source for SWM tasks.
- f) The LGU is committed to put in counterpart funds, the computation of which shall be provided by the Commission Secretariat per LGU classification.
- g) The process for Fund availment is completed.

Section 4. Process for Availing the National SWM Fund

The Commission through the Secretariat shall prescribe a simple procedure and proforma for fund application. The Commission shall strive for a decentralized system of accepting, appraising and approving of proposals. Furthermore, report proforma as well as procedures for the handling of government fund shall be provided by the Commission. In general, the availment process shall start from the submission of a project/activity concept drawn from the SWM plan. Once the concept proposal is approved, the LGU shall submit a detailed version of the proposal for review and final decision by the Commission. Subject to a more detailed

procedural guideline to be issued by the Commission the general process is described in Appendix B of these IRR.

In no case shall the Fund be used for the creation of positions or payment of salaries and wages.

Section 5. Establishment of Local SWM Fund

Barangay councils may issue council resolutions to establish ordinances for the creation of a Local Solid Waste Management Fund (also known as the Local Fund), pursuant to the relevant provisions of RA 7160. Funds for the Local fund shall be derived from the LGU collection of fines. The ordinance may vest authority in the Local SWM Board of every LGU to administer the Local Fund as a special account of the LGU, and to develop pertinent guidelines on the management of the Local Fund.

In the case of clustered LGUs, a governing Memorandum of Agreement of the cluster may be created in addition to ordinances, stipulating that the Local SWM Cluster Board shall administer the Local Fund. Moreover, stipulating that the Local SWM Cluster Board shall develop schemes to sustain the Local Fund including resource generating ventures and placing appropriate monies as Trust.

The ordinance may stipulate that reporting on the status of the Local Fund be transparent and that a report be issued annually, to the Commission or other relevant authority, by the LGU in collaboration with the Commission on Audit four (4) months after the end of each fiscal year. The Local SWM Cluster Board may conduct the same process of reporting. Further, the ordinance may include, however, shall not be limited to the following provisions:

Section 6. Sources and Use of the Local SWM Fund

Funds that will constitute the Local SWM Fund can be sourced from the following:

- a) Donations, endowments, grants and contributions from domestic and foreign sources.
- b) LGU allocation of fines collected.
- c) Fees collected from provision of solid waste services such as collection, recycling, and transport among others.
- d) Sub-contracting fees including management, transport and others, as stipulated in the contract or Memorandum of Agreement as in the case of private sector's and civil society's engagement of SWM services, respectively.
- e) LGU may allocate fund from the 20% Development Fund for waste management.

The Local Fund may be used to support endeavors, which enhance the implementation of the Act. These may include activities/projects on the following:

- a) Products, facilities, technologies and processes to enhance proper solid waste management
- b) Research activities
- c) Information, education, communication and monitoring activities
- d) Capability building activities

Section 7. Criteria for Accessing the Local Fund

- a) The proposed project/activity be based on the approved SWM Plan(s) of the LGU or the cluster of LGUs.
- b) The level of funding request for a project/activity shall be determined by the Local SWM Board/Local SWM Cluster Board. Only one (1) project per LGU, private sector or civil society group in a locality, respectively, shall be eligible for support.
- c) Project/activity types under the following categories may be considered:
 1. SWM projects which catalyze investment from the private sector and/or other investors

2. Innovative SWM approaches
 3. Prototyping SWM models
- d) A proponent may avail of the Local Fund once in every three (3) years, however, not for the same project/activity. Private sector and civil society groups shall be accredited by the Local SWM Board/Local SWM Cluster Board, and the process shall be defined by the respective boards.
 - e) The process for the availment of funds be completed.

Section 8. Process for Availing the Local Fund

The Local SWM Board/Local SWM Cluster Board shall prescribe a simple procedure and proforma for fund application. An efficient system of accepting, appraising and approving of proposals shall be established by the respective boards. Furthermore, report proforma as well as procedures for the handling of government funds, shall be provided by the boards. In general, the availment process shall start from the submission of a project/activity concept drawn from the SWM plan. Once the concept proposal is approved, the proponent shall submit a detailed version of the proposal for review and final decision by the board. Subject to a detailed guideline which the respective Local SWM Boards will promulgate, the general process is described in Appendix C.

In no case shall the Community Fund be used for the creation of positions or payment of salaries.

RULE XVI INCENTIVES

Section 1. Incentives

Incentives shall be provided for the purpose of encouraging LGUs, enterprises, private sector and civil society to develop or undertake socially acceptable, effective and efficient solid waste management, and/or to actively participate in any program for the

promotion thereof, as provided for in the Act, and these IRRs. The incentives may be fiscal including duties, taxes, interest rates or non-fiscal, including simplified bureaucratic procedures and reduced paper requirements.

