

REGION 7 SWM IMPLEMENTATION PERSPECTIVE

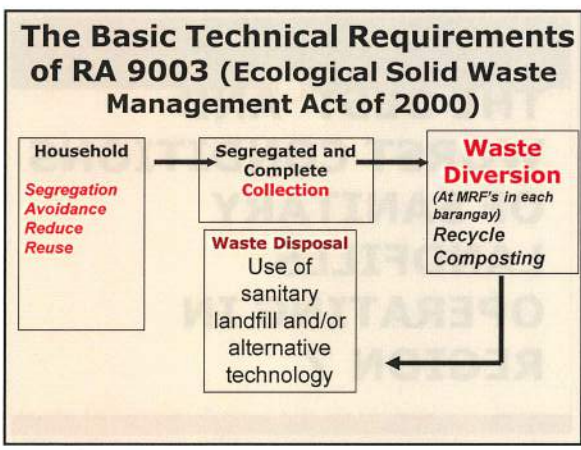
Amancio S. Dongcoy
Regional Solid Waste Management Coordinator
Environmental Management Bureau
Region 7, Banilad, Mandaue
January 28, 2014

Region 7 Covered Local Government Units

- 4 Provinces
- 16 Cities
- 116 Municipalities
- (132 mayors and 4 governors)**
- 3,003 Barangays



Department of Environment and Natural Resources-Environmental Management Bureau



Compliance Status : Environmental Organization

- Solid Waste Management Boards/Committees

Created	Unit	Active	Unit
Provincial SWMB	4	Provincial SWMB	4
City/Municipal SWMB	132	City/Municipal SWMB	28
Barangay SWMC	3003	Barangay SWMC	67

On segregated and complete garbage collection

SEGREGATED (SECTION 21, RA 9003)

COMPLETE (SECTION 48 RA 9003)
(ABSENCE OF LITTERS/GARBAGE PILES WITHIN LGU AREA OF RESPONSIBILITY)

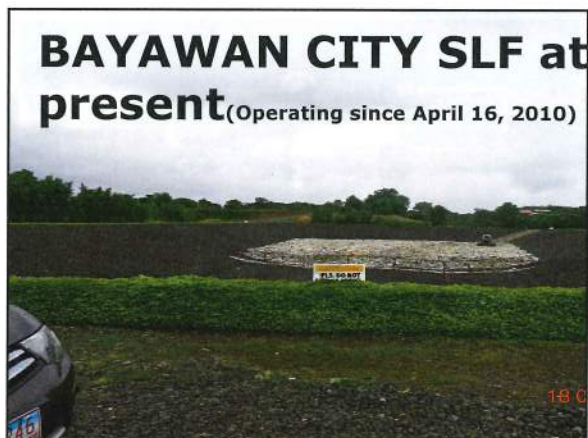


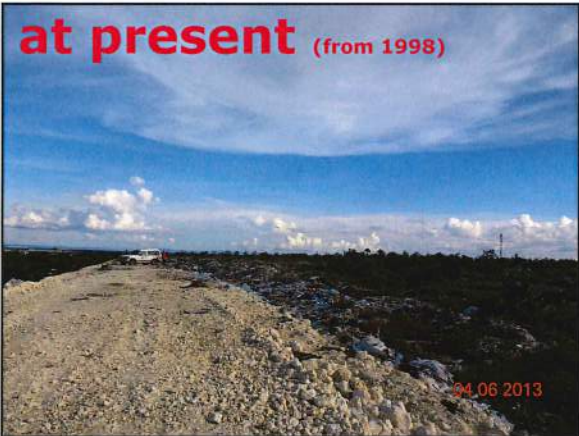
Material Recovery Facilities		
Type	No	Barangays Served
Central MRF (LGU owned)	36	To be determined
Central MRF (Privately owned)	3	
School MRF	88	
Barangay MRF	899	899
Total	1025	1025++



Waste Storage/Disposal Facilities	
LGUs using Open Dumpsites	67
LGU's using Controlled Dumpsites	49
Sanitary Landfill (Operational/LGU owned)	6
LGUs Using Sanitary Landfill	11
Sanitary Landfill (Under construction)	3
Private SLF (In Consolacion, Cebu and Compostela, Cebu	2
LGUs using Residual containment facilities	5
Open dumpsites with ATC	13
Controlled dumpsite with ATC	8

