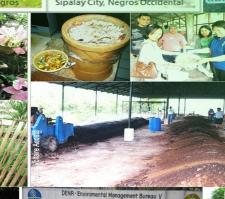


Environmental Management Bureau Department of Environment and Natural Resources

## NATIONAL SOLID WASTE MANAGEMENT STATUS REPORT 2008-2018







San Carlos City, Negros Occidental





San Carlos City Negros Occidental





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#### Preface

Solid waste management remains a challenge for the Philippines. In this National Solid Waste Management Status Report 2008 – 2018 prepared by the Environmental Management Bureau of the Department of Environment and Natural Resources, the 10-year report focuses on the status of implementation, assessment and management of solid wastes in the country.

Also highlighted in the report are various issues and concerns that need to be addressed as EMB continues to work together with local government units all over the country for the successful implementation of Republic Act 9003 or the Ecological Solid Waste Management Act.

The primary goal of solid waste management is to reduce and eliminate the adverse impacts of waste materials on the environment and human health. With this report, EMB aims to share with its stakeholders the right information to make better choices in addressing the country's solid waste management problem.

## Acronyms and Abbreviations Used

AO	Administrative Order
ATC	Authority to Close
BEO	Barangay Environmental Officer
BLGS-DILG	Bureau of Local Government Supervision-Department of Interior and Local Government
BOI	Board of Investments
BSWMC	Barangay Solid Waste Management Committee
CAR	Cordillera Administrative Region
CCQMD	Composting, Compost Quality and Market Development
CENRO	City Environment and Natural Resources Office
DA	Department of Agriculture
DAO	Department Administrative Order
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DOE	Department of Energy
DPWH	Department of Public Works and Highways
DTI	Department of Trade and Industry
EMB	Environmental Management Bureau
ENRMP	Environment and Natural Resources Management Project
EO	Executive Order
EOHO	Environmental and Occupational Health Office
ESWM	Ecological Solid Waste Management
GHG	greenhouse gas
GMI	Global Methane Initiatives
GPP	Green Procurement Program
HDPE	high-density polyethylene
HOA	Homeowners' Association
HUC	Highly Urbanized Cities
IRR	Implementing Rules and Regulations
ITDI-DOST	Industrial Technology and Development Institute—Department of Science and Technology

IWS	informal waste sector
JICA	Japan International Cooperation Agency
LCA	life cycle assessment
LCP	League of Cities in the Philippines
LGC	Local Government Code
LGU	local government unit
LMP	League of Municipalities in the Philippines
LnB	Liga ng mga Barangay
LPP	League of Provinces in the Philippines
MENRO	Municipal Environment and Natural Resources Office
MMDA	Metro Manila Development Authority
MRF	Materials Recovery Facility
MSC	Multi-Sectoral Committee
MSW	Municipal Solid Waste
NCR	National Capital Region
NEA	Non-Environmentally Acceptable
NEAP	Non-Environmentally Acceptable Products
NEAPP	Non-environmentally Acceptable Products and Packaging Materials
NEC	National Ecology Center
NEDA	National Economic and Development Authority
NFSCC	National Framework Strategy on Climate Change
NGO	non government organization
NSWMC	National Solid Waste Management Commission
NSWMF	National Solid Waste Management Framework
NSWMS	National Solid Waste Management Strategy
PD	Presidential Decree
PDP	Philippine Development Plan
PENRO	Provincial Environment and Natural Resources Office
PET	polyethylene terephthalate
PIA	Philippine Information Agency
PMP	Philippine Methane Partnership
PP	polypropylene
PSWMB	Provioncial Solid Waste Management Board

Republic Act
Residuals Containment Area
Regional Ecology Centers
Sanitary Landfill
Solid Waste Management
Solid Waste Management Board
Solid Waste Management Committee
Technical Education and Skills Development Authority
Technical Working Committee
Technical Working Group
United Nations Environment Programme
Waste Analysis and Characterization Study
Waste Electrical and Electronic Equipment
waste to energy
Zero Basura Olympics

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## National Solid Waste Management Status Report

#### 1. Solid waste conditions

Describing the solid waste conditions in the country involves understanding the composition and sources of solid wastes, waste generation rates and waste projection.

#### 1.1 Sources and composition of municipal solid wastes (MSW)

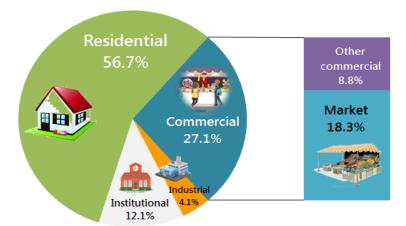
The amount, composition and sources of solid wastes generated can be statistically determined through the conduct of waste analysis and characterization studies (WACS).

#### Sources of MSW

Information on the sources of MSW was provided by a number of Environmental Management Bureau (EMB) Regional Offices in addition to data from submitted Solid Waste Management Plans. The available information from 2008 to 2013 was synthesized and summarized in **Figure 1a**.

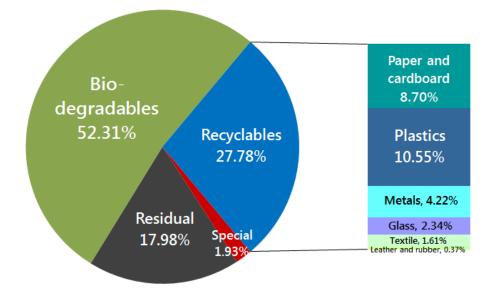
MSW comes from residential, commercial, institutional and industrial sources. Residential waste constitutes the bulk (56.7%) of MSW and includes kitchen scraps, yard waste, paper and cardboards, glass bottles, plastic containers and sando bags, foils, soiled tissues and diapers, and special wastes such as containers of household cleaning agents, batteries and waste electrical and electronic equipment (WEEE).

Commercial sources which include commercial establishments and public or private markets contribute 27.1% of which, in some regions, about two- thirds of commercial wastes come from the latter. Institutional sources such as government offices, educational and medical institutions account for about 12.1% while the remaining 4.1% are wastes coming from the industrial or manufacturing sector.



Percentage (%) contribution of the various sources of MSW

Figure 1a. Sources of municipal solid wastes in the Philippines, 2008-2013



Percentage (%) by weight of MSW fractions in the Philippines

Figure 1-2. Composition of municipal solid wastes in the Philippines, 2008-2013

Biodegradable wastes comprise about half (52.31%) of MSW although primary data suggest that figures can range from 30% to as much as 78%. Typical bio-waste consists of kitchen or food waste and yard or garden waste. From the available information, it could be estimated that 86.2% of compostable waste comes from food scraps while 13.8% are leaves and twigs.

Recyclable wastes account for almost a third (27.78%) of MSW with an estimated range of 4.1% to 53.3%. Plastic packaging materials comprise around 38% of this waste fraction and followed by paper and cardboard waste, which contributes about 31%. The remaining 31% is made up of metals, glass, textile, leather and rubber.

Special wastes which consist of household healthcare waste, WEEE, bulky waste and other hazardous materials contribute a measly 1.93% with values ranging from negligible up to 9.2%.

Finally, residuals have been found to make up 17.98% of generated MSW. Most LGUs present these data as a combination of disposable wastes as well as inert materials, which comprise about 12% of the residual waste.

#### 1.2 Waste generation rates

Waste generation rates have been estimated based on consolidated data generated from WACS presented in EMB regional reports and selected local 10-year SWM plans. Using 2010 as base year, **Table 1a** summarizes waste generation rates in the Philippines, Metro Manila, highly urbanized cities (HUCs), municipalities and other cities.

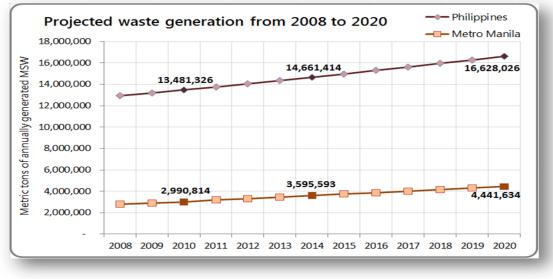
Scope / Coverage	Sample size (as % of de-	Range	Weighted Average
	mographics)	kg/capita	/day
Metro Manila (NCR)	100%	0.27 – 1.00	0.61
Metro Manila and some highly urbanized cities (HUCs)	N/A	0.27 – 1.00	0.69
Other cities and provincial capi- tals (excluding NCR/HUCs)	N/A	0.29 – 0.64	0.50
PHILIPPINES (Nationwide)	79%	0.10 – 0.79	0.40
All LGUs in the country, ex- cluding Metro Manila	76%	0.10 – 0.71	0.34
Municipalities (cities and some capital towns excluded)	N/A	0.10 – 0.64	0.31

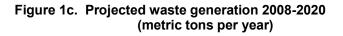
Table 1a.	Synthesized waste generation rat	es in the Philippines for the base year 2010
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In 2010, waste generation rates vary from as low as 0.10 kg/capita/day in the municipalities outside of Metro Manila to 1.00 kg/capita/day in Metro Manila and HUCs. The rates are dependent on household income, lo-cal economic activity and waste avoidance policies and incentives. The average per capita generation rate for the Philippines is 0.40 kg.

#### 1.3 Waste projection

Based on the per capita rate of 0.40 and annual projected population, the amount of waste generated yearly in the entire Philippines and Metro Manila in terms of tonnage can be seen in **Figure 1c**.





#### National Solid Waste Management Status Report [2008-2018]

The figure shows that the yearly amount of waste in the country is expected to increase from 13.48 million tons in 2010 to 14.66 million tons in 2014 to 18.05 million tons in 2020. On the other hand, Metro Manila's waste generation continues to increase as it contributes 22.2%, 24.5% and 26.7% to the country's solid waste in the years 2010, 2014 and 2020, respectively.

#### 2. Solid waste impacts on health and the environment

Improper solid waste management practices can have a number of environmental and health impacts. The adverse impacts and their causes are shown in **Figure 2a**. As discussed earlier, municipal solid wastes come from residential, institutional, commercial, and industrial sources. Other sources include illegal dumps, street sweepings and litter and rubbish from roads, open spaces and water bodies. People who live near or within dumpsites are vulnerable to various diseases. Leachate from solid waste can contaminate groundwater tables and surface waters. Insects and pests in open dumpsites are disease vectors. Methane gases from dumpsites can affect the health of exposed populations and contribute to global warming. Coastal and marine litter affects aesthetics, causes pollution, and harms marine organisms. Improperly managed solid wastes also can result in increased flooding and destruction of infrastructures due to clogged waterways.

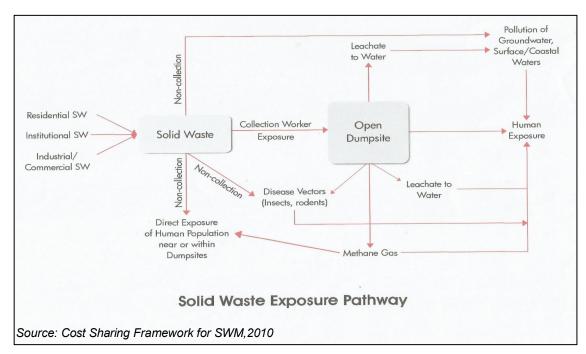


Figure 2a. Solid waste exposure pathway

The disease pathway associated with the poor handling of solid waste becomes manifest usually through direct exposure of humans and the pollution of surface water and groundwater due to leachate from open dumps. The World Health Organization and the World Bank estimate that approximately 88% of diarrhea cases worldwide can be attributed to poor water quality, sanitation, and hygiene. (**See Table 2a**). In the same manner, poor water quality, sanitation, and hygiene cause 100% of cholera cases, 100% of helminthiasis cases, 50% of hepatitis cases, and 50% of typhoid and paratyphoid fever cases.

Disease	Attributable Fraction	Source
Diarrhea	88%	WHO
Helminthiasis	100%	WHO
Typhoid & Paratyphoid	50%	WB
Cholera	100%	Widely accepted
Hepatitis A	50%	WB

 Table 2a. Fraction of disease cases attributable to water, sanitation and hygiene

Sources: WHO, Preventing Disease Through Healthy Environments, 2006; World Bank, Philippine Environment Monitor 2006: Environmental Health.

However, there is no established information on the proportion of disease incidence in Table 2a that can be attributed solely to solid waste pollution. A study made on the cost sharing framework for solid waste management in 2010 has assumed that the proportion of the municipal population within the vicinity of open dumpsites is the population with the highest risk of contracting diseases. If the leachate from dumpsites affect the groundwater and domestic water supply, then the population at risk might be even greater.

Thus, the potential population at risk was estimated based on the population of potentially affected barangays surrounding open dumpsites. Using a sample of open dumpsites, it is estimated that an average of 27% of the municipal population might be at risk from water-borne diseases due to open dumpsites. Hence, it can be assumed to be the same proportion of diarrhea cases solely attributable to solid waste pollution.

Morbidity or illness due to acute diarrhea has economic cost that includes costs of hospitalization, medical costs and foregone income due to reduced workdays.

There are other environmental costs associated with improperly disposed municipal solid wastes. These include pollution of surface and marine waters that could deplete fish and other marine resources, damages to infrastructures from worsened flooding incidence due to clogged waterways, increased cost of dredging and coastal cleanups and loss of aesthetic value.

# **3.** Ecological Solid Waste Management: status of implementation of Republic Act No. 9003

#### 3.1 Avoidance, reduction and reuse

SWM implementation follows a hierarchy of options as illustrated by an inverted triangle in **Figure 3a**. The most preferred option is waste avoidance and reduction where the ultimate goal is to reduce the amount of materials entering the waste stream. Apart from avoidance, achieving this goal involves product reuse, increased product durability, reduced material use in production and decreased consumption. Behavioral change is deemed necessary in the exercise of this option as lifestyle demands often favor convenience over conservation with minimal regard for long-term environmental consequences.

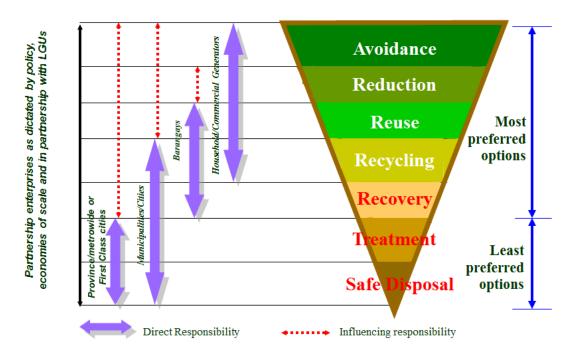


Figure 3a Overall policy of RA 9003 based on waste management hierarchy

There are now various initiatives towards waste reduction such as green procurement, eco-labeling, identification of non-environmentally acceptable products and implementation of 3Rs.

Executive Order (EO) No. 301 was issued in 2004 establishing a Green Procurement Program (GPP) for the executive branch of government. The EO also provides for a systematic and comprehensive *National Eco-Labeling Program* necessary to support a "green procurement" policy in both government and the general public. The GPP is an approach to procurement in which environmental impacts are taken into account in purchasing decisions. Environmentally responsible initiatives include switch to electronic submission of purchase requests, reduction of materials and energy usage, greening the supply chain and patronage of eco-labeled products.

The National Solid Waste Management Commission (NSWMC) is mandated under RA 9003 to prepare and update a list of non-environmentally acceptable products (NEAP) to be prohibited according to a schedule and as long as NEAP alternatives cost no more than 10% of the cost of disposable products. However, no product has yet been determined as non-environmentally acceptable (NEA).

Through NSWMC Resolution 9, a Technical Working Committee (TWC) was created to work on the phasing out of NEA products and packaging materials. The TWC has established four product categories that will be subjected for evaluation, namely: plastics, construction materials, baby products and electronics. The NSWMC TWC through the Industrial Technology and Development Institute of the Department of Science and Technology (ITDI-DOST) conducted a study to determine the non-environmental acceptability of products or packaging material and life cycle assessment (LCA) of the products to be listed as NEAP. A third party was engaged to conduct the study to look into applying appropriate assessment tools to come up with a scientific basis on classifying certain material as non-environmentally acceptable which shall cover plastic carrier bags and foam polystyrene.

The study established a comprehensive LCA of the environmental impact of plastic, paper, and non-woven polypropylene (PP) carrying bags in the Philippines. The functional unit used in the study is based on the usual products purchased by a Filipino family. A cradle-to-grave analysis was employed to assess the impacts of the various life-cycle stages of the three alternatives. The life- cycle inventory was categorized into the on-site, pre-combustion, and transportation inventories. In addition, the impact categories were assessed based on the internal and external impacts. The study concluded that:

a) Non-Woven PP provides the least impact among the options evaluated

b) Based on the cost of remediation, the flooding contribution of paper bags compared to plastic is higher. It must be however that the approach adopted is limited in scope due to the availability of cost and waste data

c) Plastic bags are more environmentally desirable compared to paper in all impact areas. This is primarily traced to their lower material quantity used.