- a) Rewards - shall be provided to LGUs, individuals, private organizations and entities, including non-government organizations, that have undertaken outstanding and innovative projects, technologies, processes and techniques or activities in re-use, recycling and reduction. The reward shall be appropriately sourced from the Fund.

A set of standards for innovativeness, proactivity, exemplary and outstanding SWM endeavors shall be formulated by the Commission and localized by the Local SWM Boards. There may be a variety of criteria for granting rewards, including though not limited to, the following categories:

1. For LGUs who initiate policy reform on SWM, principally by including co-management and the decentralization of authority to conceptualize, support and implement SWM development projects.
2. For LGUs using methodologies which substantively reduce the generation of wastes and which thereby exceed the 25% waste diversion goal.
3. For LGUs with comprehensive SWM prototypes which have undergone professional evaluation as matured models on SWM with complete coverage on the sustainable development requisites like the social, economic, cultural, political, technological, institutional and ecological dimensions.
4. For LGUs using alternative indigenous processes, materials, technologies and approaches which have been exhaustively screened for social acceptability, efficiency and effectivity.
5. For LGUs hosting SWM facilities. The Commission shall promulgate within one (1) year following the effectivity of these IRR specific guidelines that will provide specific

incentives, aside from giving grants and other financial assistance packages, to LGUs hosting or offering to host SWM facilities. The principle by which this package of incentive is designed resolves round the recognition of paying for the access granted to the present and future use of resources that are within the localities. The set of incentives may include, among others, targeting subsidies for specific use of resources like water and power; plowing back certain percentage of the profits generated from the facility to support development initiatives of the LGUs or payment of royalties for continued operation of the facilities. The Commission shall task DENR to undertake a study that will look into the specific aspects of these incentives and present to the public within a year the results of the said study.

The rewards may be monetized or non-monetized depending on the valuation of the awarding body, in this case, the Commission and Local SWM Boards. The manner of selection for the awardees shall be transparent and public.

- b) Grants -Under the Fund, the provinces, cities and municipalities with Commission approved SWM Plans, shall be entitled to receive project/activity grants for a range of SWM endeavors.
- c) Fiscal Incentives - A Committee on Fiscal Incentives for SWM Projects and Initiatives (CFI) may be established by the Commission. Committee members may serve a fixed 3-year term. The CFI may be chaired by the DOF and co-chaired by the DTI, and its members constituted by the chairpersons. The organizational protocol of the committee may be formulated by the committee members, but duly approved by the chair of the Commission. This committee may be responsible for providing the technical basis for the fiscal incentives, design proposals, review and for setting the required standards and processes to avail of these fiscal incentives. The procedures for availment of incentives under EO 226 shall be followed.

Existing Environment-Friendly Establishment. The Commission may provide monetary and non-monetary incentives to existing businesses and industries that have been professionally evaluated to engage in socially acceptable, effective and efficient recycling of wastes. The Commission shall formulate the criteria in awarding these incentives such as:

1. Tax and Duty Exemption on Imported Capital Equipment and Vehicles

Within ten (10) years upon effectivity of this Act, LGUs, enterprises or private entities shall enjoy tax and duty-free importation of machinery, equipment, vehicles and spare parts used for collection and processing of solid wastes. Provided, that the importation of such machinery, equipment, vehicle and spare parts shall comply with the following conditions:

- i. They are not manufactured domestically in sufficient quantity, of comparable quality and at reasonable prices;
- ii. They are reasonably needed and will be used actually, directly and exclusively for the above mentioned activities; and
- iii. The approval of the Board of investment (BOI) of the DTI for the importation of such machinery, equipment, vehicle and spare parts.

Provided further that, the sale, transfer or disposition of such machinery, equipment, vehicle and spare parts, without prior approval of the BOI, within five (5) years from the date of acquisition shall be prohibited, otherwise, the LGU concerned, enterprises or private entities and the vendee, transferee or assignee shall be liable to pay twice the amount of tax and duty exemption given it.

2. Tax Credit on Domestic Capital Equipment

Within ten (10) years from the effectivity of the Act, a tax credit equivalent to 50% of the value of the national internal revenue taxes and customs duties that would have been waived on the machinery, equipment, private entities, including NGOs, subject to the same conditions and prohibition.

3. Tax and Duty Exemption of Donations, Legacies and Gift.

All legacies, gifts and donations to LGUs, enterprises or private entities, including NGOs, for the support and maintenance of the program for socially acceptable, effective and efficient solid waste management shall be exempt from all internal revenue taxes and customs duties, and shall be deductible in full from the gross income of the donor for income tax purposes. The standard procedures for such exemptions are contained in the Tariff and Customs Code, Section 105-106.