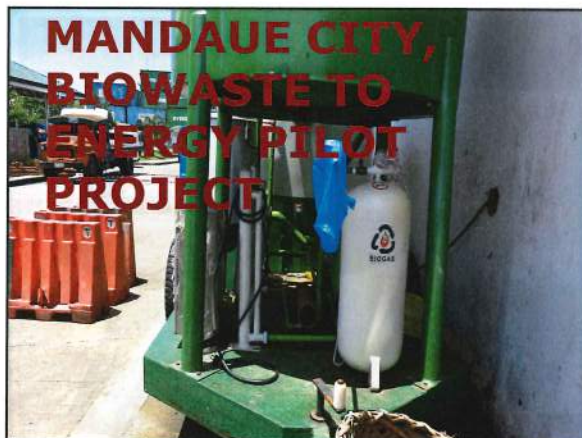
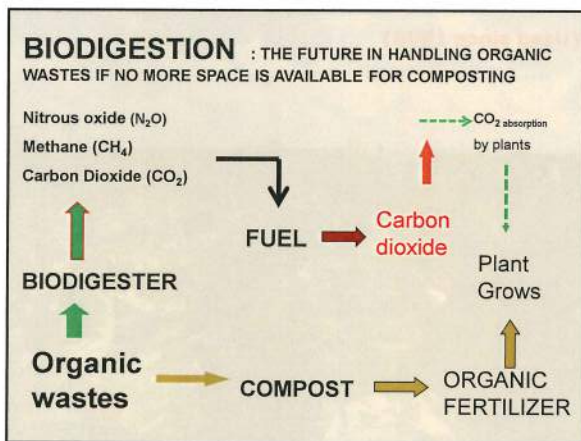
THE BEST AND WORST CONDITIONS OF SANITARY LANDFILLS OPERATING IN REGION 7







**R7 TRENDS
RE-COMPOSTING IN
THE FUTURE WHEN
THERE IS *INCREASE*
IN *POPULATION* AND
DECREASE IN AREA
FOR COMPOSTING**



SEGREGATION OF SOLID WASTES

THE CRITICAL TURNING POINT IN SOLID WASTE MANAGEMENT BUT MOST OFTEN TAKEN FOR GRANTED

Stumbling Blocks

- 1. Attitudes, perception, personal interest of Elected officials**
- 2. *Awareness* and *acceptance* of the Community**
- 3. Ourselves as govt. employees**

EFFORTS BY EMB 7 to overcome THESE STUMBLING BLOCKS

Overcoming the Stumbling Blocks....

For Local Officials the effort to possibly change their attitudes, perception, personal interest towards SWM is basically "courting". For instance we need to wait longer hours for a chance to talk to the mayor

Overcoming the Stumbling Blocks....

To change the behaviour of the community EMB 7 started tapping the services of the Barangay Health Workers as our "foot soldiers" to penetrate each households to preach the need to manage our solid wastes

"Overcoming the Stumbling Blocks....

EMB 7 tried to enlist the services of the 4P's Beneficiaries – by receiving an amount from the government regularly they are virtually part of the government service. Does it offend their rights and feelings if we require them to practice waste management in their household as a condition to receiving financial support from the government?

Overcoming the Stumbling Blocks

To change the behaviour of the government employees we prepared policy guidelines for DENR 7 in line also with the memorandum from DENR Central for us to "walk the talk"

(Section 3e, Rule 21 Implementing Rules and Regulations of RA 9003)

All government offices, at the national and local levels, within the executive, legislation and judicial branches, and government-owned and controlled corporations, shall ensure information, education and actual implementation of waste management programs at the workplaces and work premises, including the pursuit of environment-friendly purchasing policies for their respective offices

POLICY GUIDELINES FOR THE ESTABLISHMENT AND OPERATIONALIZATION OF WASTE MANAGEMENT SYSTEM FOR DENR 7 (APRIL 2013)

POLICY GUIDELINES FOR THE ESTABLISHMENT AND OPERATIONALIZATION OF WASTE MANAGEMENT SYSTEM FOR DENR 7 OFFICES

Vision : DENR 7 to be the center of excellence in waste management
Mission : Operationalization of total waste management system for the Offices of DENR 7 starting at the Regional Office
Scope and area of implementation : This policy shall cover the proper collection, treatment and disposal of solid and liquid wastes generated in Regional Office, PENRO, CENRO and other DENR 7 Offices
Rationale : The existing practices at DENR 7 Regional and field in handling wastes are far from perfect and ideal. Hence, the Policy Guidelines for the Establishment and Operationalization of Waste Management System for DENR 7 Offices is developed DENR 7 Regional and field offices
Legal bases for the establishment of the policy guidelines :
 (1) RA 9003 - Ecological Solid Waste Management Act of 2000
 (2) RA 8749 - Philippine Clean Air Act of 1989
 (3) RA 8774 - Philippine Clean Water Act of 2004
 (4) RA 6969 - Toxic and Hazardous and Nuclear Waste Control Act of 1990
Mandated Activities under RA 9003 (Ecological Solid Waste Management Act) :
 (a) Segregation of garbage at source (households, schools, hospitals, factories, business establishments, and others).
 (b) Garbage collection, should be segregated and complete. Collecting means biodegradable and non-biodegradable waste is provided. The absence of litter and piles of garbage in public/private places, drainage canals, roads, water bodies and other areas is an evidence that collection of waste is complete.
 (c) Diversion of wastes. Section 30 of RA 9003 requires the diversion of wastes from the disposal sites through composting, recycling and other resource recovery activities. Each barangay or cluster of barangays is required to construct and operate material recovery facilities (MRFs) that will receive biodegradable wastes for composting and mixed non-biodegradable wastes for final segregation, reuse and recycling.