About 316 LGUs have passed ordinances banning or regulating the sale and use of plastic bags and polystyrene foams due to their perceived role in the clogging of waterways, increased flooding and water pollution. Among these LGUs are the cities of Muntinlupa, Quezon and Pasig in Metro Manila and the municipalities of Los Banos, Laguna, Burgos, Ilocos Sur and San Marcos, Isabela. In response, the plastics industry has undertaken voluntary measures such as in-store recovery programs with selected supermarkets and the introduction of oxo-biodegradable plastic bags.

#### National Solid Waste Management Status Report [2008-2018]

Shopping mall giants like SM Group, Ayala Malls and Robinson's Supermarket continually promote the reuse, reduction and recycling (3R) of waste through their eco-shopping bag program and their monthly waste markets and recyclers' fairs nationwide. Other malls, supermarkets, fast food chains and commercial shops also have their own SWM programs. Unilever Philippines' "Project Eliminate" enabled their plant and offices to reduce trash by 50% while Nestlé Philippines' "Waste to Resource" project enabled the composting of coffee grounds. Coca-cola Bottlers Philippines' "Give a Can, Give a Hope" program works with Tahanang Walang Hagdanan as a partner and beneficiary in recycling.

The Industrial Waste Exchange Program is managed by the Philippine Business for the Environment, which acts a clearinghouse and matching agent for waste generators and buyers. The Eco Index in Region IV-A organizes regular Resource Recovery Events that allow waste generators to bring in their recyclables/waste products to invited recyclers and waste users. At the regional level, EMB's main partner in environmental education and recycling promotion are the Pollution Control Association of the Philippines and other local stakeholders.

#### 3.2 Segregation at source

In cases where segregation at source and segregated storage are not practiced by households, communities and businesses, most solid wastes end up as "mixed garbage". This may be due to limited awareness, appreciation and discipline on the part of the citizenry, lack of incentives and enforcement of ordinances on the part of the government, or inadequate support facilities in place to receive pre-segregated materials.

To address this problem, some LGUs provide segregated waste containers and implement color codes to aid in the easy identification of segregated bins. In 2013, the NSWMC had already approved Resolution No. 60 to provide recommendatory measures for mandatory solid waste segregation at source, segregated collection and recovery to guide waste generator on onsite separation and support the LGUs in implementing 'nosegregation, no-collection' campaigns.

Some LGUs have strictly enforced segregation at source coupled with segregated collection, through a "no segregation, no collection" ordinance and the operation of Materials Recovery Facility (MRFs). The DENR Environment and Natural Resources Management Project (ENRMP) aimed at identifying and selecting LGUs with promising initiatives and regularly monitoring its compliance and performance. Compliance of this select group of 128 LGUs on the mandatory segregation at source ranges from 53% to 100% based on validations conducted by NSWMC Secretariat.

#### 3.3 Segregated collection

Collection is the act of removing solid waste from the source or from a communal storage point. It is regarded as potentially the most expensive of the functional elements of SWM.

RA 9003 requires segregated collection by the LGUs. Waste segregation and collection are to be conducted at the barangay level specifically for biodegradable and recyclable wastes while disposal and collection of non-recyclable/residual and special wastes are the responsibility of the city or municipality.

Waste collection techniques include 1) door-to door – where waste materials are collected in every house within a target area to recover recyclables to be sold to junkshops and biodegradables either for use as animal feeds or for composting and 2) block or communal – which utilizes MRFs in barangays that are within or near the targeted collection area.

Solid waste collection in the country has environmental, social, economic and political implications. For example, people have the tendency to link uncollected garbage and dirty surroundings to the performance of local officials. Collection is usually done by an LGU department such as the General Services Office, Engineering Office, Environment and Sanitation Office or the Department of Public Services. Many LGUs also outsource waste collection to private contractors.

There is a growing number of cities and municipalities that are implementing 'no segregation, no collection' policies leading to more responsible attitudes and behavior towards the environment and greater efficiency in the delivery of SWM services. However, many LGUs still practice mixed waste collection – a backward step that produces the opposite effect.

As reported by 128 ENRMP pilot sites, compliance to segregated collection ranges from 43% to 100%. Outside of ENRMP, however, very few regions and LGUs gather information on segregated waste collection rates.

It is estimated that waste collection coverage in the LGUs may vary from 30% to more than 99%. Urban centers register higher coverages and frequencies compared to rural areas. Nevertheless, some LGUs devise ways to still extend service to the rural and upland communities by making special arrangements such as the adoption of satellite accumulation areas or residuals containment areas.

Reasons identified for waste collection inefficiencies are:

- poor labor management and supervision
- more workers on the roles than needed
- inadequate cooperation from the citizenry with collection schedules and methods
- inappropriate type and size of collection vehicles
- non-rational routes for collection service
- failure to optimize vehicle productivity by selecting the appropriate crew size and shift duration
- inadequate communal container capacity at the communal collection points
- long vehicle down times from poor equipment maintenance and repair

#### 3.4 Recovery and processing

#### Materials Recovery Facility (MRF)

RA 9003 mandates the establishment of a MRF in every barangay or cluster of barangays in barangayowned, leased land or any suitable open space designated by the barangay. The MRF shall be designed to receive, sort, process and store compostable and recyclable material efficiently and in an environmentally sound manner. Any resulting residual waste shall be transferred to a proper disposal facility.

MRFs are also being established in schools, malls, and other commercial establishments. There are also mobile and gravity-driven, centralized MRFs. A number of LGUs also engage local junkshops to serve as their MRFs. Through Memorandum of Agreements and following the guidelines on MRF establishment, junk dealers become part of the formal SWM system of the LGU. **Figures 3b to 3d** show the different types and designs of MRFs.



Figure 3b. Low-cost MRFs in the Philippines

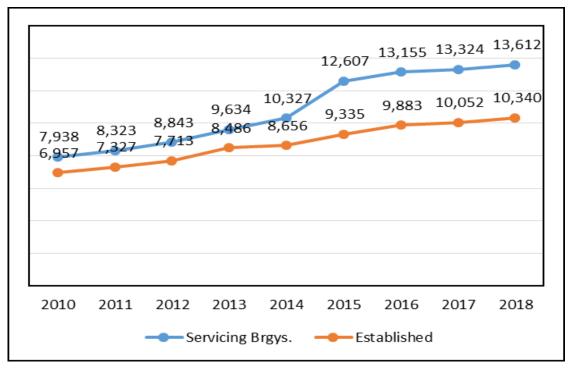


Figure 3c. Mobile MRFs



Figure 3d. Centralized gravity-driven MRFs in Negros Island LGUs

The NSWMC has reported the number of MRFs for the years 2008 to 2018. Figure 3e shows the number of MRFs and the number of barangays served by MRFs during those years. Based on the table, there was a six-fold increase in the number of barangays served from 2,701 in 2008 to 13,612 in 2018.



#### Source: NSWMC

Figure 3-e. Number of MRFs and barangays served by MRFs from 2008 to 2018

#### Composting

Under RA 9003, composting is regarded as a means to meet the mandatory waste diversion requirements. It is the biological decomposition of biodegradable solid waste under controlled predominantly aerobic conditions to a state that is sufficiently stable for nuisance-free storage and handling and is satisfactorily matured for safe use in agriculture. It can either be a component of an MRF or established as a standalone processing facility. The law also provides for an inventory of markets for compost and guidelines for compost quality.

Typical small-scale composting in the Philippines is done in compost pits, tire towers, coconut shell stack, bottomless bins, clay pots and plastic sacks. Meanwhile, large-scale composting is done in windrows (by turning, passive aeration, active aeration and static piles), in-vessel (e.g., agitated beds, composting silos and rotating drum bioreactors), and through vermi or worm composting.

The different types of composting techniques used by LGUs, national government agencies, private farms and cooperatives in the Philippines are shown in **Figures 3f to 3i**. It is estimated that composting could reduce the weight of organic waste by 50% or more and vermicomposting by 70-80%, the latter capable of turning biodegradables into a high-quality vermicompost product.



Figure 3f Tire composters at the city hall compounds of Tacloban (left) and San Carlos, Negros Occidental (center), and in Dumaguete City, Negros, Oriental (right)



Figure 3g. Rotating drum composters at Barangay Sun Valley, Parańaque City (left), in the Heritage City of Vigan, Ilocos Sur (center) and in Santiago City, Isabela (right)



Figure 3h. Vermicomposting facilities at EMB-Region 8 in Palo, Leyte (left), Buro-buro Springs Farm in Talisay City, Negros Occidental (center) and at the Ormoc City Eco-Center, Leyte (right)



Figure 3i. Other techniques such as the coconut shell stack and can composting in Barangay Olaycon, Monkayo, Compostela Valley (left), Bokashi composting at Buro-buro Springs Farm (center) and Takakura composting in Bago City, Negros Occidental (right)

#### Recycling

The important role of recycling in achieving the mandatory waste diversion requirements is recognized under RA 9003. This law offers guidelines on the establishment and operation of buy-back centers and MRFs and provides for an inventory of markets and eco-labelling of recyclables. Recycling may either be a component of an MRF or established as a stand-alone processing facility.

Recyclables, particularly those with high commercial value such as paper, scrap metals and plastics are typically sold to junk dealers, consolidators and recyclers. The accumulated recyclables from MRFs are delivered to junkshops. In many cases, either the semi-formal or informal waste collectors or even the generators themselves bring the sellable materials to junkshops or at designated areas during recyclables collection events.

The recovered materials that are sold to local junkshops pass through a business chain of middlemen and wholesaler for use by the industry sector, mainly outside the Philippines. However, there are local commercial recyclers that utilize such materials to produce recycled products such as paper/cardboard and recycled

Based on a 2008 study by NSWMC and Japan International Cooperation Agency, primary waste collectors could divert significant amount of recyclables from the waste stream as shown in **Table 3a**.

Recyclable Material	Primary Collector	Metro Manila	Metro Cebu	Southern Mindanao
	Street Collectors	3.18	3.59	2.45
Paper	Collection Workers	21.83	1.81	0.62
	Disposal Site Scavengers	22.01	8.21	12.86
	Street Collectors	0.76	0.35	0.40
Aluminum	Collection Workers	0.78	0.13	0.02
	Disposal Site Scavengers	2.50	0.05	1.79
	Street Collectors	1.39	5.04	14.76
Other Metals	Collection Workers	12.35	0.94	0.64
motalo	Disposal Site Scavengers	16.75	6.34	13.75
	Street Collectors	1.63	3.94	3.50
Plastic	Collection Workers	9.79	0.50	0.63
	Disposal Site Scavengers	20.32	4.48	25.00
	Street Collectors	0.85	0.58	6.65
Glass	Collection Workers	6.58	0.26	0.94
	Disposal Site Scavengers	9.96	0.32	49.64

Table 3a.	Collection of recyclable materials by primary collectors
	(unit: kg/capita/day)

Source: JICA Study, 2008

Some LGUs have started recognizing the important contribution of informal and semi-formal sectors in diverting wastes away from disposal sites and have explored ways of partnering with them.

In most regions, LGUs find that there are available markets for recyclable materials except for those with low economic value. For the latter, they had to seek alternatives to recycling these materials into marketable and innovative products such as bags, slippers, fashion accessories, decorative items, furniture and fixtures, ropes, mats, tiles, upholsteries and various crafts and accessories.

Figures 3j to 3m show the various ways recyclables are utilized.



Figure 3j. Waste Market Fair organized in Davao City and the Waste2Cash Market Programs held in Naga City, Camarines Sur (left) and Legazpi City, Albay (right)



Figure 3k. Trust International Paper Company in Bulacan and Dasmarinas Paper Mills in Cavite recycle paper and cardboard (left) while Coca-Cola Bottlers, Philippines partners with Tahanang Walang Hagdanan to convert post-consumer aluminum waste into wheelchairs



Figure 3I. Fashion accessories produced from the recycling of waste materials in Agusan del Sur, Aurora, Leyte, Southern Leyte and Samar



Figure 3m. Various recycled materials for personal and home use as produced in San Luis, Pampanga (left) at Clark, Capas, Tarlac (center) and SPU, Dumaguete City (right)

#### 3.5 Disposal

Waste disposal refers to the discharge, deposit, dumping, spilling, leaking or placing of any solid waste into or in any land while disposal sites refer to areas where solid waste is finally discharged and deposited. It is regarded as the least preferred method of managing solid waste although it plays an important role in dealing with residual waste.

Almost all solid wastes ended up at dumpsites before the passage of RA 9003. Dumpsites are raw, open spaces designated as local disposal areas that lack engineering measures and pollution control systems. These are often located close to ravines, gullies, seashore, bodies of water and other open spaces and usually become inaccessible during heavy rains.

The law mandates the closure and rehabilitation of all dumpsites and their replacement with sanitary landfills (SLFs). SLFs are disposal facilities with impermeable liners to prevent liquid discharges from polluting ground and surface waters. It should also have a gas management system to reduce risks of burning or explosion, a regular soil cover to minimize odor, and other environmental protection features

#### Open and controlled dumpsites

RA 9003 prohibits the establishment and operation of open dumps or any practice or disposal involving the use of open dumps. Open dumps, however, were allowed to be converted into controlled dumps only until 2006 as a temporary and remedial measure. Nevertheless, controlled dumps which were required to meet basic waste management guidelines should have been phased out in 2006 in favor of sanitary landfills. The legally mandated transition was not fully realized as many open and controlled dumps are still currently in operation.

The number of illegal dumpsites in the country has decreased by more than half over the past 8 years from 806 in 2008 to 353 in 2018. These dumps might have either been completely closed and rehabilitated or are undergoing rehabilitation for closure.

**Figure 3n** shows the number of illegal dumpsites in every region of the country in 2018. The data show that Regions 5, 7 and 4A had the most number of illegal dumpsites. NCR, CAR and Region 12 had no reported illegal dumpsite while Region 9 and Region 8 had fewer remaining illegal dumpsites.



Figure 3n. Number of illegal dumpsites in 2018, per region

#### Sanitary landfills

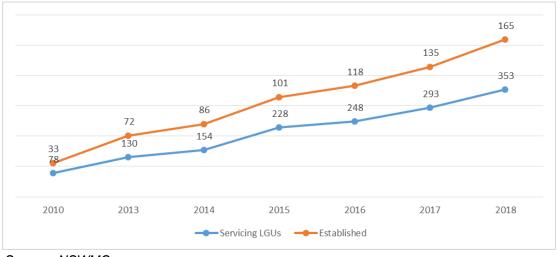
A sanitary landfill (SLF) refers to a waste disposal site designed, constructed, operated and maintained in a manner that exerts engineering control over significant potential environmental impacts arising from the development and operation of the facility. Prior to 2004, the country had only four sanitary landfills - located in Capas, Tarlac, Inayawan, Cebu City, San Mateo, Rizal and Carmona, Cavite.

Sections 40 to 42 of RA 9003 provide for the criteria in site selection, establishment and operation of SLFs. Specifically, Section 41 stipulates the minimum requirements for the establishment of SLFs: a landfill liner system, leachate collection and treatment, gas control recovery system, groundwater monitoring wells, a daily cover during operations and final cap over the completely filled landfill, and a closure and post-closure maintenance procedure.

The traditional material used to render landfill cells impervious to water seepage is high-density polyethylene (HDPE) plastic material. However, with the pioneering efforts in Bais City, it was found that compacted bentonite clay or clay-spiked host soil may be used as alternative liner material as long as it passes the permeability requirements for a landfill liner.

In 2005, the NSWMC issued a Resolution No. 06 on the guidelines for establishing categorized SLFs, which was later adopted at Department Administrative Order (DAO) 2006-10 and supplemented by the 'Technical guidebook on solid wastes disposal design, operation and management. The guidelines still mandate the use of the relatively expensive HDPE for bigger SLFs but the minimum requirements of clay liners for smaller landfills facilitated the compliance of smaller municipalities.

In Figure 3o, waste disposal remains a challenge since a total of 353 illegal dumpsites have to be closed and rehabilitated in accordance with Section 37 of RA 9003. This is offset by the fact that there has been a steady increase in the number of SLFs being established and LGUs having access to them; from 33 SLFs that cater to the residual waste of 78 LGUs in 2010, to about 353 LGUs already have access to 165 SLFs in December 2018.



Source: NSWMC



Table 3b also shows an updated list of 166 SLFs established in the country as of December 2018. Five (5) of these landfills are currently not operating.