4. Financial Assistance Program

Government financial institutions such as the Development Bank of the Philippines (DBP), Landbank of the Philippines (LBP), Philippine National Bank (PNB), Government Service Insurance System (GSIS), and such other government institutions providing financial services shall, in accordance with and to the extent allowed by the enabling provisions of their respective charters or applicable laws, accord high priority to extend financial services to individuals, enterprises, or private entities engaged in solid waste management. These services maybe in the form of, but are not limited to the list as below:

- i. Provision of technical assistance to prospective SWM project proponents
- ii. Special interest rates

- iii. Collateral for loans
 - iv. Grace period of loans
- d) Non-Fiscal Incentives - LGUs/Authorities, enterprises or private entities shall also be entitled to applicable non-fiscal incentives formerly provided for under E.O. 226, otherwise known as the Omnibus Investments Code.

1. Enhanced Procedure for Importation

The Commission shall define a simplified and more efficient process for the importation of equipment, spare parts, new materials and supplies; provided the process is in accordance with the existing custom standards.

2. Enhanced Procedure for Exportation

An enhanced procedure to export locally processed products from SWM projects shall be established by the Commission. Similarly, the Commission shall develop export standards for SWM processed products.

3. Enhanced Certification, Permitting and Licensing Processes

The Commission through the Department shall provide support to SWM projects requiring an ECC. It shall thereby hasten the EIA process by formulating a guideline for the specific procedure of EIA for SWM projects. Similarly, the Local SWM Boards/Local SWM Cluster Boards shall establish simplified and efficient procedure for permitting and licensing functions.

4. Knowledge and Skills Exchange

The Commission, Local SWM Boards and Local SWM Cluster Boards shall provide cross study visits in-country and outside the country, in order to model SWM projects. The travel requirements and process shall be established by

the Commission in accordance with existing governmental procedures.

5. Employment of Foreign Nationals

Pursuant to the relevant provisions of EO 226, procedures for an enhanced processing of the employment of foreign nationals shall be hereafter followed.

- e) Private Sector Participation - Essentially, contractual arrangement is envisaged to be entered into by a Local SWM Board/Local SWM Cluster Board. This provides authority for the private sector to finance, construct, operate and maintain a facility and, in the process, to charge user fees or receive compensation. The Commission shall further define the guidelines for the private sector engagement.

The choice of the participation mode may vary from any of the scheme authorized under the BOT Law, RA 6957, as amended by RA 7718 and its implementing Rules and Regulations or joint venture arrangement allowed under the Local Government Code, RA 7160, as well as other private sector funded arrangements.

The following rights may be bestowed on the private sector proponent:

1. To operate the facility over a fixed period, not to exceed 50 years;
2. To charge facility user fees, tolls, rentals or share in the revenue of the project; and
3. To recover capital, operating and maintenance expenses and earn a reasonable return on investment.

RULE XVII. COST RECOVERY MECAHNISMS

Section 1. Power to Collect Solid Waste Management Fees

The Local SWM Board/Local SWM Cluster Board shall impose fees on the SWM services provided for by the LGU and/or any authorized organization or unit. In determining the amounts of the fees, a Local SWM Board/Local SWM Cluster Board shall include only those costs directly related to the adoption and implementation of the SWM Plan and the setting and collection of the local fees. This power to impose fees may be ceded to the private sector and civil society groups which have been duly accredited by the Local SWM Board/Local SWM Cluster Board; provided, the SWM fees shall be covered by a Contract or Memorandum of Agreement between the respective board and the private sector or civil society group.

The fees shall pay for the costs of preparing, adopting and implementing a SWM Plan prepared pursuant to the Act. Further, the fees shall also be used to pay the actual costs incurred in collecting the local fees and for project sustainability.

Section 2. Basis of SWM Service Fees

Reasonable SWM service fees shall be computed based on but not limited to the following minimum factors:

- a) Types of solid waste to include special waste
- b) amount/volume of waste
- c) distance of the transfer station to the waste management facility
- d) capacity or type of LGU constituency
- e) cost of construction
- f) cost of management
- g) type of technology

Section 3. Collection of Fees

Fees may be collected corresponding to the following levels:

- a) **Barangay** - The Barangay may impose fees for collection and segregation of biodegradable, compostable and reusable wastes from households, commerce, other sources of domestic wastes, and for the use of Barangay MRFs. The computation of the fees shall be established by the respective SWM boards. The manner of collection of the fees shall be dependent on the style of administration of respective Barangay Councils. However, all transactions shall follow the Commission on Audit rules on collection of fees.
- b) **Municipality** - The municipal and city councils may impose fees on the barangay MRFs for the collection and transport of non-recyclable and special wastes and for the disposal of these into the sanitary landfill. The level and procedure for exacting fees shall be defined by the Local SWM Board/Local SWM Cluster Board and supported by LGU ordinances, however, payments shall be consistent with the accounting system of government.
- c) **Private Sector/Civil Society Group** - On the basis of the stipulations of contract or Memorandum of Agreement, the private sector or civil society group shall impose fees for collection, transport and tipping in their SLFs. Receipts and invoices shall be issued to the paying public or to the government.