1 | Head Office Policy Guidelines for Waste Management System for DENR Offices
 2013 9/4/13

(d) Storage/Disposal of Residual Wastes. Disposal of wastes is the last option under RA 9003 and section 32 provides that residual wastes should be transferred to a dump area, storage, or disposal facility of sanitary landfill in relation to RA 8975. Dumping lamps which contain the toxic mercury shall be left unbroken and kept in safe storage pending the existence of environmentally appropriate treatment/disposal facility. Burning of wastes as a mode of disposal is prohibited in RA 9003 and RA 8749 (Philippine Clean Air Act) hence as a policy, burning of wastes should likewise be banned inside DENR offices.

Wastewater Management/Disposal
 RA 8774 regulates the disposal of wastewater to the environment to prevent water pollution and prescribed the penalties for violators. The sources of water pollution most common among offices of DENR are the control rooms, washing from food preparation and steaming of kitchen utensils particularly in the canteen and the respective offices in cases when the employee visited to eat in their working area.
 Another source of wastewater are the laboratories of the Environmental Management Bureau and the Mines and Geosciences Bureau. The wastewater from these laboratories possibly contained toxic components hence required complete treatment prior to disposal.

General Approaches
 The following general approaches shall be implemented to attain the purpose of this policy, namely:

- (1) Establishment and operationalization of material recovery system (MRS) for the solid and liquid wastes in each source within the DENR 7 premises;
- (2) Onsite treatment of liquid wastes; and
- (3) Waste minimization program.

Sources of liquid and Solid Wastes Considered in this Policy Guidelines:

1. Office of the Regional Executive Director (ORED)
2. Legal Division
3. Administrative and Finance Division (DENR)
4. Environmental Management Bureau (EMB)
5. Environmental Research and Development Service (ERDS)
6. Forest Management Service (FMS)
7. Land Management Service (LMS)
8. Mines and Geosciences Bureau (MGB)
9. Protected Area Wildlife and Coastal Zone Management Service (PAWCZMS)
10. Mour Post
11. Daycare Center and
12. Canteens

2 | Head Office Policy Guidelines for Waste Management System for DENR Offices
 2013 9/4/13

Part I

Handling of Solid Wastes

The general strategy to address the problem in solid waste management and operationalization of material recovery system in each source identified above.
Material Recovery System Defined. A complete system of recovering wastes that can still be of use. From recyclable materials to kitchenyard wastes that can be turned into compost. The MRS shall have four major operational components namely: (a) segregation at source; (b) collection and transport; (c) storage; and (d) marketing of recyclables.

Guidelines in the Establishment and Operationalization of MRS
Segregation of Solid Wastes at Source
 The source as used in this policy guidelines shall mean the sectoral sources identified above. However for the purpose of instilling the proper behavior, each individual employee in the service sector shall be directly involved not just the utility workers. Segregation should start at the moment the wastes are generated by each individual. It means that utility workers need not segregate the utility room wastes until can choose them to health hazards hence they will now directly involve themselves in the further processing of the wastes for the recovery of the valuable materials in the waste stream.

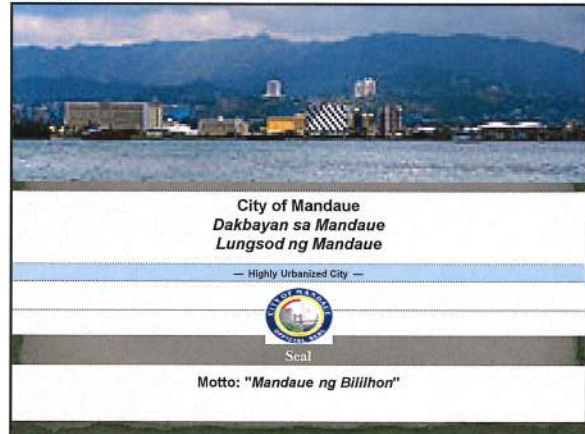
The four types of Solid Wastes

1. **Biodegradable** - can be turned into compost and used in the garden. These include food wastes from the canteens and produced even inside the office working area during parties etc.; wastes from kitchen (fish and animal skin and innards, vegetable and fruit trimmings, tea bags, used paper napkins, etc.) and yard wastes (leaves, twigs, flowers, seeds etc.)
2. **Recyclable/reusable** - can be sold to junkshop or reuse. These include paper (files, envelopes, newspapers, folders, used bond paper, books and papers), metals (aluminum cans from soft drinks, and others), plastic such as PET (containers of bottled water and other plastic materials who retain code identification number 1 to 7 except for styrofoam (code #6) which is not marketable in Cebu to date.
3. **Residual Wastes** - wastes that no longer have economic value hence for disposal. These include used tissue paper, sanitary napkins, diapers, cotton, rags, plastic bags, etc.; and
4. **Special or toxic/hazardous wastes**; wastes that is toxic and hazardous to the environment and human health. These include used fluorescent lamps, car batteries, used oil from motor vehicles, etc.

