



# Philippine Medical Association

**Theme: One PMA, One Health, One Nation**

Member : World Medical Association (WMA)  
Co-Founder : Confederation of Medical Association in Asia and Oceania (CMAAO)  
Medical Association of Southeast Asian Nations (MASEAN)  
Secretariat : PMA Bldg., North Avenue, Quezon City 1105  
Telephone Nos.: (632) 929-7361; 929-6366; 926-2447 Fax: (632) 929-6951  
Mobile: (Membership Hotline) 0917-8221357  
Emails: [info@philippinemedicalassociation.org](mailto:info@philippinemedicalassociation.org); [philmedas@yahoo.com](mailto:philmedas@yahoo.com)  
Website: [www.philippinemedicalassociation.org](http://www.philippinemedicalassociation.org)

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## MEMORANDUM CIRCULAR NO: 2016-03-15-050

**TO :** PMA National Officers and Board of Governors  
Component Society Officers, Specialty Divisions  
Specialty Societies and Affiliate Societies

**SUBJECT :** COMPREHENSIVE ECOLOGICAL SOLID WASTE MANAGEMENT

**DATE :** MARCH 15, 2016

Warmest greetings from the Philippine Medical Association!

We pleased to inform you that the incumbent Board of Governors in the recent board meeting held in General Santos last March 5, 2016 has endorsed the adoption of the Comprehensive Ecological Solid Waste Management for Barangays as recommended by the Committee on Environmental Health and Ecology chaired by Dr. E. Ulysses Dorotheo.

For your ready reference, we have attaced the copy of the Comprehensive Ecological Solid Waste Management Program for Barangays.

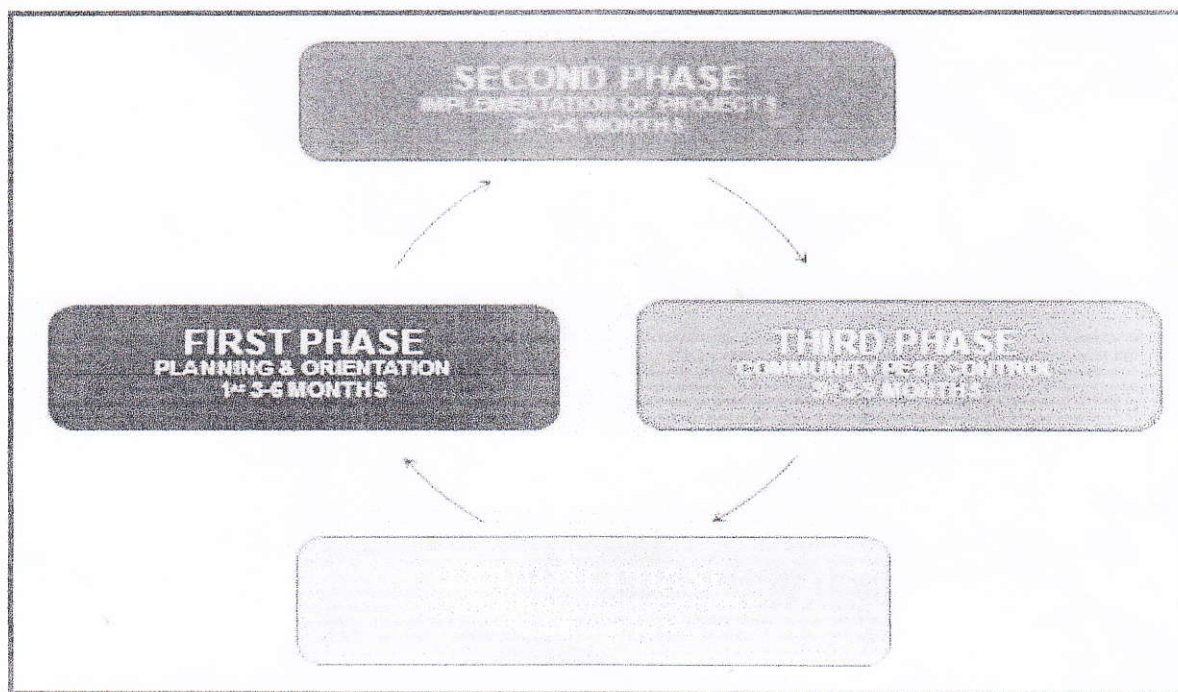
**MARIANNE L. ORDOÑEZ-DOBLES, M.D.**  
Secretary General

Noted By:

**MARIA MINERVA P. CALIMAG, M.D.**  
President

## A COMPREHENSIVE ECOLOGICAL SOLID WASTE MANAGEMENT PROGRAM DESIGNED FOR BARANGAYS

This is a **Comprehensive Ecological Solid Waste Management Program Designed For Barangays** which is divided into four [4] phases as follows in **one-year cycle**:



One-year Cycle

### FIRST PHASE [FIRST 3-6 MONTHS]: PLANNING & ORIENTATION

Republic Act 9003, otherwise known as the **Ecological Solid Waste Management Act**, mandates that the implementation of a **Comprehensive Ecological Solid Waste Management Program** shall be undertaken and implemented at the barangay level.