Section 4. Collection and Retention of Fines

The collection of fines under the penal provisions of the Act may be conducted by the Local SWM Board/Local SWM Cluster Board or any other authorized body. The collection shall be receipted. Alternatively, the Local SWM Board/Local SWM Cluster Board and/or any duly authorized body shall retain the 40% portion of the collected fees from fines and remit 60% of the same to the Fund, as

prescribed herein. Thereafter, the retained percentage is deposited under the Local Fund, the procedure for which shall be defined by the Local SWM Board/Local SWM Cluster Board.

Section 5. Special Account

The Local SWM Board/Local SWM Cluster Board shall establish appropriate special accounts for the fines, fees, donations and other monies collected or generated under the Act and this IRR.

PART V. PROHIBITED ACTS, PENALTIES AND SUITS

RULE XVIII PENAL PROVISIONS

Section 1. Prohibited Acts

The following acts are prohibited:

- a) Littering, throwing, dumping of waste matters in public places, such as roads, sidewalks, canals, esteros or parks, and establishment, or causing or permitting the same;
- b) Undertaking activities or operating, collecting or transporting equipment in violation of sanitation operation and other requirements or permits set forth in or established pursuant to the Act;
- c) The open burning of solid waste;
- d) Causing or permitting the collection of non-segregated or unsorted waste;
- e) Squatting in open dumps and landfills;
- f) Open dumping, burying of biodegradable or non-biodegradable materials in flood-prone areas;
- g) Unauthorized removal of recyclable material intended for collection by authorized persons;
- h) The mixing of source-separated recyclable material with other solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal;

- i) Establishment or operation of open dumps as enjoined in the Act, or closure of said dumps in violation of Sec. 37 of the Act;
- j) The manufacture, distribution or use of non-environmentally acceptable packaging materials;
- k) Importation of consumer products packaged in non-environmentally acceptable materials;
- l) Importation of toxic wastes misrepresented as “recyclable” or “with recyclable content”;
- m) Transport and dumping in bulk of collected domestic, industrial, commercial and institutional wastes in areas other than centers of facilities prescribed under the Act;
- n) Site preparation, construction, expansion or operation of waste management facilities without an Environmental Compliance Certificate required pursuant to Presidential Decree No. 1586 and the Act and not conforming with the land use plan of the LGU;
- o) The construction of any establishment within two hundred (200) meters from open dump or controlled dumps or sanitary landfills; and
- p) The construction or operation of landfills or any waste disposal facility on any aquifer, groundwater reservoir or watershed area and/or any portion thereof.

The Commission may also issue further guidelines that consider existing and relevant laws and regulations, and which may further define the scope and coverage of the above prohibited acts.

Section 2. Specific Prohibition Against the Use of Open Dumps for Solid Waste.

No open dumps shall be established and operated, nor any practice or disposal of solid waste by any person, including LGUs, which constitutes the use of open dumps for solid waste, be allowed after the effectivity of the Act; Provided, that within three (3) years after the effectivity of the Act, every LGU shall convert its open dumps into controlled dumps; Provided, further, that no controlled dumps shall be allowed five (5) years following effectivity of the Act. In

order to facilitate the Act’s requirement that LGUs convert their open dumps into controlled dumps, the Commission, shall direct the Department in collaboration with DILG, to formulate a staged-compliance program. The staged compliance program shall consider but not be limited to respective LGU classification and abilities to immediately comply with Section 41 of the Act. It shall also establish its base line from the inventory of all open dumpsites in the country, which must be completed not more than three (3) months following effectivity of these Rules and Regulations.

Section 3. Fines and Penalties

The following schedule of fines and penalties shall be imposed, upon conviction:

SPECIFIC VIOLATIONS (under Section 49 of the Act)	FINES	PENALTIES
Paragraph 1. Littering, throwing, dumping of waste matters in public places, such as roads, sidewalks, canals, esteros or parks, and establishment, or causing or permitting the same	Payment in the amounts not less than Three hundred pesos (P300.000) but not more than One thousand pesos (P1,000.00) <u>or</u>	Rendering of community service for not less than one (1) day to not more than fifteen (15) days to an LGU where such prohibited acts are committed <u>or both</u>
Para 2. Undertaking activities or operating, collecting or transporting equipment in violation of sanitation operation and other requirements or permits set forth in or established pursuant to the Act	Payment in the amounts not less than Three hundred pesos (P300.000) but not more than One thousand pesos (P1,000.00) <u>or</u>	Imprisonment of not less than one (1) day to not more than fifteen (15) days <u>or both</u>
Para 3. The open burning of solid waste		