3 | Head Office Policy Guidelines for Waste Management System for DENR Offices
 2013 9/4/13

- 1. The presence of an enforcement system to compel compliance of non performing elected officials**
- 2. Top to bottom practice of waste management for all government offices (For DENR a fresh reminder from OSEC is desirable)**





Mandaue

The City of Mandaue is a city in the province of Cebu in the Philippines. It is one of the three urbanized cities in the island and forms a part of the Cebu Metropolitan area. Mandaue City is located on the middle eastern coastal region of Cebu, bordering to its right-side are Mactan Island where Lapu-Lapu City is located. Mandaue is connected to Mactan Island via two bridges which includes the Mactan-Cebu Bridge and Marcelo Fernan Bridge. And is bounded south and the west by the Provincial Capital, Cebu City and north by Consolacion which is linked with Cansaga Bay Bridge. The city has an area of about 34.87 square kilometers and has a total population of about 348,693 people.

District

Mandaue City is part of the Sixth District of Cebu joined with the municipalities of Consolacion and Cordova. Although qualified for a lone district in 1991 this was neglected by lawmakers. Mandaue is a highly-urbanized city but is administered with the supervision of the provincial government and Mandaue is politically subdivided into 27 barangays. The barangay is further divided to a sitio.

Area

The city has a total land area of 3,487 hectares or 34.87 square kilometers. Every square kilometer is inhabited by more or less 10,471 people. Land utilization is summarized as follows:

Category	Land Area (hectares)
Residential	872 hectares
Commercial	242 hectares
Industrial	1,695 hectares
Institutional	60 hectares
Parks	24 hectares
Roads	120 hectares
Agricultural	283 hectares

Barangays

Mandaue is divided into 27 barangays.

Population

Population Census		
Year	Pop.	% p.a.
1970	58,579	—
1980	110,043	6.3%
1990	180,288	4.84%
2000	259,728	3.65%
2010	331,320	2.43%
2014 (proj)	365,144	4.54%



OBJECTIVE

To monitor, coordinate, facilitate, and provide assistance in the development and implementation of an improved solid waste management program in the City of Mandaue.

DEALING WITH WASTE IN MANDAUE CITY

Be Wise with Waste:

The Mandaue City's approach to Solid Waste Management

Introduction to Solid Waste Management of Mandaue City

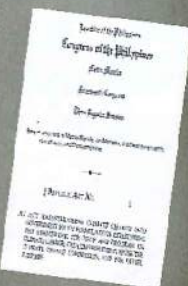
Waste is an issue that affects us all. We all produce waste, people living in Mandaue City throws away household rubbish every year. All this waste has a huge impact on the environment, causing pollution and greenhouse gas emissions that contribute to climate change. The amount of wastes we are creating is increasing and the nature of waste itself is changing. This means waste now contains an increasingly complex mix of materials, including plastics, precious metals and hazardous materials that are difficult to deal with safely.

The solid waste management program of Mandaue City was approached through waste segregation with back-up advocacy and information drive. Our vision is to turn Mandaue City into a clean city "living in an environment that is friendly to man", avoiding waste and using unavoidable waste as a resource wherever possible. The aim is to achieve proper waste management which is the key element in ensuring resource efficiency and the sustainable growth of Mandaue City.

This presentation explains our best practices and how the Solid Waste Management of Mandaue City is working to minimize the negative impacts of waste in the city while maximizing the benefits of good waste management, and the role of individuals, households, business sectors and barangays have to play.

R.A. 9003, ECO-WASTE MANAGEMENT LAW

- Principally, RA 9003 mandates the segregation of wastes at source collection and transfer and prioritizes the wide dissemination and adoption of measures for waste reduction, resource recovery, recycling, and re-use. Its salient features include:
 - Phasing out of open dumping in favor of sanitary landfills and banning of open burning of solid wastes. Non-segregation of wastes is made illegal.
 - Phasing out of non-recyclable consumer packaging materials and non-biodegradable packaging materials such as plastic bag, styrofoam, and aluminum foil.
 - Mandates the establishment of recycling centers at every barangay nationwide.
 - Calls for the integration of solid waste management concerns in the school curriculum starting in the elementary level.
 - Requires the preparation of 10-year solid waste management plans by all local government units.



RESPONSIBILITIES OF BARANGAYS

- Identify markets for materials that are diverted from disposal facilities through re-use, recycling, and composting, and other environment-friendly methods
- Enact ordinances that will ensure that sound waste management practices are established and sustained in the community and aid in the implementation and enforce the provisions of RA 9003 such as establishment of Local Solid Waste Management Fund (Local Fund)
 - Strictly impose sanctions for the violation of environmental rules and ordinances
 - Impose Fees, through SWM Boards, for collection and segregation of biodegradable, compostable and reusable wastes from households, commerce, other sources of domestic wastes and for the use of barangay MRF's.
- Create a Barangay Solid Waste Management Committee
- Set up a Materials Recovery Facility
- Collect only biodegradable, recyclable, compostable and reusable wastes.