Hence, the **planning and orientation phase** includes the preparation of the **Comprehensive Solid Waste Management Program** that is designed for barangays. The following are the targets and are involved in this program: 1). **Officials of the barangay**, 2). **Informal leaders**, and 3). **Constituent-residents** themselves. They shall be properly oriented on **Proper Ecological Solid Waste Management** right in their barangay.

**Section 10 of Republic Act 9003** emphasizes the **vital role of the barangays in the segregation at source, sanitary collection, and proper recycling of waste of every barangay household**. Everyone shall be involved; none shall be left behind.

And all punong barangays are directed to create their respective **Barangay Ecological Solid Waste Management Committee [BESWMC]** per the **DILG Memorandum Circular 2001-38** dated April 10, 2001. This shall be headed by the **Barangay Chairman**. And it shall be composed of the following: 1). **Barangay Kagawad** in charge on environmental protection/ health and sanitation; 2). **SK Chairman**; 3). **President of Homeowners Association**; 4). **Public/ Private School Principal**; 5). **President of Public School Parents-Teachers Association**; 6). **Representative of Religious organization**; 7). **President of Association of Business Community**; **Representative from Non-Government Organization**; and 8). **President of Market Vendors Association/ Junk ward owners**.

The **BESWMC** shall undertake programs that shall **reduce, reuse and recycle** household waste in the barangay with the assistance of their **bio-men** and **eco-aides** provided with pushcarts

If in case the barangay fails to implement this circular, its officials shall be held liable for Ombudsman actions.

The good news is the **Zero Waste Recycling Movement of the Philippines Foundation, Inc. [ZWRMPFI]** in cooperation with the **National Committee on Urban Pest Control [NCUPC]** shall assist the barangays as the **resource persons or speakers bureau** in order for them to comply with the requirements of the law.

The **ZWRMPFI** and **NUCPC** shall assist the barangay officials of the barangay to come up with their **Ten-Year Plan on Ecological Solid Waste Management Program** as required by the laws. We shall orient them on how to prepare their plan.

Once completed, the plan shall be incorporated in the **Ten-Year Plan on Ecological Solid Waste Management Program** of the city or municipality.



When improperly managed in the barangay, this waste: 1). can become waste barangay resource; 2). can cause unsanitary conditions, emit foul odor, pollute the surrounding environment including canals and esteros, and cause the flooding; and 3). can create favorable conditions for urban pests such as cockroaches, flies, mosquitoes and rodents to grow, reproduce, and proliferate in numbers. Waste serves as their food, breeding media and hiding materials. These urban pests shall serve as natural mechanical vectors and carriers of various pathogenic micro-organisms causing the diseases and illnesses to constituent-residents.

Per **DILG Memorandum Circular 2000-117** dated **August 30, 2000**, it is therefore the **objective of this phase** to explain the roles of the constituent-residents of the barangay on the proper ecological management of their solid waste through reduce, reuse, and recycle. This can **solve the perennial problem on waste** in the barangay. Common community diseases and illnesses transmitted by these urban pests are also solved.

The **budget in this phase** includes the **conduct of various half-day productive orientation seminars and workshop-seminars** that includes the following:

PARTICULARS	ESTIMATED AMOUNT	TOTAL AMOUNT
1). Seminar materials [such as pencils or ball pens, notebooks or yellow writing padpapers, and brown envelopes] hand-outs, and streamers.	P 60.00/ px x 100 px x 6 sessions	P 36,000.00
2). Transport expense [gasoline] for speakers/ trainers, or their honoraria	P 500 x 6 = P 3,000.00 x 10 persons	30,000.00
3). Merienda [no. of participants to be multiplied by the number of sessions to be conducted]	P 30.00/ px x 100 px x 6 sessions	18,000.00
Total Amount		P 84,000.00

Estimated for 100 participants per session for 6-10 sessions or 600-1,000 participants.



The above **initial expenses** can be taken from the **barangay livelihood fund** as the start up fund.

And we shall also ask assistance from the city/ municipal councilors, from barangay well-to-do residents or from business establishments located within the barangay in accordance to **Presidential Proclamation 990** and it is strengthened by another **Presidential Proclamation 2063**. We shall prepare the solicitation paper.

With the involvement of the barangay officials, we shall orient all constituent-residents of the barangay on **Ecological Solid Waste Management** particularly on sorting at source through seminar-workshops. Every household of the barangay should be able to segregate their waste they generate either into: **Biodegradable Vs Non-biodegradable**; and **Recyclable Vs Non-recyclable**.

The constituent-residents shall **list down the waste that they generate**. Let them understand that biodegradable waste can either be reused, reduced, or recycled per **Republic Act 9003** as follows:

- 1). Left-overs shall be re-used or recycled as human food or as feeds for animals.

**This should be contained in properly covered containers and should be sanitarily handled properly since they can still be eaten or be given to animals as their feeds.**

- 2). All kitchen waste, garden waste, and other non-reusable left-over shall be converted into vinegar, sweets and among others, and organic fertilizer.