SPECIFIC VIOLATIONS (under Section 49 of the Act)	FINES	PENALTIES
<p>Para 4. Causing or permitting the collection of non-segregated or unsorted waste</p> <p>Para 5. Squatting in open dumps and landfills</p> <p>Para 6. Open dumping, burying of biodegradable or non-biodegradable materials in flood-prone areas</p> <p>Para 7. Unauthorized removal of recyclable material intended for collection by authorized persons</p>	<p>Payment in the amounts not less than One thousand pesos (P1,000.00) but not more than Three thousand pesos (P3,000.00) <u>or</u></p>	<p>Imprisonment of not less than fifteen (15) days to not more than six (6) months <u>or both</u></p>
<p>Para 8. The mixing of source-separated recyclable material with other solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal</p> <p>Para 9. Establishment or operation of open dumps as enjoined in the Act, or closure of said dumps in violation of Sec. 37 of the Act</p> <p>Para 10. The manufacture, distribution or use of non-environmentally acceptable packaging materials</p> <p>Para 11. Importation of consumer products packaged in non-environmentally acceptable materials</p>	<p>For the first time, shall pay a fine of Five hundred thousand pesos (P500,000.00) plus an amount not less than five percent (5%) but not more than ten percent (10%) of his net annual income during the previous year</p>	<p>The additional penalty of imprisonment of a minimum period of one (1) year, but not to exceed three (3) years at the discretion of the court, shall be imposed for second or subsequent violations of Sec. 48 of the Act, paragraphs (9) and (10)</p>

SPECIFIC VIOLATIONS (under Section 49 of the Act)	FINES	PENALTIES
<p>Para 12. Importation of toxic wastes misrepresented as “recyclable” or “with recyclable content”</p> <p>Para 13. Transport and dumping in bulk of collected domestic, industrial, commercial and institutional wastes in areas other than centers of facilities prescribed under the Act</p>	<p>Payment in the amounts not less than Ten thousand pesos (P10,000.00) but not more than Two hundred thousand pesos (P200,000.00) <u>or</u></p>	<p>Imprisonment of not less than thirty (30) days but not more than three (3) years, <u>or both</u></p>
<p>Para 14. Site preparation, construction, expansion or operation of waste management facilities without an Environmental Compliance Certificate required pursuant to Presidential Decree No. 1586 and the Act and not conforming with the land use plan of the LGU</p> <p>Para 15. The construction of any establishment within two hundred (200) meters from open dump or controlled dumps or sanitary landfills</p> <p>Para 16. The construction or operation of landfills or any waste disposal facility on any aquifer, groundwater reservoir or watershed area and/or any portion thereof.</p>	<p>Payment in the amounts not less than One hundred thousand pesos (P100,000.00) but not more than One million pesos (P1,000,000.00) <u>or</u></p>	<p>Imprisonment of not less than one (1) year but not more than six (6) years, <u>or both</u></p>

If the offense is committed by a corporation, partnership, or other juridical entity duly organized in accordance with law, the chief executive officer, president, general manager, managing partner or

such other officer-in-charge shall be liable for the commission of the offense penalized under the Act.

If the offender is an alien, he shall, after service of the sentence prescribed above, be deported without further administrative proceedings.

The fines herein prescribed shall be increased by at least ten percent (10%) every three (3) years to compensate for inflation and to maintain the deterrent function of such fines.

RULE XIX
ADMINISTRATIVE AND ENFORCEMENT PROCEDURES

Section 1. Proceedings

In the enforcement of the Act and this IRR, both criminal and administrative proceedings may be instituted.

Section 2. Criminal Actions

Violators of Section 48 of the Act shall be subject to criminal proceedings, pursuant to the relevant provisions of the revised rules on criminal procedure.

Section 3. Enforcement Mechanism

The Commission shall define the roles of the Department, other concerned agencies, LGUs and any other agency deemed responsible for the implementation and enforcement of the Act and its IRRs. It shall also promulgate detailed procedures and protocols for such implementation and enforcement of the Act and its IRRs at the Commission and local governmental level.

Section 4. Enforcement at the Local Government Level

LGUs shall be required to legislate appropriate ordinances to aid in the implementation of the Act and in the enforcement of its provisions. Specific measures to implement and enforce Section 48 of the Act should be included; Provided, such ordinances shall be formulated pursuant to relevant provisions of RA 7160; provided further, that the Commission shall aid LGUs in this process particularly by giving advisory assistance. For this purpose, a pro forma ordinance shall be established by the Commission for the guidance of LGUs. However, LGUs shall not be limited to this pro forma nor shall it prejudice any further improvement, modifications and revisions LGUs may chose to undertake of the pro forma.