Status of Mandaue City Dumpsite



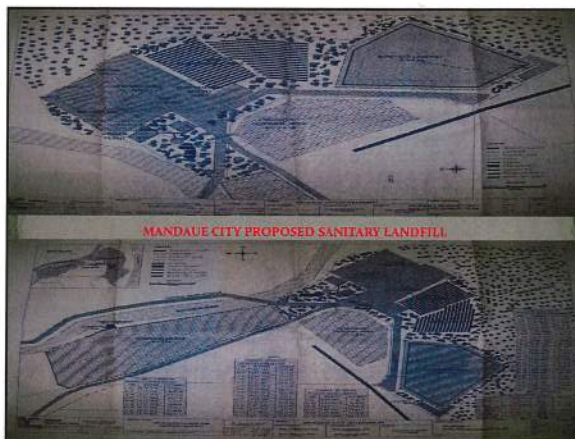
DUMPSITE PARTIAL CLOSURE

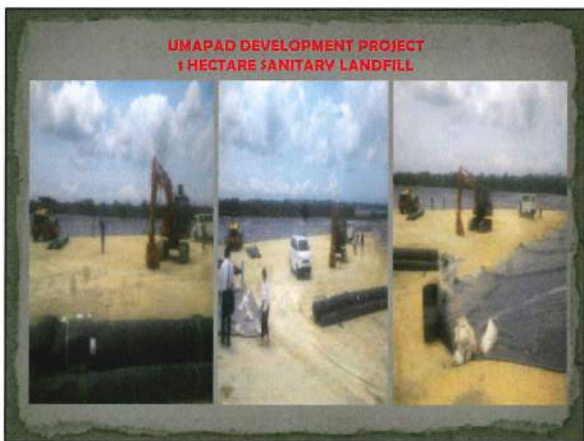
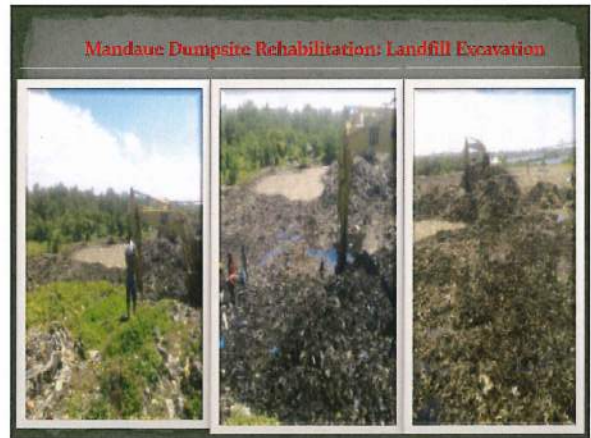


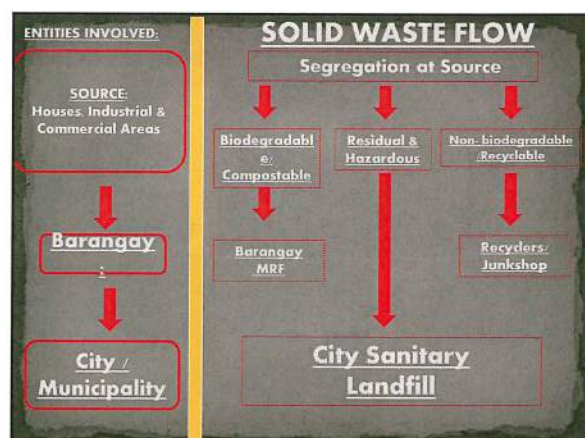
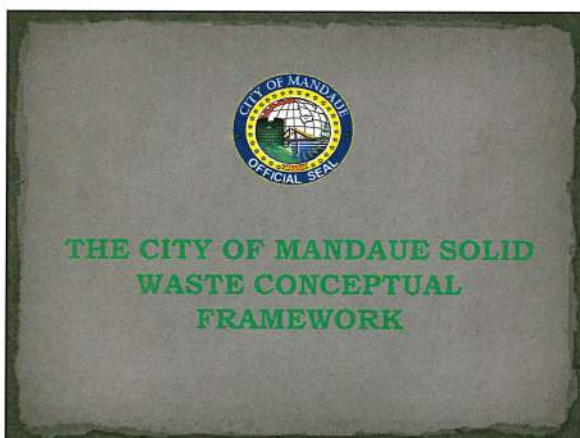
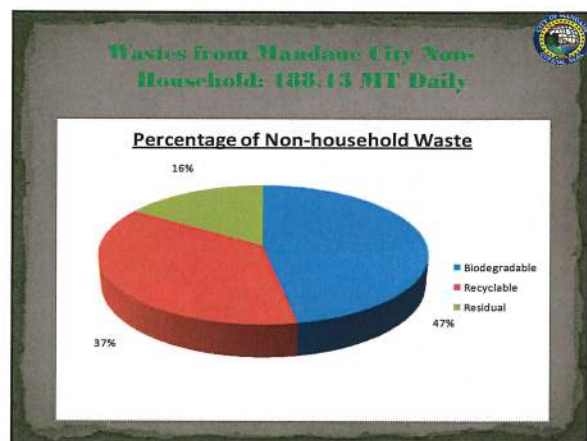
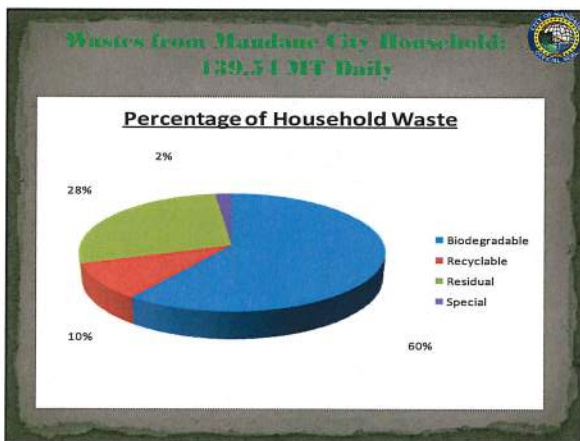
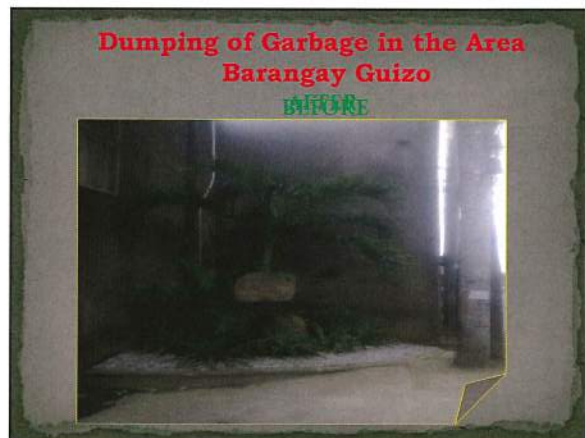
The ceremonial closure happened on June 6, 2011