**Once residents in barangay re-use or recycle them [as vinegar, sweets, organic fertilizer, among others], home-buying clubs shall be organized for the marketing of their produce.**

- 3). All other recyclable waste shall go to the Material Recovery Facility / Storage [MRF/ MRS] after proper cleaning in exchange for either coupon or cash.

**Recyclable waste includes papers, bottles, tin cans, and plastics. They become resources when properly managed, thus, giving the opportunity to earn livelihood.**

Then various **barangay home-buying clubs** shall be identified based on the waste the barangay residents and business establishments generate.

The barangay identifies the area to set up its **Material Resource Facility/ Storage [MRF/ MRS]** where all household waste, after segregation and cleaning that shall be collected by **barangay bio-men** and **eco-aides** using their pushcarts, is stored for later disposal.

After sourcing funds, **the barangay shall construct its MRF/ MRS**. An official of the barangay shall be assigned to handle all MRF/ MRS matters. Orient the official in-charge of the MRF/ MRS on simple accounting and bookkeeping.

#### **SECOND PHASE [SECOND 3-6 MONTHS]: IMPLEMENTATION OF VARIOUS BARANGAY PROJECTS**

Based on all the waste the barangay constituent-residents and establishments generate, **the barangay can put up home-buying clubs for decoration, vinegar/ sweet making, and Urban Gardening.**

The **objectives of this phase** are as follows: 1). To generate income from generated waste; 2). To organize Home-buying Clubs; and 3). To provide the funds for different community activities.

For **Urban Gardening**, barangay residents **shall find out first all available spaces within the barangay for this project**. This project can be either communal or individual resident.

If the barangay constituent-residents found that there's no space available, this **Urban Gardening** can be done in **containers and movable trays** either on **rooftop, vertical or hanging**.

The **barangay bio-men** and **eco-aides** with their pushcarts shall collect **all biodegradable/ organic waste from the households and establishments**. They shall be processed them into **organic fertilizer**. All recyclable materials shall go the MRF/ MRS after proper cleaning.



We need funds for the following:

**1). Purchase of a communal organic shredding machine.**

**Orient the barangay constituent-residents the proper way of composting or vermicomposting of their organic waste using the VermiLog Technology of MAPECON Green Charcoal [MGCPI] Technology and the use of earthworms [African night crawlers] to decompose the organic wastes, and to produce organic fertilizer.**

**2). Purchase of vegetable seeds.**

**Once the seeds have already generated and grown, the barangay constituent-residents shall be taught on how to make/ prepare their own botanical insecticides for their Urban Gardening project.**

A **Home-buying manager** from barangay officials shall be appointed to do all the marketing of all the produce from **Urban Gardening**. He/ she either gets some percentage or mark ups.

This shall be used as funds for other barangay projects. He/ she shall be oriented on simple marketing techniques to market all the produce that the barangay produces.

**THIRD PHASE [THIRD 3-9 MONTHS]:  
IMPLEMENTATION OF COMMUNITY PEST CONTROL PROJECT**

Per the **DILG Memorandum Circular 2003-186** dated **September 3, 2003** and as required by the **Local Government Code** where the health of the constituent-residents shall be protected, the barangay shall prepare the program of the **Community Pest Control and its corresponding budget** for the for the **whole barangay**.

This is also in accordance to **DOH Health Circular 155 S-1975**.

The **objective of this phase** is to be able to properly prevent and control common illnesses like dengue, malaria, diarrhea, typhus, leptospirosis, among others that are caused or brought about by the different urban pests proliferating in the barangay such as mosquitoes, flies, cockroaches and rodents that barangay constituent-residents may be affected.

The corresponding **budget for 1 month** includes the:

PARTICULAR	TOTAL AMOUNT
1). Purchase of the chemicals and materials <span style="float: right;">P</span> <b>[insecticides, rodenticide and bait attractants] to            be used for the regular spraying and raticiding            activities in the barangay.</b>  <b>[1 liter IGR Insecticide/ barangay @ P 2,640.00 +            1 box @ P 320.00 /box rodenticide]</b>	3,960.00
2). Purchase of 1 unit of knapsack spray equipment.  <b>The spray equipment depreciate or worn out after            5 year of continuous use</b>  <b>[P 5,000/ 5 Years = P 1,000.00 annual depreciation            cost].</b>	1,000.00
<b>TOTAL AMOUNT    P</b>	<b>4,960.00</b>

Per **DOH Health Circular 155 S-1975**, we shall **train volunteer-members in the barangay** on how to undertake the **Barangay-wide Pest Control Program**.

For household personal use inside house, spray insecticide shall be made available in the barangay at barangay cost on consignment basis.

For termite control that requires expertise and tools, we shall refer this to the pest control provider to get a referral commission.



The constituent-residents of the barangay shall **evaluate the various programs and activities** to see if they have uplifted the conditions of the barangay and provided livelihood opportunities to its constituent-residents.

They shall also see if they can be duplicated in other barangays.