	Region	Province	LGU	Barangay
1	1	llocos Norte	Bacarra	Pungto
2	1	llocos Norte	Banna	Bangsar
3	1	llocos Norte	Nueva Era	Poblacion
4	1	llocos Norte	Paoay	Mumulaan
5	1	llocos Norte	Piddig	Abucay
6	1	llocos Norte	San Nicolas	San Guillermo*
7	1	llocos Norte	Vintar	Ester
8	1	Ilocos Sur	Candon City	Balingaoan
9	1	Ilocos Sur	Narvacan	Dasay
10	1	Ilocos Sur	Santiago	

Table 3b. Operational Sanitary Landfills and their Locations, 2014

	Region	Province	LGU	Barangay
11	1	Ilocos Sur	Santa Cruz	Gabor Norte
12	1	La Union	Agoo	San Agustin
13	1	La Union	Balaoan	Calumbuyan (Nagsabaran Norte)
14	1	La Union	Bangar	Cadapil
15	1	La Union	Luna	Sucoc Norte
16	1	La Union	Naguilian	Cabaritan Norte
17	1	La Union	Rosario	Inabaan Norte
18	1	La Union	San Fernando City	Dallangayan Oeste
19	1	La Union	San Gabriel	Lipay Sur
20	1	La Union	Santol	Corrooy
21	1	La Union	Sudipen	Sengnat
22	1	Pangasinan	Binalonan	Camangaa*
23	1	Pangasinan	Bolinao	Balingasay
24	1	Pangasinan	Urdaneta City	Sitio Calegu, Catabian
25	2	Cagayan	Ballesteros	Centro West (Pob.)
26	2	Cagayan	Gattaran	Casicallan Norte*
27	2	Cagayan	Gonzaga	Pateng
28	2	Cagayan	Lal- lo	Cagoran
29	2	Cagayan	Peñablanca	Baliuag
30	2	Cagayan	Sanchez Mira	Santor
31	2	Isabela	Quezon	Sitio Namnama, Santos (Pob.)
32	2	Nueva Vizcaya	Aritao	Kirang
33	2	Nueva Vizcaya	Bagabag	Sitio Tapaya, Baretbet
34	2	Nueva Vizcaya	Bayombong	Luyang
35	2	Nueva Vizcaya	Solano	Concepcion
36	2	Quirino	Diffun	Ricarte Norte
37	2	Quirino	Maddela	Balligui
38	2	Quirino	Saguday	Cardenas
39	3	Aurora	Dipaculao	Toytoyan
40	3	Aurora	Maria Aurora	San Joanquin
41	3	Aurora	San Luis	L. Pimentel
42	3	Bataan	Abucay	Sitio Macao, Capitangan
43	3	Bataan	Balanga City	Munting Batangas
44	3	Bataan	Hermosa	Mambog (Eco-Nest)
45	3	Bulacan	Norzagaray	Sitio Tiakad, San Mateo (WACUMAN)
46	3	Bulacan	Norzagaray	Sitio Coral, Matictic

	Region	Province	LGU	Barangay
47	3	Nueva Ecija	General Tinio	San Pedro
48	3	Nueva Ecija	Guimba	Lennec
49	3	Nueva Ecija	Santa Rosa	Mapalad
50	3	Tarlac	Capas	Sitio Kalangitan, Cutcut (Metro Clark Waste Management, Corp.)
51	3	Zambales	Candelaria	Pinagrealan
52	3	Zambales	Olongapo City	New Cabalan
53	3	Zambales	Palauig	Salaza
54	3	Zambales	Subic	Naugsol
55	4A	Batangas	Alitagtag	San Juan
56	4A	Batangas	Batangas City	San Jose Sico
57	4A	Batangas	Bauan	Malindig
58	4A	Batangas	Cuenca	Poblacion 8
59	4A	Batangas	Lemery	Poblacion 1
60	4A	Batangas	Taysan	Piña
61	4A	Cavite	Dasmariñas City	Salawag (Lexter)
62	4A	Cavite	Imus City	Pasong Buaya 1 (Coldwell Envi- ronmental Care Corp.)
63	4A	Laguna	Вау	Santa Cruz
64	4A	Laguna	Calamba City	Bubuyan (SURI Waste Mgt.)
65	4A	Laguna	Kalayaan	Sitio Malaking Pulo, San Juan
66	4A	Laguna	Paete	Sitio Santa Ana, #3 Ermita
67	4A	Laguna	San Pablo City	Santo Niño
68	4A	Laguna	San Pedro City	Narra Road, San Antonio (Pilotage)
69	4A	Laguna	Santa Cruz	Alipit (Gemtech)
70	4A	Quezon	Dolores	Dagatan
71	4A	Quezon	General Nakar	Anoling
72	4A	Quezon	Gumaca	San Vicente
73	4A	Quezon	Infanta	Magsaysay
74	4A	Quezon	Lucena City	Kanlurang Mayao
75	4A	Quezon	Mauban	Sitio Tejero, Lual Barrio
76	4A	Quezon	Pagbilao	Ibabang Bagumbungan
77	4A	Quezon	Plaridel	Tanauan
78	4A	Quezon	Real	Tanauan
79	4A	Quezon	Sampaloc	Sitio core Housing, Bilucao
80	4A	Quezon	Sariaya	Sampaloc 1
81	4A	Quezon	Tayabas City	Pandakaki
82	4A	Rizal	Rodriguez (Montalban)	Sitio Lukutan, San Isidro (Rizal Provincial)(Green Leap)

	Region	Province	LGU	Barangay
83	4A	Rizal	Morong	San Guillermo (Morong Engi- neered SLF)
84	4A	Rizal	San Mateo	Sitio Mabilog, Pintong Bukawe (New San Mateo SLF)
85	4B	Marinduque	Boac	Sitio Bago-Agong, Brgy. Maybo
86	4B	Occidental Mindo- ro	Lubang	Sitio Pulili, Brgy. Tangal
87	4B	Oriental Mindoro	Calapan City	Batino
88	4B	Oriental Mindoro	Pinamalayan	Maningcol
89	4B	Palawan	Bataraza	Rio Tuba (Coral Bay Nickel Corp.)
90	4B	Palawan	El Nido (Baciut)	Villa Libertad
91	4B	Palawan	Puerto Princesa City	Lourdes Village
92	4B	Palawan	Quezon	Sitio Metropal, Brgy. Malatgao
93	4B	Romblon	Odiongan	Bangon (c/o Tita Nelie); Anahao
94	4B	Romblon	San Jose	Combot
95	5	Albay	Legazpi City	Sitio Caridad, Banquerohan
96	5	Masbate	Masbate City	Usab*
97	6	Aklan	Malay	Cabulihan
98	6	lloilo	Iloilo City	Calajunan
99	6	Negros Occidental	Bacolod City	Felisa
100	6	Negros Occidental	Bago City	Ма-ао
101	6	Negros Occidental	Cadiz City	Cabahug
102	6	Negros Occidental	Kabankalan City	
103	6	Negros Occidental	Sagay City	Paraiso
104	6	Negros Occidental	San Carlos City	Hilamunan
105	6	Negros Occidental	Sipalay City	Sitio Can-Araw, Brgy. Cabadyangan
106	7	Negros Oriental	Bais City	Cambanjao
107	7	Negros Oriental	Bayawan City (Tulong)	Maninihon
108	7	Bohol	Alburquerque	Dangay
109	7	Cebu	Aloguinsan	Tampa-an
110	7	Cebu	Asturias	Sitio Libaong, San Isidro
111	7	Cebu	Badian	Dobdob
112	7	Cebu	Balamban	Lamesa
113	7	Cebu	Cebu City	Inayawan
114	7	Cebu	Consolacion	Polog
115	7	Cebu	Cordova	Poblacion
116	7	Cebu	Dalaguete	Tapon

	Region	Province	LGU	Barangay
117	7	Cebu	Talisay City	Sitio Tapul, Maghaway
118	7	Cebu	Toledo City	Sitio Masaba, Das; Putingbato
119	7	Siquijor	Siquijor	Caipilan
120	8	Leyte	Burauen	Gamay
121	8	Leyte	Tacloban City	San Roque
122	8	Leyte	Ormoc City	
123	8	Samar	Basey	Roxas
124	8	Samar	Calbayog City	Dinag-an
125	8	Southern Leyte	Tomas Oppus	Anahawan
126	8	Southern Leyte	Maasin City	Bactul II
127	9	Zamboanga del Sur	Zamboanga City	Salaan*
128	10	Bukidnon	Damulog	Sitio Narugaran, Pocopoco
129	10	Bukidnon	Lantapan	Bantuanon
130	10	Bukidnon	Maramag	South Poblacion
131	10	Bukidnon	San Fernando	Nacabuklad
132	10	Bukidnon	Valencia City	Barobo
133	10	Camiguin	Mambajao	Benhaan
134	10	Lanao del Norte	Iligan City	Bonbonon
135	10	Misamis Oriental	Cagayan de Oro City	Pagalungan
136	11	Davao del Norte	Island Garden City Of Samal	Sitio Sampao, Mambago-A
137	11	Davao del Sur	Davao City	New Carmen, Tugbok Dist.
138	11	Davao Oriental	Lupon	Lupon
139	12	Cotabato	Arakan	Greenfield
140	12	Cotabato	Kidapawan City	Onica
141	12	Cotabato	Magpet	Doles
142	12	Cotabato	Matalam	Manubuan
143	12	Cotabato	M'Lang	Tibao
144	12	Cotabato	President Roxas	Cabangbangan
145	12	Sarangani	Alabel	Sitio Mahayahay, Bagakay
146	12	Sarangani	Maasim	Kamanga
147	12	Sarangani	Malungon	Poblacion
148	12	South Cotabato	General Santos City	Sinawal
149	12	South Cotabato	Surallah	Colungolo
150	12	South Cotabato	Polomolok	Purok 6, Kinilis
151	12	Sultan Kudarat	Kalamansig	Sitio Bantogon, Santa Clara
152	12	Sultan Kudarat	Lebak	Sitio Kitay, Salaman
153	12	Sultan Kudarat	Isulan	Sitio Kamanga, Laguilayan
154	12	Sultan Kudarat	Tacurong City	Upper Katungal

	Region	Province	LGU	Barangay
155	Caraga	Agusan del Norte	Butuan City	Dumalagan
156	Caraga	Dinagat Islands	San Jose	Luna
157	Caraga	Surigao del Norte	Alegria	Gamuton
158	Caraga	Surigao del Norte	Surigao City	Cagniog
159	CAR	Apayao	Calanasan	Poblacion
160	CAR	Apayao	Luna	Bayugao, Turod
161	CAR	Apayao	Pudtol	Swan
162	CAR	Benguet	La Trinidad	Induyan, Alno
163	CAR	Ifugao	Alfonso Lista	Poblacion
164	CAR	Kalinga	Tabuk City	Dilag
165	NCR	Metro Manila	Navotas City	Tanza (PhilEcology System Corp.)
166	ARMM	Lanao del Sur	Wao	Katutungan

Source: NSWMC

Based on information provided by NSWMC, the number and percentage of LGUs with access to sanitary landfills have increased from 63 LGUs (3.9%) in 2008 to 228 LGUs (14%) in 2015. (See **Table 3c**).

Parameter	Year								
Parameter	2008	2010	2013	2014	2015	2016	2017	2018	
Population of the Philippines	88,543,800	92,337,852	98,449,090	100,420,642	101,883,764	103,320,222	104,918,090	106,512,074	
Number of operating SLFs	21	29	72	86	101	118	135	166	
Number of LGUs with access to SLFs	63	78	130	154	228	248	293	353	
Percent of LGUs with access to SLFs	3.9%	4.8%	8.0%	9.4%	14.0%	15.17%	17.93%	21.78%	

Table 3c.	Number and	percentage	of LGUs with	access to	SLFs, 2008-2018.
		percentage			OLI 5, 2000 2010.

Source: NSWMC

#### Clustered landfills

Clustering is an option in which small LGUs can pool their resources into setting up a common solid waste disposal facility. It also enables them to attain large economies of scale and reduce the cost per unit of solid waste disposal. The main constraints, however, are finding a host LGU and the social acceptability of the proposed facility.

#### National Solid Waste Management Status Report [2008-2018]

Forms of clustering in the Philippines include private sector-led ventures that offer their landfills where LGUs dispose their residual waste upon payment of tipping fees. There also LGUs that host a facility that serve neighboring municipalities for a fee.

Inter-municipal clustering has been successful in the province of South Cotabato. The establishment of a common Category 2 SLF at Barangay Colongulo, Surallah, South Cotabato (**Figure 3p**) in 2011 was financially supported by the provincial government with technical assistance from DENR and United States Agency for International Development (USAID). The facility is now being shared among the municipalities of Surallah, Norala, T'boli, Banga, Sto. Nino and Lake Sebu. Earlier, in 2008, a Category 1 SLF was established in Barangay Kinilis, Polomolok as a result of the partnership between the LGU and Dole Philippines, Inc. The facility also serves neighboring municipalities.



Figure 3p. Clustered sanitary landfill in Surallah, South Cotabato

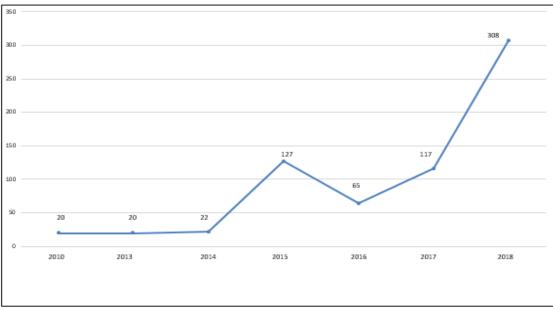
#### 3.6 Local Solid Waste Management Plans

RA 9003 requires the preparation of 10-year SWM plans by provinces, cities and municipalities consistent with the national SWM Framework. These plans shall include all the components identified in the law.

The plans are subject to annual review and updating by the provincial, city or municipal SWM boards. All plans must be approved by the NSWMC. An annotated outline has been prepared by the NSWMC to guide the LGUs on the specific components of the plans as well as to facilitate the review and approval of the plans submitted to NSWMC.

#### Submission and approval of SWM Plans

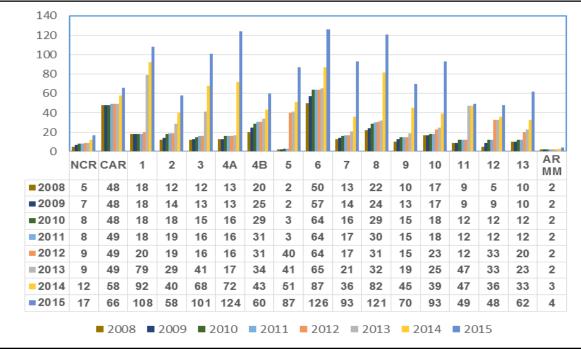
**Figure 3q** shows the number of local SWM Plans approved by the NSWMC. These submitted plans were reviewed and evaluated by the EMB and endorsed to the NSWMC TWG for deliberation. It will be noted that approved plans were more than doubled during the previous year (2018), from 127 in 2017 to 308 in 2018 This is largely due to the more intensified efforts by NSWMC to assist LGUs in plan preparation and finalization.



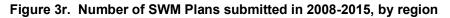
Source: NSWMC



Disaggregated data on the number of submitted plans per region from 2008 to 2015 are shown in **Figure 3r**. It must be noted that regions that were previously lagging in plan submission have accelerated their plan completion efforts towards the end of 2015.

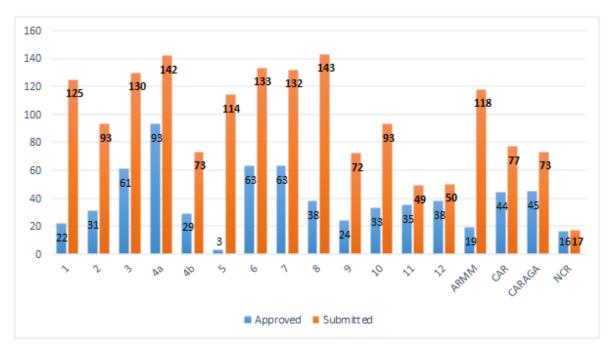


Source: NSWMC



#### National Solid Waste Management Status Report [2008-2018]

Figure 3s shows the percentage of LGUs with submitted plans compared to the approved SWM plans of 2018. In 2018, 100% of LGUs in the NCR, Regions 1, 9, 10, 11, 12, CARAGA and CAR have submitted their 10-year SWM Plans. Except for ARMM, the rest of the regions have 95% compliance rates in terms of submission of plans.



#### Figure 3s. Percentage of LGUs with submitted viz a viz approved SWM Plans in 2018

#### 4. Legal and institutional framework

#### 4.1 Legislations and policies

Over the last 17 years (1999 to 2015), the Philippines has endeavored to improve its management and operation of solid waste through several national laws, rules, regulations, orders, and memoranda on environment, including resolutions and ordinances issued by local government units.

#### The Ecological Solid Waste Management Act (RA 9003)

In 2001, RA 9003, otherwise known as the Ecological Solid Waste Management Act of 2000, was enacted into law declaring the policy of the government to "adopt a systematic, comprehensive, and ecological solid waste management program" in the country.