Mandaue Dumpsite Rehabilitation: Phase I









ASSISTANCE OF THE CITY TO SWMP




TURN-OVER OF GARBAGE TRUCKS TO 27 BARANGAYS



TURN-OVER OF SHREDDER MACHINES TO 27 BARANGAYS



CONSTRUCTION OF MRF



BARANGAY MRF



PAGSABUNAGAN



JAGOBIAO



CUBACUB



GUIZO



MANTUYONG



TABOK



IBABAO-ESTANCIA



ALANG-ALANG

Proposed Technology for Barangay and Dumpsite

Waste to Energy



Generator



Shredding Machine



Plastic To Fuel



Proposed Waste to Energy Facility for City Public Market and City Abattoir

DAILY VOLUME

METHANE	24.81 (kg)
LPG	26.64 (kg)
Electricity	168.53 (kwh)
Diesel	15.84 (l)
Carbon Credits	16.57


EFFLUENTS

Soil Conditioner	1,500 (l)
Pest Repellent	500 (l)


AUXILIARY

Compost Fertilizer	400(kg)
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PUBLIC MARKET




ABATTOIR



DAILY VOLUME

METHANE	
Electricity	150(lwh)
Heating	150(kg)
Organic Soil	1.5 tons



MY MANDAUE SULONG MANDAUE SEARCH SWM CRITERIA

BARANGAY SWM PERFORMANCE STANDARDS AND CRITERIA

Institutional Mechanism

Presence of a functional Barangay Solid Waste Management Committee _____ 5

Minutes of the Meetings, Resolutions passed, and approved, Presence of Local Ordinance (localizing RA 9003/City Ordinance), Address taken/SWM Activities, Proper documentation, Organizational structure and system

Waste Management System in Operation

A. Segregation of Solid Waste at Source (by random inspection of households; 2 barangay officials and 2 households for every inspection) _____ 20

B. Waste Collection

1. Segregated collection (monitored trash bins and garbage trucks, collection schedules) _____ 10

2. Effective collection (absence of litter, mini dumpsites in rivers (1st round) of inspection will focus on riverbanks), creeks, other waterways and in public and private areas) _____ 10

C. Wastes Diversion through the Material Recovery System (focused on residual wastes and not on recycled materials)

1. Operationalization of composting system _____ 20

Products as a result of composting _____ 20
(Higher points for higher percentage of waste composted hence barangay WACS data is required)

2. Existence of facility(ies) to recover recyclable/reusable wastes _____ 5

D. Waste Storage/Disposal

1. Presence of secured storage facility for busted bulbs/lamps/rechargeable batteries _____ 2
(Points shall be deducted if broken lamps are noted in barangay area of responsibility)

2. Presence of secured storage facility for infectious wastes (such as syringa, etc.) from clinics/health centers/nursing parlors _____ 3

3. No burning of solid wastes (plastic, rubber, PVC, infectious wastes) _____ 5
(actually observed during visit/evaluation period or based on physical evidence of burning)

Bonus: Initiatives undertaken by the barangays in the proper disposal of human and animal wastes _____ 1


Generation of livelihood/income generating projects thru recycled waste _____ 20

Efforts to utilize residual wastes generated in the barangay (used tire and styrofoam boxes/cups to plant box, plastic waste melted to form bricks etc., (w/ra packs to bags, plastics used in pillows) etc. except those done in schools

Bonus: More types of recyclable materials utilized for various IGPs _____ 1

* Note: SWM Initiatives in the barangays that will promote and raise level of awareness towards solid waste