Section 5. Deputization of Solid Waste Management Officers

The Commission shall be authorized to deputize persons, individuals or entities to be Solid Waste Management Officer, giving them authority to effect the arrest of violators in accordance with the law, for purposes of enforcing and implementing the Act, its IRRs and other rules and regulations governing solid waste management. Provided however, that no person is deputized until they have completed the necessary training and capacity building, required by the NEC, for the effective implementation of the Act and its IRRs.

The deputization shall be upon the recommendations of the Provincial Solid Waste Management Board and City/Municipal Solid Waste Management Boards. The Commission shall deputize only those persons of known integrity and probity, who have completed the aforementioned training and capacity building of the National Ecology Center. Further, the Commission shall formulate the necessary guidelines for the protocol and procedures for deputization within six (6) months following the effectivity of these Rules and Regulations.

Section 6. Enforcement by the Commission

The Commission shall provide a mechanism whereby, any citizen, LGU or concerned agency may file an action/complaint directly with the Secretariat and concurrently with any other appropriate legal proceeding.

Section 7. Actions and Procedures

The following sets of general procedures shall guide the administration of actions until such time as the Commission shall issue more detailed guidelines and procedures for the administration of enforcement.

- a) Commencement of Actions -Actions may be instituted for violations of any of the prohibited acts under the Act of these Rules and Regulations, and/or any further orders issued by the aforementioned agencies under the enforcement mechanism section of the IRRs.

Actions shall be commenced by any person filing a written complaint, or by the Department on its own initiative, or by the filing of a charge by any deputized agent of the Department, Commission or the LGU, before the court hearing officer.

However, the commencement of such an action shall be without prejudice to the right of any individual or affected person to file any other appropriate legal action for the violation of the Act, its IRRs and/or any further orders issued by the aforementioned concerned agencies.

The LGU ordinance shall prescribe the rules and procedures for the commencement of an action/complaint at the local level.

- b) Charge Sheets - For actions initiated by the respective LGUs, the filing of charge sheets shall be in accordance with the rules and procedures prescribed by relevant ordinances and pursuant

to the relevant provisions of RA 7160. Actions initiated by and for the Department shall follow the existing rules and procedures of the Agency. The charge sheet shall be in writing and drawn in clear and concise language. It shall recite the ultimate facts constituting the cause(s) of action and/or the violations committed under the Act and/or these Implementing Rules and Regulations, as well as all information pertinent thereto and shall be duly signed by the apprehending officer. The charge sheet shall include a notice requiring the Respondent to appear and answer the charge, and specify the date, time and place indicated therein which shall not be less than fifteen (15) days nor more than thirty (30) days from receipt hereof.

- c) Filing and Service of Charge Sheet/Complaint - The charge sheet shall be filed in two (2) copies before the secretariat. Upon the receipt of the charge sheet and/or a complaint, the secretariat shall determine the appropriate agency, to which the charge sheet and/ or complaint may be remitted.
- d) Hearing -Designated hearing officers of the appropriate agencies, to which the charge sheet/complaint is remitted, shall regard both the validity of the action/complaint and the appropriate authority, to which the charge sheet should proceed and be determined and shall make recommendations, thereto.

Hearing officers shall be appointed and undertake their responsibilities pursuant to the guidelines and criteria of their existing agency.

Department Secretaries shall be responsible for undertaking the appropriate action regarding the action/complaint, once the secretariat has determined that it should proceed to his/her particular agency. Existing agency procedures shall apply where appropriate, including both administrative and criminal procedure.

- e) Nature and Procedure - Subject to the basic requirements of due process, the proceedings herein provided shall be summary in nature. The technical rules of evidence obtaining in courts of law shall not bind the designated adjudicating unit for LGUs or of the Department as the case maybe. Similarly the rules of the Court shall not apply in proceedings before the adjudicating unit except in a supplementary character and only whenever applicable.

Section 8. Closure or Suspension of Operations of Solid Waste Management Facilities

The Department shall have the authority to order the closure or suspension of developments, construction or operation of solid waste management facilities pursuant to existing laws, rules and regulations.

Section 9. Authentication with Official Seal

All decisions, orders and appropriate legal documents hereinafter promulgated shall be issued with the official seal of the Department or the government agencies designated by the Commission.

RULE XX. SUITS

Section 1. Citizen Suits

The purposes of this section are to:

- a) promote the participation of the citizens in the enforcement of the Act
- b) ensure that government officials to take the necessary and appropriate action to abate and/or control pollution.

The legal actions contemplated under this section of the IRR are for civil and criminal remedies. The procedure for administrative

sanctions is discussed under Section 50 and Section 61 of the Act and IRR, respectively.