The ecological solid waste management (ESWM) policy is based on the management of waste in the following hierarchy:

- Source reduction (avoidance) and minimization of waste generated at source
- Reuse, recycling and resource recovery of wastes at the barangay level
- Efficient collection, proper transfer, and transport of wastes by city/municipality

Efficient management of residuals and of final disposal sites and/or any other related technologies for the destruction/reuse of residuals

Provided in RA 9003 and its IRR are mandates and schedules of implementation to be undertaken by provincial, city/municipal, and barangay governments within their jurisdiction. The most important of these include:

- Creation of a Solid Waste Management (SWM) Board (city/municipal and provincial levels)
- Creation of a SWM Committee (barangay level)
- Submission of a 10-year SWM Plan (city/municipal levels)
- Establishment of Materials Recovery Facilities (MRF) per barangay or cluster of barangays and city/municipal centralized MRF
- Closure of open dumpsites and conversion into controlled dumpsites by 2004
   (city/municipal levels)
- Banning of controlled dumpsites by 2006 (city/municipal levels)

#### Other SWM-related laws and policies

There are also relevant laws enacted at the national level that affect the implementation of RA 9003. These are summarized as follows:

*Toxic Substances and Hazardous and Nuclear Waste Act of 1990 (RA 6969).* The act calls for the regulation of and restriction on the importation, manufacture, processing, sale, distribution, use and disposal of chemical substances and mixtures that pose risk and/or injury to health and to the natural environment.

*Local Government Code (RA 7160).* The act devolved certain powers to the local governments units, including enforcement of laws and cleanliness and sanitation, solid waste management, and other environmental matters.

*Clean Air Act of 1999 (RA 8749).* The act directs all government agencies to adopt the integrated air quality framework as a blueprint for compliance. Among its salient provisions are the "polluters must pay" principle, and the prohibition of the use of the incineration method, which is defined as the burning of municipal, biomedical and hazardous waste or the process, which emits poisonous and toxic fumes. The act further mandates LGUs to promote, encourage, and implement segregation, recycling and composting within their jurisdiction. It also required the phasing out of incinerators by July 2003.

*Philippine Clean Water Act of 2004 (RA 9275).* The act provides for the protection, preservation, revival of quality of fresh, brackish and marine waters of the country to pursue economic growth.

*Environmental Awareness and Education Act of 2008 (RA 9512).* The act promotes environmental awareness through environmental education. It integrates environmental education in the school curricula at all levels, public or private, barangay day care and pre-school, and non-formal, vocational, and indigenous learning.

*Renewable Energy Act of 2008 (RA 9513).* The act promotes the development, utilization and commercialization of renewable energy and for other purposes.

Section 30 of RA 9513 provides for the use of "waste to energy" technology subject to require ments of RAs 9003 and 8749 (Clean Air Act). Specifically, waste to energy technology refers to "systems which convert biodegradable material such as but not limited to animal manure or agricultural waste, into useful energy processes such as: anaerobic digestion, fermentation, and gasification, among others, subject to the provisions of the Clean Air Act of 1999 and the Ecological Solid Waste Management Act of 2000".

*Climate Change Act of 2009 (RA 9729).* The act declares as a Philippine policy the adoption of the ultimate objective of the United Nations Framework Convention on Climate Change, which is the stabilization of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

*Code of Sanitation of the Philippines (Presidential Decree [PD] 856).* The decree prescribes sanitation requirements for hospitals, markets, ports, airports, vessels, aircraft, food establishments, buildings, and other establishments. Refuse collection and disposal system in cities and municipalities are described in Chapter XVIII of the law.

*Environmental Impact Assessment Law (PD 1586)*. Approved on June 11, 1978, the law establishes and institutionalizes an environmental impact system where projects to be undertaken would be reconciled with the requirements of environmental quality. This requires proponents of critical projects and projects located in critical areas to secure an environmental compliance certificate from the President or his duly authorized representative. The inclusion of the construction of SLF as a critical project was done later.

*PD 1160.* The law vests authority in Barangay Captains to enforce pollution and environmental control laws. It also deputizes the Barangay Council member and Barangay Zone Chairperson as peace officers.

*Executive Order (EO)* 774. Issued on December 26, 2008 the order calls for the reorganization of the Presidential Task Force on Climate Change, headed by the President, with all cabinet members as members of the Task Force. EO 774 created 13 Task Groups that included solid waste management.

*The Philippine Disaster Risk Reduction and Management Act of 2010.* In relation to Climate Change program, the law supports the 3 R's of SWM in promoting to consumers avoidance of using the disposable and unnecessary products in order to avoid or reduce the solid wastes generated by house-holds, commercials, institutional, industries and all levels of stakeholders.

Of significance also are several national policy frameworks that support solid waste management in the country, namely:

*National Solid Waste Management Framework (NSWMF) 2004.* As provided for under RA 9003, the NSWMF outlines the preferred approach to support the adoption of systematic, comprehensive and ecological solid waste management program. It focuses on the waste management hierarchy that emphasizes waste avoidance and minimization through reuse, recycling, composting and resource recovery.

*National Framework Strategy on Climate Change (NFSCC)* - Chapter 8: Mitigation pillar on waste management (2010-2022). Pursuant to RA 9729 (Climate Change Act of 2009), the Climate Change Commission passed NFSCC, which finds the waste sector as the third largest greenhouse gas emitter. In response to this, NFSCC identifies SWM as among the six (6) priority sectors with strategic priorities:

- Enhanced implementation of RA 9003
- Promotion of best practices in waste management, involving all categories of waste
- Strengthen the advocacy of proper waste management as a tool towards better communicating and mobilizing the public to address climate change

*Philippine Development Plan (PDP) 2011-2016 Chapter 9*: Sustainable and climate-resilient environment and natural resources; Chapter 10: Accelerating infrastructure development. The Plan's infrastructure development program ensures equitable access to infrastructure services. The government aims to accelerate the provision of safe, efficient, reliable, cost–effective, and sustainable infrastructure. Under its 'infrastructure' component, the PDP aims to increase the percentage of the number of LGUs served by SLFs to 7.76% by 2016.

Meanwhile, the PDP's environmental protection program mitigates the demands arising from development, population expansion, poor environmental protection and climate change, through integrated approaches. Targets by 2016 include an increase in waste diversion rate by 50% through reuse, recycling and composting and other resource recovery activities; closure and rehabilitation of all existing dumpsites; and full operationalization of National/Regional Ecology Centers.

Philippine National Solid Waste Management Strategy (NSWMS) (2012-2016). In relation to the NSWMF, a National Solid Waste Management Strategy (NSWMS) was developed through a consultative process. The NSWMS has the following components:

- bridging policy gaps and harmonizing policies;
- capacity development, social marketing and advocacy;
- sustainable SWM financing mechanisms;
- creating economic opportunities;
- support for knowledge management on technology, innovation and research;
- organizational development and enhancing inter-agency collaboration;
- compliance monitoring, enforcement and recognition, and;
- cross cutting issues on good governance, caring for vulnerable groups and disaster and climate change risks through SWM

As the overarching law governing ecological SWM implementation in the Philippines, RA 9003 mandates all LGUs to cease using dumpsites as final repository for solid wastes. Along with the closure and rehabilitation of existing dumps, LGUs would have to put up sanitary landfills as the legitimate mode of disposal.

Various national environmental legislations also require wastewater or leachate control measures to prevent surface and groundwater contamination as well as proper gas management systems to reduce GHG emissions and occupational health and safety risks. At the same time, RA 9003 requires the diversion of at least 25% of waste away from disposal facilities, which can be done through the establishment of composting and MRF.

#### NSWMC resolutions and corresponding administrative orders

Since 2002, the NSWMC has passed supplementary guidelines in the form of NSWMC Resolutions to enhance the understanding of RA 9003 provisions. Some of these have been further detailed as DENR Administrative Orders (DAO). Hereunder are the resolutions issued by the NSWMC.

Resolution number	TITLE	Date Signed/Signatory
1 Series of 2002	Delegation of Certain Functions of the NSWMC Chairman to the DENR Regional Executive Directors and Prescribing Appropriate Clearances for Solid Waste Management Facilities	Date of Approval: April 24, 2002 Signed by DENR Sec. Heherson T. Alvarez
2 Series of 2003	A Resolution Requesting the Provincial Government of Tarlac to Re- consider Its Stand on Accommodating Only Wastes Coming From the Province of Tarlac and the Clark Economic Zone for Disposal at the Clark Sanitary Landfill	Date of Approval was not specified Signed by NSWMC Chair, Sec. Elisea G. Gozun
3 Series of 2004	Supporting the Recommendation by the Metro Manila Development Authority Thru its Council To Her Excellency the President to Disap- prove the Contract Entered into by the Executive Committee of the Presidential Task Force on Waste Management with JANCOM Envi- ronmental Corporation and for Other Purpose	Date of Approval: December 8, 2004 Signed by NSWMC Chairman Sec. Michael T. Defensor
4 Series of 2005	Acceptance and Approval of the Proposed Closure Plan for the Navo- tas Controlled Dump Facility	Date of Approval: June 6, 2005 Signed by NSWMC Chairman Sec. Michael T. Defensor
5 Series of 2005	Adoption of the Guidelines on the Closure and Rehabilitation of Disposal Facilities	Date of approval: December 15, 2005 Signed by NSWMC Chairman Sec. Michael T. Defen- sor
6 Series of 2005	Adoption of the Guidelines on Categorized Disposal Facilities	Date of Approval: December 15, 2005 Signed by NSWMC Chairman Sec. Michael T. Defen- sor
7 Series of 2005	Designation of the Executive Director and Deputy Executive Director of the National Solid Waste Management Commission-Secretariat	Date of Approval: December 15, 2005 Signed by NSWMC Chairman Sec. Michael T. Defensor
8 Series of 2006	Guidelines on the Review and Approval of the 10-year Solid Waste Management Plans of Local Government Units	Date of Approval:2006 NSWMC Chairman: Sec. Angelo T. Reyes
9 Series of 2006	Creation of a Technical Working Committee (TWC) for Phasing Out NEA Products and Packaging Materials	Date of Approval: 2006 Signed by NSWMC Chairman Sec. Angelo T. Reyes
10 Series of 2008	Approval of the NSWMC Work Program with the Corresponding Oper- ational Budget and Request for Subsequent Endorsement to the De- partment of Budget and Management	Date of Approval: January 30, 2008 Signed by NSWMC Chairman Sec. Angelo T. Reyes
11 Series of 2007	Adoption of "LALA" as the Filipino Term for Sanitary Landfill	Date of Approval: July 26, 2007 Signed by NSWMC Chairman Sec. Angelo T. Reyes
12 Series of 2007	Adopting and Approving the Output and Recommendations of the NSWMC-Inter-Agency Technical Working Group (NSWMC-IATWG) on the JANCOM Waste Management Contract	Date of Approval: July 26, 2007 Signed by NSWMC Chairman Sec. Angelo T. Reyes
13 Series of 2008	Adoption and endorsement of the Cost-Sharing Framework for Solid Waste Management (SWM) Services to the NEDA-INFRACOM and other appropriate government agency as deemed necessary	Date of Approval: January 30, 2008 Signed by NSWMC Chairman Sec. Angelo T. Reyes
14 Series of 2009	Designation of the Executive Director of the National Solid Waste Management Commission Secretariat	NSWMC Meeting: December 11, 2008 Signed by NSWMC Chairman Sec. Jose L. Atienza, Jr.
15 Series of 2009	Resolution Creating a National Solid Waste Management Technical Working Group (NSWMC-TWG)	Date of Approval: January 29, 2009 Signed by NSWMC Chairman Sec. Jose L. Atienza, Jr

#### Table 4a. List of selected NSWMC Resolutions and corresponding Administrative Orders (AO)

Resolution number	TITLE	Date Signed/Signatory
16 Series of 2009	Resolution to Include Department of Education (Dep-Ed) as Member of the Technical Working Group (TWG) of the National Solid Waste Management Commission	Date of Approval: January 23, 2009 Signed by NSWMC Chairman: Sec. Ange- lo T. Reyes
17 Series of 2009	Resolution Adopting the 3-Strike Policy	(Presented and agreed to be adopted by the NSWMC during the TWG meeting on January 23, 2009) Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
18 Series of 2009	Resolution Adopting the Japan International Cooperation Agency (JICA) Recy- cling Industry Development Study	(Presented and agreed to be adopted by the NSWMC during the TWG meeting on February 20, 2009) Signed by Sec. Jose L. Atienza, Jr.
19 Series of 2009	Resolution Adopting the Guidelines on the Phasing Out of Non-Environmentally Acceptable (NEA) Products and Packaging Materials	Date of Approval: June 29, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
20 Series of 2009	Resolution Replacing One (1) NGO Representative to the Non-Environmentally Acceptable Product (NEAP) and Packaging Materials Technical Working Com- mittee (TWC)	Date of Approval: June 24, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
21 Series to 23 Series of 2009	Resolution allowing the LGUs a month grace period to comply with RA 9003 after attending the F1-Zero Basura Caravan Resolution approving the publication of the list on non-complying LGUs	
24 Series of 2009	Resolution for Department of Interior and Local Government (DILG) to Issue a Circular to Tap All Barangays to Submit Status of Compliance Regarding the Establishment of Materials Recovery Facilities (MRFs)	Date of Approval: June 25, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
25 Series of 2009	Draft Resolution on Adoption of Modified Guidelines on Landfill Sitting Criteria and Suitability Assessment Procedure	
26 Series of 2009	Resolution Adopting Eco-Park as an Option to Sanitary Landfill ("Eco-park be an option for waste disposal instead of Sanitary Landfill")	Date of Approval: June 25, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
27 Series of 2009	Resolution Allowing the Conduct of Provincial Ecological Solid Waste Manage- ment Summit	Date of Approval: June 25, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
	Resolution allowing the Establishment of Metro Manila Recycling Plant at the Smokey Landfill with the Use of Refuse Derived Fuels (RDF) Technology	
	Resolution allowing the use of Patented Steam Reduction Technology as an Alternative Method for Ecological Solid Waste Management	
28-33 Series of 2009	Resolution for the Banning of Thin Film Single Use Plastic Bags	
	Resolution to adopt full implementation and Operationalization of the National Ecology Center (NEC)	
	Resolution Adopting the Extended Producers/Products Responsibility (EPR) Program	

Resolution number	TITLE	Date Signed/Signatory
34 Series of 2009	Resolution affirming the NSWMC Secretariat to Perform the Functions of the National Ecology Center	Date of Approval: September 30, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
35 Series of 2009	Resolution Adopting the Guidelines on Deputation of Solid Waste Management Officers	Date of Approval: October 9, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
36 Series of 2009	Resolution Adopting the Criteria for Accreditation of an Individual and Individual Member of an Organization as Solid Waste Management Experts	Date of Approval: October 9, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
37 Series of 2009	Resolution Authorizing the Philippine Information Agency (PIA) to Prepare the Communication Plans for NSWMC	
38 Series of 2009	Resolution to Commend Dr. Christopher Silverio for his Invaluable Contribution as DOST Representative to National Solid Waste Management Commission	Date of Approval: October 9, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
39 Series of 2009	Resolution Amending NSWMC Resolution 8 re: Guidelines on the Review and Approval of the 10-yr Solid Waste Management Plans of Local Government Units (LGUs)	Date of Approval: October 9, 2009 Signed by NSWMC Chairman: Sec. Jose L. Atienza, Jr.
40 Series of 2010	Resolution to Adopt the Guidelines for the Campaign of Basura-Free Elections 2010	Date of Approval: February 10, 2010 Signed by NSWMC Chairman: Sec. Eleazar P. Quinto
41 Series of 2010	Resolution Approving the 10 Year SWM Plans of Various LGUs Maria Aurora, Aurora Tineg, Abra Sampaloc, Quezon Solano, Nueva Viscaya Sta. Cruz, Ilocos Sur Zamboanga City Boracay, Malay, Aklan	Date of Approval : March 4, 2010 Signed by NSWMC Chairman: Sec. Horacio C. Ramos
42 Series of 2010	Designation of the Executive Director of the National Solid Waste Management Commission-Secretariat	Date of Approval: March 4, 2010 Signed by the Chairman: Sec. Horacio C. Ramos
43 Series of 2010	Resolution to Commend Assistant Secretary GERARDO V. CALDERON as Outgoing Executive Director of National Solid Waste Management Commission Secretariat	Date of Approval: March 4, 2010 Signed by NSWMC Chairman: Sec. Ho- racio C. Ramos
44 Series of 2010	Resolution to Commend Dr. METODIO PALAYPAY for his Invaluable Contribu- tion as NGO Representative to National Solid Waste Management Commission	Date of Approval: May 20, 2010 Signed by NSWMC Chairman: Sec. Ho- racio C. Ramos
45 Series of 2010	Resolution to Commend ATTY. ZOILO L. ANDIN, JR. as Outgoing Executive Director of the National Solid Waste Management Commission Secretariat	Date of Approval: May 20, 2010 Signed by NSWMC Chairman: Sec. Ho- racio C. Ramos
46 Series of 2010	Resolution to Commend Ms. LUZ SABAS for Her Invaluable Contribution as Non Government Organization Founder to the Implementation of RA 9003 known as Ecological Solid Waste Management	Date of Approval: May 20, 2010 Signed by NSWMC Chairman: Sec. Ho- racio C. Ramos
47 Series of 2010	Resolution Adopting the National Framework Plan for the Informal Sector in Solid Waste Management	Date of Approval: May 20, 2010 Signed by NSWMC Chairman: Sec. Ho- racio C. Ramos