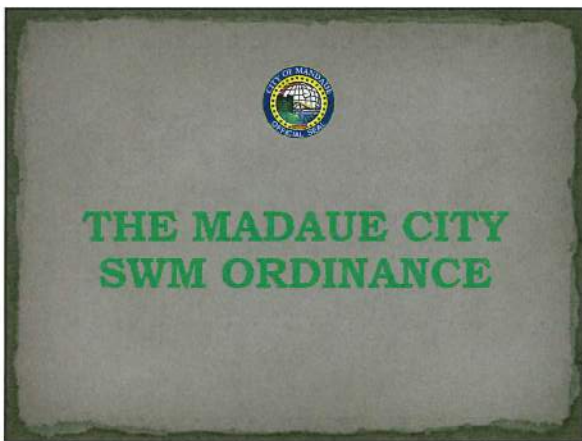
Total _____ 100



MOST OUTSTANDING BARANGAY AWARDS




PLASTIC TO FUEL Given to the Barangay 1ST Prize and 2ND Prize



Insaktong MULTA base sa ordinansa No. 10-2006-372

Section	Multa
1.A - Throwing, dumping, discharging, pouring out, unloading, spilling out waste, refuse or garbage, whether solid or liquid, human and animal excreta and other offensive and noxious matters in any vacant lot, yards, roads, streets, canals, rivers, creeks, underground drainage system and other public places.	P500.00
1.B - Spitting, urinating, or defecating on any alley, street, sidewalk, pathway, footwalk, park, plaza, or any other public place.	P600.00
1.C - Spreading handbills or posters on the streets, sidewalks, center islands, footwalk, path, plaza or other public place.	P500.00
1.D - Plying of public utility vehicles within the boundaries of the city without garbage receptacles placed inside the vehicle.	P500.00
1.E - Using any street, alley, avenue, plaza or park by animal-drawn vehicle without provision of a proper receptacle for storing animal manure or refuse.	P500.00
1.F - Burning of garbage or dry leaves, and clearing of farms through burning.	P500.00
1.G - Disposal of wastes that have not been segregated according to the following waste classification: <ul style="list-style-type: none"> i. Biodegradable wastes ii. Non-biodegradable wastes iii. Hazardous and Special wastes iv. Bulky wastes and white goods 	P1,000.00
1.H - Disposal of hazardous/special wastes, bulky wastes and white goods together with other classified wastes.	P1,000.00
1.I - Disposal of wastes outside the schedule time of collection.	P1,000.00
1.J - Disposal of wastes beyond the schedule time collection.	P1,000.00
1.K - Mixing of source-separated wastes.	P1,000.00
1.L - Posting or causing to be posted any handbill or poster of any size or materials or streamer on any fence, post or wall of private or public buildings, except in cases allowed by law or unless prior authority has been granted by the City Mayor or his authorized representative.	P5,000.00
1.M - Entering into a contract or offering or services, for a fee, for the disposal of domestic waste unless authorized and permitted by the city within the aim in view of initiating waste segregation.	P5,000.00
1.N - Posting, installing, displaying any kind or form of billboards, signs, posters, streamers, or commercial service advertisement and other visual clutter in any part of the road, sidewalk, center islands, public areas, parks and open spaces except in places designated by the government.	P500.00
1.O - Throwing of wastes of any kind of drained untreated water and effluents into the Subanon river and its tributaries, the Maniga river and its tributaries, the perimeter of the sinkhole in any catchment/basins, the vicinity of air production wells of MCHD, all roadside canals, drainage systems, creeks and the entire coastline within the jurisdiction of the city.	P5,000.00
1.P - Committing acts of vandalism.	P5,000.00
1.Q - Tinkering with the Segregation Bins or mutilating parts thereof.	P5,000.00

For violations committed as checked in the above box, you are hereby directed to pay the prescribe fine to the Barangay Treasurer and render 1 hour community service in the barangay where the violation was committed.

Failure to pay the prescribe fine and render community work within 72 hours shall authorize the apprehending officers to file criminal complaint in court and may upon conviction, an additional minimum fine of P1,000.00 to P5,000.00 be imposed at the discretion of the court.

For more info: Contact MMT Solid waste brgy. coordinator Engr. Gaga Mendoza @ 346-8894