Any citizen may file an appropriate civil, criminal or administrative action in the proper courts/bodies against:

- a. Any person who violates or fails to comply with the provisions of the Act or this rules and regulations; or
- b. The Department or other implementing agencies with the respect to orders, rules and regulations issued inconsistent with the Act; and/or
- c. Any public officer who willfully or grossly neglects the performance of an act specifically enjoined as a duty by the Act or this rules and regulations.

Provided, however, that no suit can be filed until after thirty-day (30) notice has been given to the public officer and the alleged violator concerned and no appropriate action has been taken thereon.

Section 2. Suits and Strategic Legal Action Against Public Participation (SLAPP) and the Enforcement of the Act.

Where a suit is brought against a person who filed an action as provided in Sec. 52 of the Act, or against any person, institution or government agency that implements the Act, it shall be the duty of the investigating prosecutor or the Court, as the case may be, to immediately make a determination not exceeding thrity (30) days whether said legal action has been filed to harass, vex, exert undue pressure or stifle such legal recourses of the person complaining of or enforcing the provisions of the Act. Upon determination thereof, evidence warranting the same, the Court shall dismiss the case and award attorney's fees and double damages.

This provision shall also apply and benefit public officers who are sued for acts committed in their official capacity, there being no

grave abuse of authority, and done in the course of enforcing the Act.

Section 3. Administrative Sanctions

Local government officials and officials of government agencies concerned, who fail to comply with and enforce rules and regulations promulgated relative to the Act shall be charged administratively in accordance with the Ombudsman Law and RA 7160 and other existing laws , rules and regulations.

Any citizen may file an action. The action shall be filed with the DILG or the Ombudsman, if related to any LGU, or to any government agency/employee, respectively.

PART VI. RESEARCH, PUBLIC INFORMATION AND ACCESS TO RECORDS

RULE XXI. RESEARCH AND PUBLIC INFORMATION

Section 1. Research on Solid Waste Management

The Department, in consultations with the cooperating agencies, shall encourage, cooperate with and may render financial and other assistance to appropriate government agencies, academe, private institutions and individuals in the conduct and promotion of researches, experiments, and other studies on solid waste management.

- a) The DOH, in coordination with the concerned agencies and institutions, shall spearhead the study on the adverse health effects of the unintentional release of by-products of combustion (e.g., dioxins and furans) and methods to eliminate said effects. Likewise, the health effects of solid wastes to scavengers, garbage collectors and other personnel involved in the solid waste management (SWM) programs shall be looked into by concerned agencies.

b) The DENR, in coordination with the concerned agencies and institutions shall:

1. Spearhead the setting of standards for leachate.
2. Conduct monitoring of the leachate contamination of ground water and surface water.
3. Chair the panel that will evaluate research proposals on solid waste management for possible funding.
4. Lead in the benchmarking of researches on solid wastes for the identification of gaps.
5. Study on factors for success/failure of community-based waste management initiatives.
6. Pursue improvement in the disposal practices for the solid wastes including sludge.
7. Undertake researches on economic instruments in solid waste management.

c) The DOST, in coordination with the concerned agencies and institutions, shall:

1. Initiate study on the alternative usage of non-recyclable and non-reusable materials.
2. Develop an environmental technology verification (ETV) program in the evaluation of technologies prior to its introduction locally. ETV will serve as basis for verifying the performance of technology under local conditions.
3. Promote the development of clean technology (CT)/production (CP) program in industry. Technical assistance program shall be provided by concerned agencies to implement CP and CT by the industries.
4. Develop and apply new and improved methods of collecting and disposing of solid wastes and processing and recovering materials and energy from solid wastes.
5. Improved utilization of various types of organic materials as source of fertilizer and biofuels.
6. Conduct of study and development of new uses of recovered resources.

- d) The DA, in coordination with the concerned agencies and institutions, shall:
 - 1. Lead in the improvement of composting technology and make such more affordable to communities at the barangay levels.
 - 2. Identify/inventory existing markets and demand for compost.
 - 3. Encourage the composting of agricultural waste, and other compostable materials including, but not limited to garden waste.
 - 4. Assist the compost producers to ensure that the compost products conform to standards.
 - 5. Set standards for organic fertilizers from compost.

- e) The DOE, in coordination with the concerned agencies and institutions, shall:
 - 1. Spearhead landfill extraction and utilization of biogas.
 - 2. Lead in production of usable forms of recovered resources, including fuels from solid waste.

In carrying out solid waste management related researched and studies, the Secretary of the Department or the authorized representative may provide grants or enter into contract with government agencies, non-government organizations, academe, private institutions and individuals

The private sector is further encourage to pursue researched in solid waste management.