Resolution number	TITLE	Date Signed/Signatory
48 Series of 2010	Resolution Creating the Multi-Sectoral Committee for Capacity Development of the Informal Waste Sector	Date of Approval: May 20, 2010 Signed by NSWMC Chairman: Sec. Horacio C. Ramos
49 Series of 2010	Resolution for the National Solid Waste Management Commission Members to Approve the 10 year Solid Waste Management Plans of Local Government Units (LGUs)	Date of Approval: October 22, 2010 Signed by NSWMC Chairman: Sec. Ramon JP Paje
50 Series of 2010	Adoption of the Guidebooks on Formulation of Solid Waste Management Plan, Safe Closure of Disposal Sites, Solid Waste Disposal Design Operation and Management	Date of Approval: October 22, 2010 Signed by NSWMC Chairman: Sec. Ramon JP Paje
51 Series of 2010	Resolution Adopting the National Ecology Center (NEC) and Regional Ecology Centers (RECs) Operational Guidelines	Date of Approval: October 22, 2010 Signed by NSWMC Chairman: Sec. Ramon JP Paje
52 Series of 2010	Resolution Adopting Prototype City/Municipal Ordinance Regulating the Estab- lishment and Operation of Junkshops and Provide Corresponding Penalties	Date of Approval: October 22, 2010 Signed by NSWMC Chairman: Sec. Ramon JP Paje
53 Series of 2010	Granting Authority to the EMB Director to issue Notice to Sue to Non-Complying LGUs to Section 37 of RA 9003	Date of Approval: October 22,2 010 Signed by NSWMC Chairman: Sec. Ramon JP Paje
54 Series of 2010	Resolution Requesting the Department of Budget and Management to Create Plantilla Positions for Executive Director, Deputy Executive Director and Staff of the National Solid Waste Management Commission Secretariat at the Environ- mental Management Bureau, Central Office	Date of Approval: October 22,2 010 Signed by NSWMC Chairman: Sec. Ramon JP Paje
55 series of 2013	Resolution for the NSWMC members to approve the ten-year SWM Plans of the LGUs	Date of Approval: January 24, 2013 Signed by Commissioner , Vice Chair, NSWMC and Representative, Recy- cling Sector
56 series of 2013	Resolution Amending DENR Administrative Order No. 9 Series of 2006, Other- wise known as General Guidelines in the Closure and Rehabilitation of Open Dumpsites and Controlled Dump Facilities	Date of Approval: January 24, 2013 Signed by Commissioner , Vice Chair, NSWMC and Representative, Recycling Sector
57 series of 2013	Resolution Creating a Philippine Methane Partnership Technical Working Group (PMP-TWG)	Date of Approval: January 24, 2013 Signed by Commissioner , Vice Chair, NSWMC and Representative, Recycling Sector
58 series of 2013	Resolution on the Application for registration by Mundo Verde Corporation with the Board of Investments of the Department of Trade and Industry (BOI-DTI)	Date of Approval: January 24, 2013 Signed by Commissioner , Vice Chair, NSWMC and Representative, Recycling Sector
59 series of 2013	Adopting the National Solid Waste Management Strategy (2012-2016)	Date of Approval: January 24, 2013 Signed by Commissioner , Vice Chair, NSWMC and Representative, Recycling Sector
60 series of 2013	Guidelines for Mandatory Solid Waste Segregation at Source, Segregated Col- lection and Recovery, and Prescribing Fines and Penalties for Violation thereof	Date of Approval: January 24, 2013 Signed by Commissioner , Vice Chair, NSWMC and Representative, Recycling Sector
61 series of 2013	Resolution to Enjoin the Metro Manila Council (MMC) to Effect the Massive and Continuous Clean-Up of Metro Manila in Accordance with the Provisions of RA 9003	Date of Approval: July 5, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
62 series of 2013	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Alabel, Sarangani	Date of approval: July 5, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014

Resolution number	TITLE	Date Signed/Signatory
63 series of 2013	Resolution for the Institutionalization of the National Solid Waste Management Commission and the Offices Created Under it Particularly the Secretariat and the National Ecology Center	Date of approval: July 5, 2013 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
64 series of 2013	Adoption of Modified Guidelines on Site Identification Criteria and Suitability Assessment for Sanitary Landfills	Date of approval: July 5, 2013 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
65 series of 2013	Resolution Providing Conditional Approval of the Ten-Year Solid Waste Man- agement Plans of Local Government Units	Date of Approval: October 3, 2013 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
66 series of 2013	Resolution Designating the Chief of the Solid Waste Management Division as OIC-Executive Director of the National Solid Waste Management Commission Secretariat	Date of Approval: December 13, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
67 series of 2013	Resolution Approving the 10-year SWM Plans of the following LGUs: Municipal- ity of Monkayo, Compostela, Valley and Municipality of Maragusan, Compostela Valley	Date of Approval: December 13, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
68 series of 2013	Adoption of the Guidelines on the Clustering of Local Government Units (LGUs) on Common Ecological Solid Waste Management (ESWM) System	Date of Approval: December 13, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
69 series of 2013	Resolution on the Nationwide Implementation of the Establishment of an Appro- priate Ecological Solid Waste Management System for Home Owners Associa- tion (HOAs), Public Markets and Commercial Establishments and the Ecosavers Program for Public Schools	Date of Approval: December 13, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
70 series of 2013	Adoption of Guidelines Prescribing Deadlines on the Submission of Ten-Year SWM Plans	Date of Approval : December 13, 2013 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Representative, Recycling Sector
71 series of 2013	Resolution Endorsing the Nomination of Deputy Executive Director Eligio T. Ildefonso as OIC-Executive Director of the NSWMCS upon the Retirement of the OIC-Executive Director, Emelita C. Aguinald	Date of Approval: December 13, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
72 series of 2013	Resolution Endorsing the Declaration of every month of January as Zero Waste Management Month in the Philippines	Date of Approval: December 13, 2013 Signed by the Chairman: Sec. Ramon JP Paje Date Signed: February 7, 2014
73 series of 2013	Amending Resolution Number 65 providing conditional approval to the Ten-Year SWM Plans of Local Government Units	Date of Approval: February 11, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Representative, Recycling Sector
74 series of 2013	Resolution Mandating the Local Government Units (LGUs) to strictly implement RA 9003	Date of Approval: February 11, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Repre- sentative, Recycling Sector
75 series Of 2014	Resolution for the establishment /development of the 10-storey National Ecology Center Pursuant to RA 9003	Date of Approval: April 3, 2014 Signed by USec. Manuel D. Gerochi on June 9, 2014

Resolution number	TITLE	Date Signed/Signatory
76 series of 2014	Resolution Adopting the Enforcement Policy for the Barangays	Date of Approval: April 3, 2014 Signed by USec Manuel D. Gerochi on June 9, 2014
77 series of 2014	Governing Rules and Regulations of the National Solid Waste Management Commission (NSWMC)	Date of Approval: April 29, 2014 Signed by USec Manuel D. Gerochi
78 series of 2014	Governing Rules and Regulations of the National Solid Waste Management Commission-Technical Working Group (NSWMC-TWG)	Date of Approval: April 29, 2014 Signed by USec Manuel D. Gerochi
79 series of 2014	Amending Resolution No. 26 series of 2009, Changing the Term Ecology Park or Eco-Park to Ecological Solid Waste Management Park or Eco-SWM Park and Providing Clarifications on its Use	Date of Approval: April 29, 2014 Signed by USec Manuel D. Gerochi
80 series of 2014	Amending Resolution No. 39, Guidelines on the Review and Approval of the 10- year Solid Waste Management Plans of Local Government Units (LGUs)	Date of Approval: April 29, 2014 Signed by USec Manuel D. Gerochi
81 series of 2014	Resolution Approving the Ten-Year Solid Waste Management Plans of Munici- palities of Allacapan, Baggao and Lal-Io in the Province of Cagayan and Munici- pality of Quirino in the Province of Isabela	Date of Approval: April 29, 2014 Signed by USec Manuel D. Gerochi
82 series of 2014	Resolution Adopting the NSWM Comprehensive Plan as basis for Budget Proposal	Date of Approval: June 24, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
83 series of 2014	Resolution supporting the programs of NSWMC submitted to NEDA INFRACOM for Public Investment in CY 2015	Date of Approval: June 24, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Representative, Recycling Sector
84 series of 2014	Resolution in Adopting the Implementing Guidelines of the National Ecosaver's Program	Date of Approval: June 24, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Repre- sentative, Recycling Sector
85 series of 2014	Resolution creating a Multi-Agency Sub-Group (MASG) to develop the guide- lines on the Waste Analysis and Characterization Study (WACS) and Computa- tion of Waste Diversion	Signed by Commissioner Date of Approv- al: June 24, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Repre- sentative, Recycling Sector
86 series of 2014	Resolution creating a Multi-Agency Sub-Group (MASG) to develop the guide- lines On Composting, Compost Quality and Market Development (CCQMD)	Date of Approval: August 12, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
87 series of 2014	NSWMC Resolution granting the extension of the Conditional Approval of the Ten-Year SWM Plan of the Municipality of Carmona, Cavite	Date of Approval: August 12, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
88 series of 2014	NSWMC Resolution granting the extension of the Conditional Approval of the Ten-Year SWM Plan of the Municipality of the City of Malabon, Metro Manila	Date of Approval: August 12, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Representative, Recycling Sector

90 series of 2014	Resolution creating a Multi-Agency Sub-Group (MASG) to develop the guide- lines on the establishment and operation of best available Waste to Energy (WTE) Technologies for the Country	Date of Approval: August 12, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
91 series of 2014	Resolution creating a Multi-Agency Sub-Group to develop/adopt Solid Waste Management Training Modules and Formulate a Training/Accreditation/ Certification System for SWM Practitioners and Experts	Date of Approval: August 12, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
92 series of 2014	Resolution Creating a Sub-Group to prepare the Communications Plan and the Vision and Mission for NSWMC	Date of Approval: August 12, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
93 series of 2014	Resolution Approving the Ten-Year SWM Plan of Municipalities in Laguna, Rizal and Quezon	Date of Approval: September 30, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
94 series of 2014	NSMWC Resolution Granting the Extension of the Conditional Approval of the Ten-Year Solid Waste Management Plan of the City of Manila	Date of Approval: September 30, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
95 series of 2014	NSMWC Resolution Granting the Extension of the Conditional Approval of the Ten-Year Solid Waste Management Plan of the City of Navotas	Date of Approval: September 30, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Repre- sentative, Recycling Sector
96 series of 2014	Resolution Authorizing the Presiding Officer of the NSWMC September 30, 2014 Meeting to sign and attest on behalf of the Chairman the Resolutions Approved in 2010-2013	Date of Approval: September 30, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
97 series of 2014	NSWMC Resolution granting the Extension of the Conditional Approval of the Ten-Year Solid Waste Management Plan of the Municipality of Camaligan, Camarines Sur	Date of Approval: October 28, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Representative, Recycling Sector
98 series of 2014	NSWMC Resolution granting the Extension of the Conditional Approval of the Ten-Year Solid Waste Management Plan of the Municipality of San Miguel, Bohol	Date of Approval: October 28, 2014 Signed by Commissioner Crispian N. Lao , Vice Chair, NSWMC and Representative, Recycling Sector
99 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Nabunturan, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
100 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Pantukan, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
101 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Compostela, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
102 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of New Bataan, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
103 series of 2014	Resolution Granting the request for extension of the Submission of Ten-Year Solid Waste Management Plans to Local Government granted with Conditional Approval	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
104 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Laak, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
105 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Mabini, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
106 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Maco, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
107 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Mawab, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
108 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Montevista, Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
109 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Prov- ince of Compostela Valley	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
110 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Bacarra, Province of Ilocos Norte	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
111 series of 2014	Resolution approving the Ten-Year Solid Waste Management Plan of the City of Bacoor, Province of Cavite	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
112 series of 2014	Resolution Creating A Multi-Agency (MASG) on Recognition and Awards	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
113 series of 2014	Resolution Granting the request for extension of the Submission of Ten-Year Solid Waste Management Plans to Local Government Units with Final Notice	Date of Approval: December 10, 2014 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
114 series of 2015	Resolution Supporting and Endorsing to TESDA Board the Training Regula- tions for Garbage Collection NC I and Training Regulations for Sanitary Landfill Operations NC III	Date of Approval: January 27, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
115 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Calauan, Province of Laguna	Date of Approval: January 27, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
116 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Victoria, Province of Tarlac	Date of Approval: January 27, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
117 series of 2015	Resolution Endorsing the Implementation to the Memorandum of Agreement between the NSWMC through the DENR and the Tarlac College of Agriculture for a Satellite Ecology Center	Date of Approval: January 27, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
118 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Baco- lod City, Province of Negros Occidental	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
119 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Manapla, Province of Negros Occidental	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
120 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of La Carlota, Province of Negros Occidental	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
121 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Hinobaan, Province of Negros Occidental	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
122 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Enrique B. Magalona, Province of Negros Occidental	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
123 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of the City of Bago, Province of Negros Occidental	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
124 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Bamban in the Province of Nueva Viscaya	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
125 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Parañaque	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
126 series of 2015	Granting Authority to the EMB Director to issue Notice to Sue to Non-Complying LGUs to RA 9003	Date of Approval: February 24, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
127 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Valen- zuela City, Metro Manila	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao, Vice Chair, NSWMC and Representative, Recycling Sector
128 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Solana, Cagayan	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
129 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of San Jose City, Nueva Ecija	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
130 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Municipality of Malvar, Batangas	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
131 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Luisiana, Laguna	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
132 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Carmona, Cavite	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
133 series of 2015	Resolution Adopting the Full Waste Recovery and Recycling Program	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
134 series of 2015	Resolution providing the Final Non-Extendable Deadline to Submit the Ten-Year Solid Waste Management Plans of Local Government Units	Date of Approval: March 31, 2015 Signed by Commissioner Crispian N. Lao Vice Chair, NSWMC and Representative, Recycling Sector
135 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Caraga, Davao Oriental	Date of Approval: April 28, 2015 Signed by USec. Manuel D. Gerochi on April 28, 2015
136 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Sulop, Davao del Sur	Date of Approval: April 28, 2015 Signed by USec. Manuel D. Gerochi on April 28, 2015
137 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Matanao, Davao del Sur	Date of Approval: April 28, 2015 Signed by USec. Manuel D. Gerochi on April 28, 2015
138 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Pilar, Bataan Province	Date of Approval: April 28, 2015 Signed by USec. Manuel D. Gerochi on April 28, 2015

Resolution number	TITLE	Date Signed/Signatory
139 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Maria Aurora, Aurora Province	Date of Approval: April 28, 2015 Signed by USec. Manuel D. Gerochi on April 28, 2015
140 series of 20105	Resolution Approving the Ten-Year Solid Waste Management Plan of San Juan City, Metro Manila	Date of Approval: May 26, 2015 Signed by USec. Manuel D. Gerochi
141 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality La Paz, Tarlac Province	Date of Approval: May 26, 2015 Signed by USec. Manuel D. Gerochi
142 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Trento, Agusan del Sur Province	Date of Approval: May 26, 2015 Signed by USec. Manuel D. Gerochi
143 series of 2015	Resolution Engaging the Metropolitan Manila Development Authority (MMDA) in the Review and Evaluation of 10 Year SWM Plans of LGUs in Metro Manila	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
144 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Roxas, Province of Isabela	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
145 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Rosario, Province of La Union	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
146 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Panabo, Province of Davao del Norte	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
147 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Mabalacat, Province of Pampanga	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
148 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Panabo, Province of Davao del Norte	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
149 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Dinalupihan, Bataan	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
150 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Conception, Romblon	Date of Approval : June 30, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
151 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Hinundayan, Southern Leyte	Date of Approval : July 28, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
152 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Municipality of Rizal, Laguna	Date of Approval : July 28, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
153 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Antipolo, Rizal	Date of Approval : July 28, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
154 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Manila	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao , Vice Chairman, NSWMC and Rep- resentative, Recycling Sector
155 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Mariano,Isabela	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
156 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Mateo, Isabela	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
157 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Plaridel, Bulacan	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
158 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Guagua,Pampanga	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
159 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Motiong, Samar	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
160 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Limasawa, Southern Leyte	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
161 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Angono, Rizal	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
162 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Sta. Maria, Davao Occidental	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
163 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Burgos, Surigao del Norte	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
164 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Remedios Trinidad Romualdez, Agusan del Norte	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization

Resolution number	TITLE	Date Signed/Signatory
165 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Lanuza, Surigao del Sur	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
166 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Malabon, Metro Manila	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
167 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of San Fernando, Pampanga	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
168 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Rafel, Bulacan	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
169 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Las Piñas, Metro Manila	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
170 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Pasig, Metro Manila	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
171 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of San Carlos, Negros Occidental	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
172 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Cabanglasan, Bukidnon	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
173 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Las Nieves, Agusan del Norte	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
174 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Barobo, Surigao del Sur	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
175 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Vigan, Ilocos Sur	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
176 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Jabonga, Agusan del Norte	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
168 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Rafel, Bulacan	Date of Approval : August 25,2015 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organization
169 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Las Piñas, Metro Manila	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
170 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Pasig, Metro Manila	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
171 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of San Carlos, Negros Occidental	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
172 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Cabanglasan, Bukidnon	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
173 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Las Nieves, Agusan del Norte	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
174 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Barobo, Surigao del Sur	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
175 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Vigan, Ilocos Sur	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
176 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Jabonga, Agusan del Norte	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
177 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Magallanes, Agusan del Norte	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
178 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Sta. Cruz, Davao del Sur	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector
179 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Miguel, Bulacan	Date of Approval : September 29, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Representa- tive, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
180 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Lian, Batangas	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
181 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of City of Muntinlupa	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
182 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Surallah, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
183 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Banga, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
184 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Norala, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
185 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Sto. Niño, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
186 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Tantangan, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
187 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Lake Sebu, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
188 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of T'boli, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
189 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of Koron- adal City, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
190 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Polomolok, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
191 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Tupi, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
192 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Tampakan, South Cotabato	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
193 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of SOUTH COTABATO PROVINCE	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
194 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Nicolas, Ilocos Norte	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
195 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Laur, Nueva Ecija	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
196 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of Angeles City, Pampanga	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
197 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of City of San Jose del Monte, Bulacan	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
198 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of Baguio City, Benguet	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
199 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Aliaga, Nueva Ecija (pending submission of copy of the Resolution from the Sangguniang Bayan for their final disposal to Metro Clark SLF including its budget allocation within 90 days)	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
200 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Sta. Rita, Pampanga	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
201 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Sta. Maria, Bulacan (pending submission of (1) corrected waste diversion target (2) annual budget including the MOOE and Investment Cost correspondent to the adjustment made to the waste diversion target)	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
202 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Aloran, Misamis Occidental (pending submission of adjusted waste diversion target extracted from the en- tirety of the total waste generation including programs and strategies and annual budget reflective of the activities)	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
203 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Dangcagan, Bukidnon	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
204 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Leyte, Leyte	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
205 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of La Paz, Agusan del Sur	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
206 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Tagbina, Surigao del Sur	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
207 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Ballesteros, Cagayan Date of Approval : October 27, 2015 Signed by: , Vice Chairman, NSWMC	Date of Approval : October 27, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
208 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Alaminos, Pangasinan Province	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
209 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Tangalan, Province of Aklan	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
210 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Navotas, Metro Manila	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
211 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Nasipit, Agusan del Norte	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
212 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Cagdianao, Province of Dinagat Islands	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
213 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Alitagtag, Province of Batangas	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
214 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Aritao, Province of Nueva Vizcaya	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
215 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Taguig, Metro Manila	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
216 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Esperanza, Agusan del Sur	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
217 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Biñan, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
218 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Pila, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
219 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Sta. Rosa, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
220 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Cabuyao, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
221 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of Calamba, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
222 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of San Pablo City, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
223 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the City of San Pedro, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
224 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Pagsanjan, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
225 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Pangil, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
226 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Siniloan, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
227 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Alaminos Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
228 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Lumban, Province of Laguna Date of Approval : November 25, 2015 Signed by: , Representative, Recycling Industry and Vice Chairman, NSWMC	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
229 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Pakil Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
230 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Victoria Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
231 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Famy, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
232 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Liliw, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
233 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Cavinti, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
234 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Mabitac, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
235 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Paete, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
236 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Majayjay, Province of Laguna	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
237 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Moncada, Province of Tarlac	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
238 series of 2015	Resolution Adopting the Study on Life Cycle Analysis (LCA) of Selected Pack- aging Products (Carrying and Polystyrene)	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector

Resolution number	TITLE	Date Signed/Signatory
239 series of 2015	Resolution Creating A Multi-Agency Sub-Group (MASG) for the Updating of the Recycling Market Development Study	Date of Approval: November 25, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
240 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Candaba, Province of Pampanga	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
241 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Macrohon, Southern Leyte	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
242 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Lupon, Davao Oriental	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
243 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Lupon, Davao Oriental	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
244 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of San Isidro, Davao Oriental	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
245 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Tarragona, Davao Oriental	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
246 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Dinagat, Dinagat Islands	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
247 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Tubajon, Dinagat Islands	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
248 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Munic- ipality of Loreto, Dinagat Islands	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
249 series of 2015	Resolution Supporting and Endorsing to TESDA Board the Training Regulations for Sanitary Landfill Operators (NC II)	

Resolution number	TITLE	Date Signed/Signatory
250 series of 2015	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Baganga, Davao Oriental	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
251 series of 2015	Resolution Authorizing the Official Representative from Non-Government Or- ganization (NGO) to the National Solid Waste Management Commission, to Issue Endorsements and Represent the Commission to the Environmental Om- budsman Pertaining to Non-Compliance of LGUs within the Provisions of RA 9003	Date of Approval: December 11, 2015 Signed by: Commissioner Crispian N. Lao, Vice Chairman, NSWMC and Repre- sentative, Recycling Sector
252 series of 2016	Resolution Adopting the Guidelines in the Selection of a Representative from the Recycling Sector	Date of Approval : January 26, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
253 series of 2016	Resolution providing Citations and Special Recognition to Acknowledge Excep- tional Contribution and Unwavering Support to Local Government Units in the Implementation of the RA9003	Date of Approval : January 26, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
254 series of 2016	Resolution Adopting the Memorandum of Understanding to Strengthen the Im- plementation of Waste Recovery Program with the Private Sector	Date of Approval : January 26, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
255 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Makati City, Metro Manila	Date of Approval : February 23, 2016 Signed by: Manuel D. Gerochi, CESO I, Undersecretary for Policy, Planning and Foreign Assisted Programs
256 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Manda- luyong City, Metro Manila	Date of Approval : February 23, 2016 Signed by: Manuel D. Gerochi, CESO I, Undersecretary for Policy, Planning and Foreign Assisted Programs
257 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Marikina City, Metro Manila	Date of Approval : February 23, 2016 Signed by: Manuel D. Gerochi, CESO I, Undersecretary for Policy, Planning and Foreign Assisted Programs
258 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Pasay City, Metro Manila	Date of Approval : February 23, 2016 Signed by: Manuel D. Gerochi, CESO I, Undersecretary for Policy, Planning and Foreign Assisted Programs
259 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Calocan City, Metro Manila	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
260 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Baras, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
261 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Cainta, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
262 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Cardona, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC

Resolution number	TITLE	Date Signed/Signatory
263 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Rodriguez, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
264 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of San Mateo, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
265 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Tanay, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
266 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Binangonan, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
267 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Morong, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
268 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Jala-jala, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
269 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Pililia, Province of Rizal	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
270 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Magdalena, Province of Laguna	Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
270 A	Resolution Approving the Ten-Year Solid Waste Management Plan of the Mu- nicipality of Magdalena, Province of Laguna	Date of Approval : August 30, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
271 series of 2016		Date of Approval : March 29, 2016 Signed by: Crispian N. Lao, Representa- tive, Recycling Industry and Vice Chair- man, NSWMC
481 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Lemery, Batangas	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organiza- tions, NSWMC
482 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of City of Balanga, Bataan	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organiza- tions, NSWMC

Resolution number	TITLE	Date Signed/Signatory
483 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Mariveles, Bataan	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
484 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Isulan, Sultan Kudarat	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
485 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of San Jose, Dinagat Islands Province	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
486 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Hinatuan, Surigao del Sur	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
487 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Munici- pality of Kltcharao, Agusan del Norte	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
487 A	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Kltcharao, Agusan del Norte	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
488 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Buenavista, Agusan del Norte	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
489 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Santiago, Agusan del Norte	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
490 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Dapa, Surigao del Norte	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
491 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Surigao City, Surigao del Norte	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC
492 series of 2016	Resolution Approving the Ten-Year Solid Waste Management Plan of Municipal- ity of Roseller T. Lim, Zamboanga Sibugay	Date of Approval : April 26, 2016 Signed by: Romeo G. Hidalgo, Repre- sentative, Non-Government Organizations, NSWMC

Resolution number	TITLE	Date Signed/Signatory
669 series of 2016	Resolution Adopting the Guidelines Governing the Establishment and Operation of Waste to Energy Facilities for Municipal Solid Wastes	Date of Approval: June 9, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
670 series of 2016	Resolution Endorsing the Second National Integrated Waste Management Exhi- bition on June 21-24, 2016	Date of Approval: June 9, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
671 series of 2016	Resolution Approving the Ten-Year SWM Plan of Bauan Province of Batangas	Date of Approval: June 9, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
672 series of 2016	Resolution Approving the Ten-Year SWM Plan of San Francisco, Agusan del Sur	Date of Approval: June 9, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
673 series of 2016	Resolution Approving the Ten-Year SWM Plan of Rosario Province of Batangas	Date of Approval: June 9, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
674 series of 2016	Resolution Approving the Ten-Year SWM Plan Province of Batangas	Date of Approval: June 9, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
759 series of 2016	Resolution Approving the Ten-Year SWM Plan Province of Rizal	Date of Approval: July 26, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
760 series of 2016	Resolution Approving the Ten-Year SWM Plan of Jaen, Nueva Ecjia	Date of Approval: July 26, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
761 series of 2016	Resolution Approving the Ten-Year SWM Plan of Libjo, Dinagat Islands	Date of Approval: July 26, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
762 series of 2016	Resolution Approving the Ten-Year SWM Plan of San Jose, Batangas	Date of Approval: July 26, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
763 series of 2016	Resolution Approving the Ten-Year SWM Plan of Minalin, Pampanga	Date of Approval: July 26, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
764 series of 2016	Resolution Authorizing the Office of the Solicitor General to represent and/or deputize a Legal Counsel or Representative to represent the National Solid Waste Management Commission on Present Actions Filed and Future Actions to be Prosecuted Against Local Government Units that Violate Provisions of RA 9003, otherwise known as the Ecological Solid Waste Management Act of 2000	Date of Approval: July 26, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
782 series of 2016	Resolution Approving the Ten-Year SWM Plan of Sindangan, Zamboanga del Norte	Date of Approval: August 30, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
783 series of 2016	Resolution Approving the Ten-Year SWM Plan of Cuenca, Batangas	Date of Approval: August 30, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
784 series of 2016	Resolution Approving the Ten-Year SWM Plan of Lobo, Batangas	Date of Approval: August 30, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
785 series of 2016	Resolution Approving the Ten-Year SWM Plan of San Juan, Batangas	Date of Approval: August 30, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
792 series of 2016	Resolution Approving the Ten-Year SWM Plan of Kalamansig, Sultan Kudarat	Date of Approval: September 26, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
793 series of 2016	Resolution Approving the Ten-Year SWM Plan of Tarlac Province	Date of Approval: September 26, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
794 series of 2016	Resolution Adopting the State of the Brown Environment for the Solid Waste Management Sector	Date of Approval: September 26, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
817 series of 2016	Resolution Approving the Ten-Year SWM Plan of Cabadbaran City, Agusan Del Norte	Date of Approval: November 3, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
818 series of 2016	Resolution Approving the Ten-Year SWM Plan of Padre Burgos, Southern Leyte	Date of Approval: November 3, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
819 series of 2016	Resolution Approving the Ten-Year SWM Plan of Maddela, Quirino	Date of Approval: November 3, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
771-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Iguig, Cagayan	Date of Approval: November 3, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
819 – A series of 2016	Resolution Approving the Ten-Year SWM Plan of Maddela, Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
820 series of 2016	Resolution Approving the Ten-Year SWM Plan of Province of Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
821 series of 2016	Resolution Approving the Ten-Year SWM Plan of Aglipay, Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
822 series of 2016	Resolution Approving the Ten-Year SWM Plan of Diffun, Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
823 series of 2016	Resolution Approving the Ten-Year SWM Plan of Saguday, Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
308-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Cabarroguis, Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
497-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Maddela, Quirino	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
652-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Libagon, Southern Leyte	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
287-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Pintuyan, Southern Leyte	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
535-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Province of Dinagat Islands	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
828 series of 2016	Resolution Approving the Ten-Year SWM Plan of Province of General Santos City	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
829 series of 2016	Resolution Approving the Ten-Year SWM Plan of Pagadian City, Zamboanga del Sur	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
830 series of 2016	Resolution Approving the Ten-Year SWM Plan of Batangas City, Batangas Province	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
831 series of 2016	Resolution Approving the Ten-Year SWM Plan of Tanauan City, Batangas	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
236 A series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Majayjay, Laguna	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
832 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Sta. Maria, Province of Laguna	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
833 series of 2016	Resolution Approving the Ten-Year SWM Plan of City of General Trias, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
834 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Indang, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
835 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Maragondon, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
836 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Rosario, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
837 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Silang, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
838 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Tanza, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
839 series of 2016	Resolution Deputizing the Metropolitan Manila Development Authority (MMDA) as an implementing agency, as well as its officials and personnel as Solid Waste Management Officers, to enforce provisions of RA 9003 and its Imple- menting Rules and Regulations, and for other purposes	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
538-A series of 2016	Resolution Approving the Ten-Year SWM Plan of City of Dasmariñas, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
692-A Series of 2016	Resolution Approving the Ten-Year SWM Plan of City of Imus, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
840 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Naic, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
841 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of General Emilio Aguinaldo, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao, Vice Chair and Representative, Recycling Industry
537-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Amadeo, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
842 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Mataas na Kahoy, Province of Batangas	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
314-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Magallanes, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
316-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Kawit, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
843 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Ternate, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
844 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Noveleta, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
845 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Alfonso, Prov- ince of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
846 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of General Mariano Alvarez, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
847 series of 2016	Resolution Approving the Ten-Year SWM Plan of City of Cavite, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
848 series of 2016	Resolution Approving the Ten-Year SWM Plan of City of Tagaytay, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
849 series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Bay, Province of Laguna	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
722-A series of 2016	Resolution Approving the Ten-Year SWM Plan of Municipality of Mendez Nuñez, Province of Cavite	Date of Approval: December 13, 2016 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
865 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of La Trinidad, Province of Benguet	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
866 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Janiuay, Prov- ince of Iloilo	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
867 series of 2017	Resolution Approving the Ten-Year SWM Plan of Laguna Province	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
868 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Taytay, Rizal	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
579-A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Hilongos, Leyte	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
581-A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Palo, Province of Leyte	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
648-A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Calbiga, Prov- ince of Samar	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
720-A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Cabucgayan, Province of Biliran	Date of Approval: February 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
877 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of President Carlos P. Garcia, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
740 A series of 2017	Resolution Approving the Ten-Year SWM Plan of City of Bislig, Province of Surigao del Sur	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

Resolution number	TITLE	Date Signed/Signatory
805 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Santo Tomas Province of Davao del Norte	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
879 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Toboso, Prov- ince of Negros Occidental	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
880 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Calanasan, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
881 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Conner, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
882 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Flora, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
883 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Kabugao, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
884 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Luna, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
885 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Pudtol, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
886 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sta. Marcela, Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
774 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Doña Remedios Trinidad, Province of Bulacan	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
887 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Ibajay, Province of Aklan Peoples Concern, DENR	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR
908 series of 2017	Resolution Approving the Ten-Year SWM Plan of City of Tabuk, Province of Kalinga	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and In- digenous Peoples Concern, DENR