Section 2. Environmental Education in the Formal and Non-formal Sectors

- a) The Department of Education (DeptEd), the Technical Education and Skills Development Authority (TESDA), the Commission on Higher Education (CHED), the Department of

Environmental and Natural Resources (DENR), and other concerned government agencies, shall aggressively incorporate ecological waste management in the school systems at all levels, emphasizing the involvement of the school administrators, teaching and non-teaching staff, and studentry in school-wide and nearby community waste management actions, and in the strengthening of the waste management content in the curricula.

- b) Such education program shall emphasize, but not be limited to, the ill-effects of solid wastes relative to human health and the environment, waste minimization and pollution prevention, waste segregation (biodegradable and non-biodegradable) and storage, waste reduction at source, waste recycling/reuse, composting, different methods of waste management and economic benefits derived thereat, and other community-based solutions to the solid waste problem.
- c) The education program should also include the provisions of the prohibited acts, their sanction, and the right of citizens to file suits.

Section 3. Public Education and Information

- a) The Department of Interior and Local Governments (DILG) and its leagues, in coordination with the National Ecology Center and its local counterparts, shall ensure active education and public information on waste management of every local government unit, down to the barangay levels.
- b) The local government units, down to the barangay levels, shall allocate a portion of their funds, to public education and information activities on ecological waste management particularly biodegradable and non-biodegradable wastes including, but not limited to, installation of billboards on collection days for specific waste types, other outdoor signages, stickers, flyers, conduct of seminars, and other effective non-traditional information strategies.

- c) The Office of the Press Secretary, the Philippine Information Agency, the Kapisanan ng mga Brodkaster ng Pilipinas, the National Press Club, the Philippine Press Institute and the private sector (particularly the entertainment and advertising industries), shall allocate regular free air time and print spaces on waste management matters, in television, radio, broadsheets, outdoor signages, other telecommunications, information technologies and non-traditional medial channels.
- d) The DILG, through the Philippine National Police, the Department of National Defense and the Philippine Coast Guard, shall help enforce compliance to Sections 48 and 49 of the said prohibited acts of this Law.
- e) All government offices, at the national and local levels, within the executive, legislation and judicial branches, and government-owned and controlled corporations, shall ensure information, education and actual implementation of waste management programs at the workplaces and work premises, including the pursuit of environment-friendly purchasing policies for their respective offices.
- f) The DENR, other concerned government agencies, educational associations, non-government organizations, people's organizations and the private sector, shall also help implement various efforts in the education and public information on waste management.
- g) All garbage collection and hauling companies shall also be directed to install visible signs in their collection and hauling trucks, describing the waste type they are supposed to collect (for example, NABUBULOK, NARERESIKLO, DI NABUBULOK).
- h) All garbage collection and hauling companies shall also be enjoined to employ other possible media approached to ensure compliance to mandatory waste segregation (for example, use

of bell, characteristic music, jingle, slogan, color-coded trucks, and the like) in their garbage collection vehicles.

- i) All institutions in the foregoing provisions are directed to submit periodic reports to the appropriate local solid waste management boards. The criteria and mechanisms for the report and its submission may be specified by the NSWMC. The report shall thereafter be submitted to the NSWMC secretariat. Sample copies of education and public information materials and strategies employed, shall be part of such submissions.

RULE XXII. ACCESS TO RECORDS

Section 1. Public Access to Records

Any record, report or information obtained by the NSWMC and /or its secretariat, and their local offices, under the Act and the IRR, shall be available to the public.

Section 2. Business and Industry Role

The Commission shall encourage commercial and industrial establishments through appropriate incentives other than tax incentives:

- a) To initiate, participate and invest in integrated ecological solid waste management projects;
- b) To manufacture environmental-friendly products, to introduce, develop and adopt innovative processes that shall recycle and re-use materials, conserve raw materials and energy, reduce waste and prevent pollution; and
- c) To undertake community activities to promote and propagate effective solid waste management practices.

PART VII. FINAL PROVISIONS

Section 1. Separability Clause

If any section or provision of these Rules and Regulations is held or declared unconstitutional or invalid by a competent court, the other sections or provisions hereof shall continue to be in force as if the sections or provisions so annulled or voided had never been incorporated herein.

Section 2. Repealing Clause

All Rules and Regulations or parts of said rules and regulations of pertinent laws inconsistent with these Rules and Regulations are hereby revised, amended, modified and/or superseded as the case may be by these Rules and Regulations.

Section 3. Amendments

These Rules and Regulations may be amended and/or modified from time to time by the Department of Environment and Natural Resources.

Section 4. Effectivity

These Implementing Rules and Regulations shall take effect fifteen (15) days from the date of its publication in the *Official Gazette* or in at least two (2) newspapers of general circulation.

(Sgd.) HEHERSON T. ALVAREZ
Secretary