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909 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Anda, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
890 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dimiao, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
851 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Trinidad, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
891 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Corella, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
892 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dagohoy, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
893 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Antequera, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
894 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Loay, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
895 series od 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bien Unido, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
896 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Albuquerque, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
897 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Jagna, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
898 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Duero, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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899 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dauis, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
900 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Calape, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
901 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Catigbian, Province of Boho	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
902 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Maribojoc, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
903 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Balilihan, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
904 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Guindulman, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
905 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bilar, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
906 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sikatuna, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
907 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Miguel, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
843 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Ternate, Prov- ince of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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845 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Alfonso, Prov- ince of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
847 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Cavite City, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
692 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Imus City, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
316 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Kawit, Prov- ince of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
722 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mendez Nunez, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
840 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Naic, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
844 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Noveleta, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
848 A series of 2017	Resolution Approving the Ten-Year SWM Plan of City of Tagaytay, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
537 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Amadeo, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
314 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Magallanes, Province of Cavite	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
849 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bay, Province of Laguna	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
868 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Taytay, Prov- ince of Rizal	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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842 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mataas na Kahoy, Province of Batangas	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
802 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Braulio E. Dujali, Province of Davao del Norte	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
878 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Isidro, Province of Davao del Norte	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
910 series of 2017	Resolution Approving the Ten-Year SWM Plan of Province of Apayao	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
911 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Taysan, Prov- ince of Batangas	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
912 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sto. Tomas, Province of Batangas	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
913 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Alicia, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
914 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Lila, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
915 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Isidro, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
916 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Buenavista, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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917 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Clarin, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
918 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Batuan, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
919 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Pilar, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
920 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Carmen, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
921 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Cortes, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
922 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Talibon, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
923 series of 2017	Resolution Approving the Ten-Year SWM Plan of Tagbilaran City Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
790 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Panglao, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
752 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Inabanga, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
924 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sierra Bullones, Province of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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925 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Tubigon, Prov- ince of Bohol	Date of Approval: April 25, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
941 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bontoc, Southern Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
942 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Ricardo, Southern Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
775 A series of 2017	Resolution Approving the Ten-Year SWM Plan of City of Ligao, Province of Albay	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
737 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Binalonan, Province of Pangasinan	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
517 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Liloan, South- ern Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
789 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Hinunangan, Southern Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
717 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Maripipi, Biliran	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
578 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Jaro, Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
421 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Culaba, Biliran	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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645 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Villareal, Samar	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
715 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Kawayan, Biliran	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
716 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Almeria, Biliran	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
461 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Francisco, Southern Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
719 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Biliran, Biliran	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
614 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Catbalogan City, Samar	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
523 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of St. Bernard, Southern Leyte	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
919 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Pilar, Bohol	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
920 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Carmen, Bohol	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
922 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Talibon, Bohol	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

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925 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Tubigon, Bohol	Date of Approval: May 30, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
865 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of La Trinidad, Province of Benguet	Date of Approval: June 27, 2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
291 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Carmen, Prov- ince of Agusan del Norte	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
910 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Province of Apayao	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
872 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Cabagan, Province of Isabela	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
577 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dulag, Prov- ince of Leyte	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
791 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Malitbog, Prov- ince of Southern Leyte	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
911 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Taysan, Prov- ince of Batangas	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
912 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sto. Tomas, Province of Batangas	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
755 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bogo, Province of Cebu	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

Resolution number	TITLE	Date Signed/Signatory
963 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Cortes, Prov- ince of Bohol	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
964 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Laurel, Prov- ince of Batangas	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
965 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mankayan, Province of Benguet	Date of Approval: August 30,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
983 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Francisco, Province of Cebu	Date of Approval: October 24,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
693 A series of 2017	Resolution Approving the Ten-Year SWM Plan of City of Passi, Province of Iloilo	Date of Approval: October 24,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
742 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Banate, Prov- ince of Iloilo	Date of Approval: October 24,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
397 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Tubungan, Province of Iloilo	Date of Approval: October 24,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
387 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Lambunao, Province of Iloilo	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
391 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of New Lucena, Province of Iloilo	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
976 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Pavia, Prov- ince of Iloilo	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
396 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sta. Barbara, Province of Iloilo	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
347 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Kalibo, Prov- ince of Aklan	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
975 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Samal, Prov- ince of Bataan	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
973 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bagac, Prov- ince of Bataan	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
974 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Orion, Province of Bataan	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
972 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Lamut, Prov- ince of Ifugao	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
930 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mayoyao, Province of Ifugao	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
961 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Siocon, Prov- ince of Zamboanga del Norte	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
295 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Prosperidad, Province of Agusan del Norte	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
571 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Remegio, Province of Cebu	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
570 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Ginatilan, Prov- ince of Cebu	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
985 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Cordova, Province of Cebu	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
984 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Consolacion, Province of Cebu	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
852 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sogod, Prov- ince of Cebu	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
982 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Madridejos, Province of Cebu	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
965 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mankayan, Province of Benguet (with Additional Information [AI])	Date of Approval: October 24,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
384 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dueñas, Prov- ince of Iloilo (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
977 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sibalom, Prov- ince of Antique (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
987 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Tabuelan, Province of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
988 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Boljoon, Prov- ince of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
991 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Ronda, Prov- ince of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
989 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Borbon, Prov- ince of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry

Resolution number	TITLE	Date Signed/Signatory
986 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Tudela, Prov- ince of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
402 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Pinamungajan, Province of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
513 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Carmen, Province of Cebu (with AI)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
990 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Alegria, Province of Cebu (with Al)	Date of Approval: October 24, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
1004 series of 2017	Resolution Adopting the Freedom of Information (FOI) Manual of the NSWMC	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
1005 series of 2017	Resolution Adopting the Work Program of the National Solid Waste Manage- ment Commission to Operationalize the National Solid Waste Management Fund	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
959 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mauban, Prov- ince of Quezon (with AI)	Date of Approval: November 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
1001 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mallig, Prov- ince of Isabela (with AI)	Date of Approval: November 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
977 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Sibalom, Prov- ince of Antique (Al submitted)	Date of Approval: November 28, 2017 Signed by: Crispian N. Lao , Vice Chair and Representative, Recycling Industry
384 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dueñas, Prov- ince of Iloilo (with AI)	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
1002 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Tineg, Prov- ince of Abra	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
786 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Tuguegarao City, Province of Cagayan	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR

Resolution number	TITLE	Date Signed/Signatory
519 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Silago, Prov- ince of Southern Leyte	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
965 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Mankayan, Province of Benguet (Al submitted)	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
509 B series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Miagao, Prov- ince of Iloilo (Al submitted)	Date of Approval: November 28,2017 Signed by: Atty. Noel K. Felongco, Under- secretary for Local Government and Indig- enous Peoples Concern, DENR
356 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Caluya, Prov- ince of Antique	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
357 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Laua-an, Prov- ince of Antique	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
392 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Pototan, Prov- ince of Iloilo	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1011 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Igbaras, Prov- ince of Iloilo	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
339 A A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Calinog, Prov- ince of Iloilo	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1012 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Dingle, Prov- ince of Iloilo	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
286 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Zarraga, Prov- ince of Iloilo	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC

Resolution number	TITLE	Date Signed/Signatory
348 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Lezo, Province of Aklan	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
352 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of New Washing- ton, Province of Aklan	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
560 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of San Juan, Province of Abra	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
936 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Bangued, Province of Abra	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
563 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Licuan-Baay, Province of Abra	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1013 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Danglas, Prov- ince of Abra	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1014 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Manukan, Province of Zamboanga del Norte	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
927 A series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Banaue, Prov- ince of Ifugao	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1015 series of 2017	Resolution Approving the Ten-Year SWM Plan of Municipality of Ampatuan, Province of Maguindanao	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1017 series of 2017	Adopting the Guidelines on Composting and Market Development for Compost	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1016 series of 2018	Resolution Approving the Ten-Year SWM Plan of City of Lipa, Province of Ba- tangas	Date of Approval: December 22,2017 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC

Resolution number	TITLE	Date Signed/Signatory
927 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Banaue, Prov- ince of Ifugao	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
560 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of San Juan, Province of Abra	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1013 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Danglas, Prov- ince of Abra	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
563 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Licuan-Baay, Province of Abra	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
936 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Bangued, Prov- ince of Abra	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
565 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of La Paz, Prov- ince of Abra	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
286 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Zarraga, Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
339 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Calinog, Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
384 C series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Dueñas Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
392 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Pototan, Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
395 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of San Rafael, Province of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
357 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Lauan, Prov- ince of Antique	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC

Resolution number	TITLE	Date Signed/Signatory
356 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Caluya, Prov- ince of Antique	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
353 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Anini-y, Prov- ince of Antique	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
352 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of New Washing- ton, Province of Aklan	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
348 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Lezo, Province of Aklan	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
380 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Badiangan, Province of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1010 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Batad, Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
10111 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Igbaras, Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1012 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Dingle, Prov- ince of Iloilo	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1014 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Manukan, Province of Zamboanga del Norte	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1015 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Ampatuan, Province of Maguindanao	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
841 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of General Emilio Aguinaldo, Province of Cavite	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
959 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Mauban, Prov- ince of Quezon	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC

Resolution number	TITLE	Date Signed/Signatory
1032 series of 2018	Resolution Adopting the Partnership with the Philippine Alliance for Recy- cling and Materials Sustainability (PARMS) Adopting the Full Waste Re- covery and Recycling Program	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1033 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Bombon, Prov- ince of Camarines Sur	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1034 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Datu Odin Sinsuat, Province of Maguindanao	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1035 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Parang, Prov- ince of Maguindanao	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1036 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Abdullah Sang- ki, Province of Maguindanao	Date of Approval: February 27,2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
929 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Alfonso Lista, Province of Ifugao	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
504 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Dilasag, Prov- ince of Aurora	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
502 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Dipaculao, Province of Auroa	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
857 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of San Luis, Prov- ince of Aurora	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
303 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Bacnotan, Province of La Union	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
957 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of General Nakar, Province of Quezon	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC

Resolution number	TITLE	Date Signed/Signatory
993 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Mangaldan, Province of Pangasinan	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1001 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Mallig, Prov- ince of Isabela Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DE Undersecretary for Local Governm Units Concerns and Alternate of the man to the NSWMC	
1073 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Lagawe, Prov- ince of Ifugao	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1074 series of 2018	Resolution Approving the Ten-Year SWM Plan of Quezon City	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1075 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Bongabon, Province of Nueva Ecija	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1076 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of General Mamerto Natividad, Province of Nueva Ecija	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1077 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Guimba, Prov- ince of Nueva Ecija	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1078 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Talugtug, Prov- ince of Nueva Ecija	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1079 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Angat, Province of Bulacan	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1080 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Guiguinto, Province of Bulacan	Date of Approval: August 28, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC

Resolution number	TITLE	Date Signed/Signatory
1081 series of 2018	Resolution Establishing the Executive Committee for the Review and De- liberation of the 10-year Solid Waste Management Plans	Date of Approval: September 13, 2018 Signed by: Benny D. Antiporda, DENR Undersecretary for Local Government Units Concerns and Alternate of the Chair- man to the NSWMC
1083 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Morong, Prov- ince of Bataan	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1084 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Orani, Prov- ince of Bulacan	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
653 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Baliuag, Prov- ince of Bulacan	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1082 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Calumpit, Province of Bulacan	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
499 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Hagonoy, Province of Bulacan	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1085 series of 2018	Resolution Approving the Ten-Year SWM Plan of Science City of Muñoz, Prov- ince of Nueva Ecija	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1086 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Quezon, Prov- ince of Nueva Ecija	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1087 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of San Leonardo, Province of Nueva Ecija	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
684 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Floridablanca, Province of Pampanga	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1088 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Lubao, Prov- ince of Pampanga	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1089 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Anao, Province of Tarlac	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC

Resolution number	TITLE	Date Signed/Signatory
1090 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Camiling, Prov- ince of Tarlac	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
313 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Balete, Prov- ince of Batangas	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1091 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Mabini, Prov- ince of Batangas	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1092 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Padre Garcia, Province of Batangas	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1093 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of San Pascual, Province of Batangas	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1094 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Taal, Province of Batangas	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
379 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Anilao, Prov- ince of Iloilo	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
776 A series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of Concepcion, Province of Iloilo	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC
1095 series of 2018	Resolution Approving the Ten-Year SWM Plan of Municipality of San Dionisio, Province of Iloilo	Date of Approval: September 25, 2018 Signed by: Crispian N. Lao, Representa- tive, Recycling Sector and Vice Chairman, NSWMC

### 4.2 Institutional arrangements

Among the provisions of RA 9003 is the establishment of an institutional support mechanism necessary to effectively implement the law. Solid waste management functions are distributed among national, regional and local government entities wherein the participation of relevant stakeholders is highly encouraged.

#### National and regional levels

National level oversight and policy formulation is provided by Sections 4-6 of RA 9003 through the creation of the NSWMC. RA 9003 also creates a NEC under the Commission to provide capacity building services on SWM. The NEC is to be supported by Regional Ecology Centers (RECs) as mandated under Rule V, Section 1 of DAO 2001-34, which is the implementing rules and regulations (IRR) of RA 9003.

### National Solid Waste Management Commission (NSWMC)

The NSWMC is chaired by the DENR Secretary and co-chaired by a representative from the private sector. The DENR-EMB provides secretariat support to the NSWMC, which is headed by an executive director who is nominated by Commission members and appointed by the chairperson.

Under Section 4 of RA 9003, the NSWMC was established with fourteen (14) members from the government sector and three (3) members from the private sector, who have different roles and mandates. The following agencies and organizations are members of the NSWMC:

- Department of Environment and Natural Resources (DENR),
- Department of Health (DOH),
- Department of Agriculture (DA),
- Metro Manila Development Authority (MMDA),
- Department of Science and Technology (DOST),
- Department of Interior and Local Government (DILG),
- Department of Public Works and Highways (DPWH),
- Department of Trade and Industry (DTI),
- Technical Education and Skills Development Authority (TESDA),
- Philippine Information Authority (PIA),
- League of Cities in the Philippines (LCP),
- League of Municipalities in the Philippines (LMP),
- League of Provinces in the Philippines (LPP),
- Liga ng mga Barangay (LnB),
- Non-Government Organization (NGO),
- Recycling Industry,
- Manufacturing and Packaging Industry.

- Non-Government Organization (NGO),
- Recycling Industry,
- Manufacturing and Packaging Industry.

## National Ecology Center (NEC) and the Regional Ecology Centers (RECs)

Section 7 of RA 9003 requires the establishment of a NEC under the Commission, which shall be headed by the Director of the EMB. The NEC shall provide consulting, information, training, and networking services necessary in implementing the Act.

Rule V, Section 1 of DAO 2001-34 also mandates the establishment of RECs, which shall be headed by the EMB Regional Directors in their *ex officio* capacities. The RECs shall maintain a multi-sectoral, multi-disciplinary pool of experts, including those from the academe, business and industry; inventors, practicing professionals, youth, women; and other concerned sectors, who shall be screened according to qualifications set by the Commission.

The IRR stipulates that the NEC and the RECs shall make accessible to the general public all related information generated, collected, recorded, and stored, as well as data for solid waste management plans, the National Framework, the National Status Report, and all other relevant information necessary for ecological SWM.

#### Local government level

RA 7160 stipulates that basic services and facilities shall be provided by the LGUs. The services include the provision of solid waste disposal system or environmental management system and services or facilities related to general hygiene and sanitation.

Section 10 of RA 9003 reiterates these RA 7160 provisions that the LGUs shall be primarily responsible for the implementation and enforcement of the provisions of this Act within their respective jurisdictions. Segregation and collection of solid waste shall be conducted at the barangay level specifically for biodegradable and recyclable wastes, provided that the collection of non-recyclable materials and special wastes shall be the responsibility of the municipality or city.

#### Provincial Solid Waste Management Boards

Section 11 of RA 9003 requires the establishment of Provincial Solid Waste Management Boards (SWMBs). Among its principal functions are: to develop a Provincial SWM Plan from the submitted SWM Plans of the city/municipal SWMBs and ensure that these complement each other; oversee the implementation of the Provincial SWM plans and provide necessary logistical and operational support to its component LGUs; and allow for the clustering of LGUs for the solution of common solid waste management problems.

#### City and Municipal Solid Waste Management Boards

Section 12 of RA 9003 requires the establishment of city or municipal SWMBs, which shall prepare, submit and implement a plan for the safe and sanitary management of solid wastes generated in areas under its geographic and political coverage.

**Table 4b** shows the number of provincial, city and municipal SWMBs that have been created and active in 2010 as well as the status of barangay solid waste management committees (SWMCs) in the Philippines. Usually, the most tangible indication if a SWMB or SWMC has been created is the issued executive order, memorandum or any legal instrument that identifies the members and specifies the roles of each representative. A board or a committee is deemed active when it has produced a local SWM Plan or at least meets regularly within the calendar year to plan, deliberates and issues policies, and monitors the implementation of SWM Plans. **Figure 4a** shows the percentage of compliance of LGUs nationwide.

	Provincial SWM Boards			City/Municipal SWM Boards			Barangay SWM Committees		
Region	Р	Created	Active	C/M	Created	Active	В	Created	Ac- tive
NCR	1*	1	1	17	17	17	1706	1509	No data
CAR	6	6	6	77	77	77	1176	1174	1174
I	4	4	4	125	9	9	3265	No data	No data
II	5	4	3	93	64	49	2311	917	473
III	7	7	3	130	130	34	3102	No data	No data
IV-A	5	5	5	142	123	86	4011	3247	678
IV-B	5	5	5	73	73	35	1458	1457	575
V	6	6	6	114	57	57	3471	177	161
VI	6	6	1	133	123	97	4051	4039	30
VII	4	4	4	132	No data	5	3003	No data	15
VIII	6	3	3	143	95	52	4390	928	262
IX	3	3	3	72	60	50	1904	1300	850
Х	5	3	No da- ta	93	5	No da- ta	2022	48	No data
XI	4	4	3	49	46	28	1162	1152	806
XII	4	4	3	50	40	No da- ta	1195	886	No data
XIII	5	5	5	73	73	18	1311	1310	420
ARMM	5	No data	No da- ta	118	No data	No da- ta	2490	No data	No data
TOTAL	81	70	55	1634	902	520	42028	15461	4270

#### Table 4b. Number of created and active LGU SWM boards and committees in 2010, per region.

Source: NSWMC – Province C/M – City/Municipality B - Barangay \* In the case of NCR, Metro Manila acts as PSWMB. P – Province

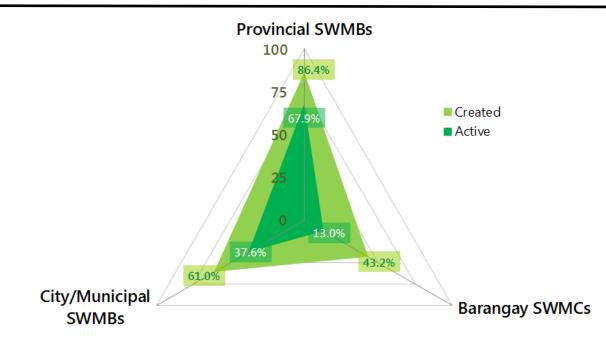


Figure 4a. Percentage of LGUs with created and active SWM Boards/Committees in 2010.

# 5. Other issues

## 5.1 Informal waste sector

Considered as the most vulnerable group in municipal solid waste management, the informal waste sector (IWS) consists mainly of waste pickers in dumpsites and communal waste collection points, informal waste collectors, itinerant waste buyers, small junkshop dealers, "jumpers" (those who jump into collection trucks to recover recyclables), and paleros (garbage trucks crew). Communities who live within or near the SWM facilities are likewise considered vulnerable.

There are thousands of informal waste workers, among them women, children and elderly, who depend on informal waste collection due to poverty and lack of livelihood and education. They are subject to livelihood insecurity, unsafe working conditions and health hazards. Yet, LGUs acknowledge that their work has contributed to savings in waste collection and disposal.

In May 2009, the NSWMC, with support from United Nations Environment Programme and development partners, prepared the National Framework Plan for the Informal Sector in Solid Waste Management, which recognizes their important contribution and hence formulated a holistic plan for their development. LGUs have yet to develop and implement their plans for this sector.

#### 5.2 Special waste management

Special waste, which consists of healthcare waste, waste electrical and electronic equipment (WEEE) and other hazardous materials, accounts for about 1.93% of municipal solid waste.

A large portion of WEEE is either disposed along with the waste stream or recovered through a haphazard recovery process resulting to resource loss and exposure of workers to health hazards.

The DENR-EMB's Hazardous Waste Management Section has finalized its revised procedural manual on hazardous waste management and proposes that certain hazardous components of any waste stream be properly handled according to RA 6969 policies.

## 5.3 Climate change: mitigation and adaptation

Poor waste management practices such as open burning, dumping in creeks and water bodies, as well as non-segregation of waste result in GHG emissions. Landfilling of biodegradables wastes and continued operation of open and controlled dumpsites lead to the release of GHGs. Thus, waste prevention, recycling and composting are effective ways to mitigate climate change.

Similarly, waste management systems and infrastructures may also be prone to disasters. Climate change causes extreme rainfall in some areas and effects can be compounded by uncollected waste, exposing the dangers of mismanaged garbage. This results in massive flooding that cause damages to properties and human lives.

Thus, there is a continuous need to clean up, declog and dredge waterways and climate-proofing infrastructure and waste management facilities in particular.

## 5.4 Regional best practices and lessons learned

#### Region 4A

Creative waste recycling practices have been demonstrated by LGUs and academic institutions across Region 4A:

 Basuranihan – coined from basura (waste) and bayanihan (cooperative effort) – involves individuals or groups who register with the environment and natural resources officer of Sta. Rosa, Laguna to bring recyclable waste materials during the monthly Basuranihan Day. The recyclables are sold to a selected junkshop where points are earned at the same time. The points are used to redeem items and qualify the participants for the top three prizes at yearend.

- Tuition fees of several deserving students in Laguna Bel Air School in Sta. Rosa have been subsidized from the selling of polyethylene terephthalate (PET) bottles collected and dropped into large bins within the campus.
- Eco-Bank project in Calatagan, Batangas was initiated by the LGU in 2010 for all public and private schools. It is being implemented by the Calatagan Ecosavers School Association to raise funds through the selling of recyclable materials. The funds are used to support environmental activities and other school programs.
- The Institute of Silang, Cavite has been using recyclable materials to set up a Scholarship "Thrash Fund". The peso value of the recyclables is recorded in the parents/students' "thrash card" and the accumulated peso value is deducted from the tuition fees of students.
- Diaper composting in Malvar, Batangas began in 2013 to reduce the volume of diapers at the landfill. There are three (3) compost pits where soiled diapers are placed and composted using vermiworms. Vermicasts are distributed free to neighboring towns.

#### Region 5

Magarao, Camarines Sur was declared lone winner in the 4<sup>th</sup> to 6<sup>th</sup> class municipality category in the first Zero Basura Olympics (ZBO) in 2008. ZBO is a nationwide contest to promote the most innovative and effective approaches in managing solid wastes.

The Plastic for Rice program is jointly undertaken by Legazpi City, EMB Region 5 and local junkshop operators to enable people to exchange recyclable wastes for rice or money. Recyclables include paper, bottles, scrap iron, aluminum and special waste such as broken appliances.

## Region 6

The Negros Occidental Provincial Solid Waste Management Board exemplified steadfast financial and technical support to the component municipality SWM Boards. This includes regular quarterly meetings with mayors or their representatives to address concerns and issues related to the implementation of SWM programs and the scheduled monitoring of compliance with RA 9003. Consequently, the province had the highest number of LGUs that submitted SWM plans.

#### Region 7

An alternative waste management program with emphasis on decentralized composting and resource recovery system at source has been scaled-up throughout Cebu City. It features:

- Adoption and strict enforcement of a "no segregation no collection policy" in 2011.
- Recruitment and deployment of Barangay Environmental Officers (BEO) to act as information providers, enforce municipal policies, monitor proper waste collection, assist in establishing MRFs and manage the composting schemes.
- Provision of financial and technical assistance by the city to establish MRFs and composting centers in barangays.
- Strengthened partnership between the city and other stakeholders such as the Women's Network, homeowners associations, local NGOs, waste pickers, academic institutions, private entrepreneurs and the media. Additionally, a series of awareness campaigns was organized with these stakeholders covering all municipalities.
- Promotion of composting schemes at different scales or levels such as households, neighborhoods, barangays, small-scale private businesses and enterprises and institutions.
- Distribution of composting baskets to individual households for the conversion of organic waste into compost used to grow vegetables and herbal plants in their home gardens. The dissemination of composting know-how and follow-up visits are done by the BEOs.
- Barangay composting schemes that are small in scale (less than one ton per day). Compost is produced using fast-reproducing types of worms such as redworms, African nightcrawler and European crawler; and/ or windrow method using native microorganisms. The compost product is either sold or used for the greening of the neighborhood.
- Enterprise-based waste management in which individual entrepreneurs, NGOs and cooperatives in barangays have turned composting and recycling into business ventures. Composting at this level depended on pure organic waste streams such as waste from vegetable, fruit and flower markets and organic waste from business establishments rather than households.
- Bayawan City has established the Bayawan City Waste Management Center, a 21-hectare complex of facilities that include the sanitary landfill, a central material recovery facility, composting facility and a treatment facility for sludge from septic tanks. The LGU is also implementing a "no segregation no collection" policy coupled with the adoption of the sticker system leading to a significant decrease in the volume of daily waste collected.

#### Region 9

Provincial SWM Boards have been established in all three provinces and 82 percent of cities and municipalities have their own SWM Boards. Ninety nine percent (99%) of cities and municipalities have completed their 10-year SWM plans with the assistance of EMB Region 9 and submitted them to the NSWMC for approval.

#### Region 11

All municipalities in the region have created their SWM Boards. Likewise, all municipalities have established their MRFs. Segregation of wastes has been advocated by all LGUs, some of which had started implementing a "no segregation, no collection" policy.

Lower income municipalities are converting their controlled dumpsites into ecological parks instead of sanitary landfills as a cost-effective measure.

#### Region 12

The municipality of Surallah, South Cotabato has established the first successful LGU-initiated clustered SLF in the country. The Category 2 SLF, which was completed in 2011, serves the 7 municipalities of Surallah, Norala, T'boli, Banga, Sto. Nino and Lake Sebu. The facility is financially supported by the South Cotabato provincial government with technical assistance from EMB, Mines and Geosciences Bureau and United States Agency for International Development. This successful undertaking has been gaining recognition and multiple awards.

Surallah has a model Ecopark and set up MRFs with composting facilities at the municipal environment and natural resources office, public market and all barangay centers.

The Category 1 SLF in Polomolok, South Cotabato, which was completed in 2008, was a product of partnership between Polomolok LGU and Dole Philippines. It also serves neighboring municipalities. Polomolok also has a 4-hectare central MRF with 48 twin vermin-beds and recycling shops for waste packaging materials operated by a barangay women's organization. MRFs are present in most of the schools, hospitals, industries and barangay halls.

#### National Capital Region

#### Marikina

In the last quarter of the year 2014, the City Government of Marikina began the Food Waste Truck Program. Through the implementation of the Program, kitchen wastes are being collected from restaurants and food stalls, and are being converted into fertilizers to be used for the City's urban garden.

Further, since the year 2004, the City has also been implementing the Eco-savers Program in the City's elementary and secondary schools to raise environmental awareness among children and youth through their active involvement in the recyclable trading activity. The activity is one of the strategies employed by the City to support its goal to implement segregation at source.

Business establishment owners are also mandated to attend an annual Waste Management Seminar as a prerequisite to the issuance of business permits.

#### Quezon City

Given its land area and population, Quezon City is known as one of the most challenged cities in terms of solid waste management. Although this is the case, the Quezon City Government has advanced its strategies to meet the standards set by RA 9003.

Quezon City implements a "No Segregation, No Collection" Policy, wherein the collection of biodegradable and non-biodegradable wastes is done in separate days every week. Recyclable trading activities such as Ecosavers Program in schools and Waste Market in malls are also being conducted to increase the City's waste diversion rate from final disposal to the Payatas Sanitary Landfill.

Given also that the City Government has contracted private haulers for the collection of solid wastes, the said private haulers are also instructed to incorporate Information, Education and Communication campaign on proper solid waste management during their regular operations in households where the policy is not being strictly followed. This way, the residents are given the right information on how they can improve their waste disposal within their respective homes.

#### Makati

Since the year 2003, the Makati City has been implementing its Solid Waste Management Code which was enacted through Ordinance No. 2003-095. Various strategies on solid waste reduction were included in the Code, wherein the main objective is to increase the waste diversion rate of the City.

Like other cities in Metro Manila, the City also has its own version of a Plastic Ban Ordinance, as well as prohibition on the use of styrofoam and other non-biodegradable packaging materials. To ensure that the said laws are being complied with, a Plastic Monitoring Task Force was also created. Its main task is to monitor the implementation of the said laws in all business establishments within Makati. Recyclable trading activities namely the *Baratilyo ng Basura sa Barangay* and *Weekend Waste Market*, are also being regularly held to provide additional income for constituents while at the same time, to increase the City's solid waste diversion rate.

The City Government conducts regular seminars to update the knowledge of its barangays with regards to the implementation of the Solid Waste Management Code.

#### Muntinlupa

The City Government of Muntinlupa has been implementing the Eco-Waste Management Ordinance since the year 1999, which mandates households, business establishments and other stakeholders to practice waste segregation at source.

Muntinlupa also continues to implement the plastic ban, which is the first of its kind in Metro Manila.

The City Government is also active in the annual celebration of the Live Green Conference, a competition among the City's youth which provides a venue for the expression of environmental perceptions through art. The event aims to increase the awareness of the youth not only on proper solid waste management, but also on the other environmental concerns which the City endeavors to address.

## Taguig City

Taguig City implements *Brigada Eskwela* before the opening of classes in public elementary and secondary schools. The activity does not only aim to conduct massive clean-up operations, but to also emphasize the importance of harmony and unity among students, parents, teachers, and other school personnel in maintaining the cleanliness of school premises.

The City is also focused on decreasing dengue cases through the implementation of *4 o'clock Habit*, during which time clean-up and drainage declogging operations are done. Communities are encouraged to maintain cleanliness of their surroundings through proper disposal of wastes and regular clean-up in their respective households.

# 6. Challenges and recommendations

## Challenges and Recommendations

The SWMD conducted the Regional Qualitative Assessment and Progress Reporting on SWM from October to December 2018. This was participated by the EMB and DENR Regional Offices (ROs), DENR Provincial Environment and Natural Resources Offices (PENROs), City Environment and Natural Resources Offices (CENRO), Provincial Environmental Management Units (PEMUs) and Environmental Monitoring Officers. Below is the summary of issues/challenges raised during the activity as well as the participants' recommendations.

Challenges	Recommendations	
Institutionalization of M/CENROs		
Solid waste management is not the priority of the Local Chief Executive. Not all LGUs have created the Municipal/City Environment and Natural Resources Office with personnel.	The LGUs must already create Municipal Envi- ronment and Natural Resources Office to ad- dress the environment concerns. Institutionalization/creation of municipal/city EN- RO. Meetings/workshop with DILG to identify strategies for creation of MENRO position	
Challenges	Recommendations	
Policy Support		
Absence of Buy Back mechanism by the Manufacturers	Issuance of EO from LCEs on Polluter's Pay Principle	

## Table 5a. Challenges and recommendations on SWM

Challenges	Recommendations	
Capacity Development in the Design of SWM Facilities		
LGU lack of technical expertise in the design and construction of the SLF	LGUs to engage/hire competent Engineers/ personnel to design and oversee the construc- tion of the SLF.	

Challenges	Recommendations	
Social Marketing and Advocacy		
Low awareness on RA 9003 at the com- munity level	Massive and continuing IEC on ESWM	
Discipline/attitude/indifference of the	Strict enforcement of ordinances on SWM; train- ing and deputation of enforcers;	
community for SWM	Provision of incentives for best practicing baran- gays	

Challenges	Recommendations		
SWM Financing			
LGUs do not have available funds for establishment of MRF and procurement of equipment	Provision of appropriate programs of funding insti- tutions that extend loans to LGUs		
3 <sup>rd</sup> to 6 <sup>th</sup> class municipalities cannot af- ford to buy collection vehicle	EMB to link with financial resources (PCSO, etc. collection vehicle as an incentive if the municipality has already approved the 10 year SWM Plan.		

Challenges	Recommendations	
Economic Issues		
Limited markets/recycling plants discour- age many LGUs/individuals to practice Segregation at Source (SAS). Recov- ered recyclable materials still if no value, will eventually go to dumpsites	The NSWMC and the Department of Trade and Industry (DTI) shall make priority the development of the local market for recycled goods.	
Marketability of the Recycled Product/ Diverted Wastes	Training on Marketability of the products through DTI, DA, DOST, TESDA , etc. Coordinate with the SMEs in the respective locali- ties	

Challenges	Recommendations	
Compliance Monitoring and Enforcement		
Disposal Facility		
Closure of LGU's open/controlled dumpsites may lead to the creation of new dumpsites. Municipalities with open dump still on- going including open burning at dumpsite Closed to Open Dumpsites every after Election/new Administration	Concerned government agencies must properly act to ensure strict enforcement of the provisions of RA 9003. LGUs must be advised to establish RCA and sim- ultaneously prepare for the establishment of the SLF.	
MRF		
MRFs are not functional; MRF Opera-	Training on MRF operations; Establishment of functional MRF with composting area, storage for recyclables; identify strategy to make MRF opera- tion sustainable(identify funding source)	
tion	MRF Operation Training- Recording and Manage- ment System	
	Waste Diversion Strategic Planning/Training	

## ACKNOWLEDGEMENT

#### EMB Central Office-DENR

**EMB Regional Offices** 

EMB-DENR National Capital Region **EMB-DENR Cordillera Autonomous Region EMB-DENR Region 1 EMB-DENR Region 2 EMB-DENR Region 3 EMB-DENR Region 4A EMB-DENR Region 4B EMB-DENR Region 5 EMB-DENR Region 6 EMB-DENR Region 7 EMB-DENR Region 8 EMB-DENR Region 9 EMB-DENR Region 10 EMB-DENR Region 11** EMB-DENR Region 12 **EMB-DENR Region 13** 

Department of Environment and Natural Resources Department of Health Department of Interior and Local Government Japan International Cooperation Agency Metro Manila Development Authority World Health Organization

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