SOLID WASTE MANAGEMENT INFORMATION DRIVE
MANDAUE CITY

WASTE SEGREGATION

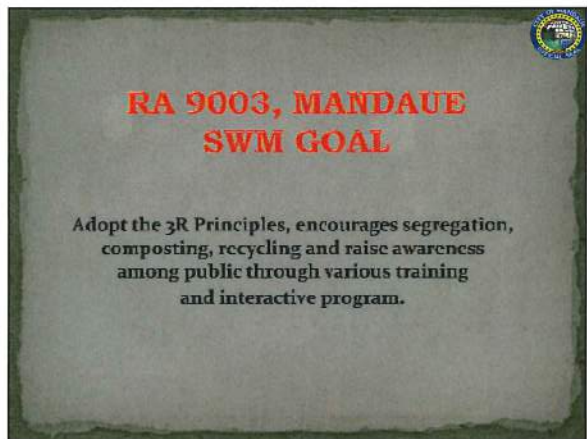
BASURA

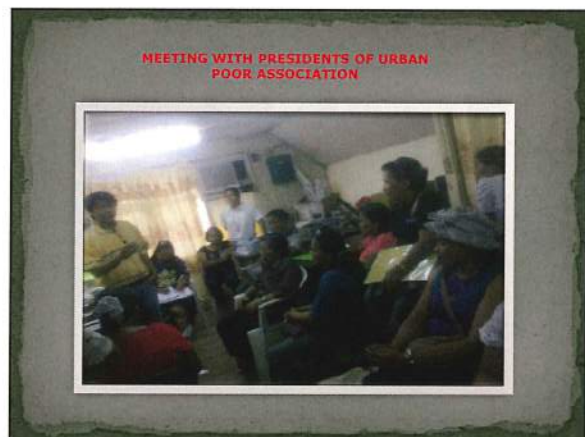
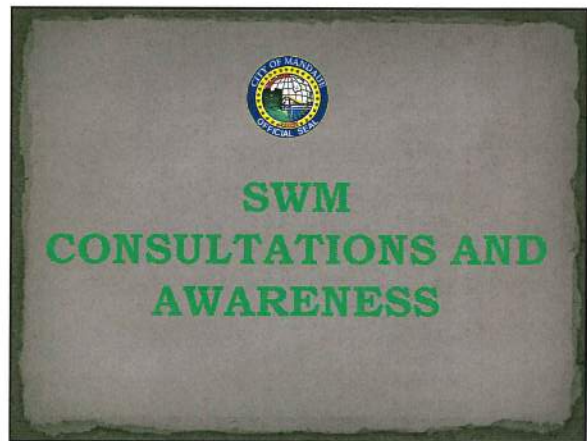
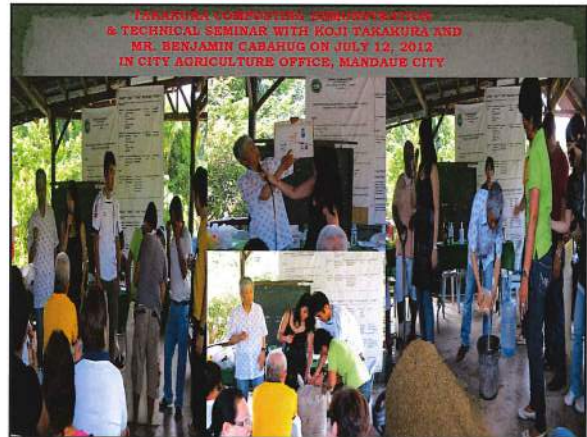
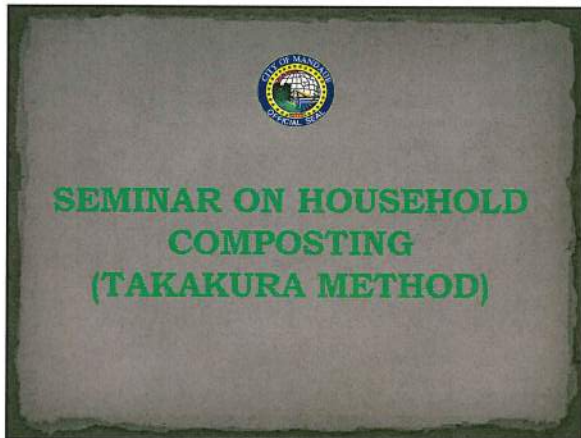
RESIDUAL WASTE DILI MA RECYCLE	BIODEGRADABLE MALATA	RECYCLABLE WASTE MA RECYCLE
ILABAY SA UMAPAD DUMPSITE KLASA SA BASURA Karaman ug dili na magamit nga mga: Cloth/hothelies (gamayon) Footwear (Sapatos / Talibata) Rubber or plastic o-things (except sa light) Plastic items Maglamin Disposables (Dapera) Plastic Containers / WRappers Porcelain/Ceramics (nga break nga plato) Map brush, tooth / paint / nail / pen/pencil Balahana / Pabalapana / Croyona / Plastic Ruber leathers: Bags / Wallets / Ballo o balon Utens sa kitchen Floor mats Aluminium foil Paint sa wire Tarpaulin Saftnet sa mga atampao / sabon Signposts Sastrador sa pagkabit sa basura	I-PROCESS SA COMPOSTING PIT-NRF AREA KLASA SA BASURA Dili sa magamit nga mga Paper / Carton Food Waste / Mga luto nga mga pagkaron Mga bulag sa basura/okhabayokha Fruit/Shell sa luto Balahon sa manok ug agpapula Fruit & Vegetable / Mga damot prutas o utanon Mga patay nga hayop Agricultural waste manure / hager sa hayop plant stubble / Mga laya nga dahon o mga sanga coconut husks Balahon sa pagkabit sa basura	I-SEGREGATE SA - MRF AREA KLASA SA BASURA Magamit pa sa mga Paper / Carton Tin cans o mga lata Glass bottles Plastic (sa bottles o Balahon sa tubig/pagkaron) Steel o Putang Plastic containers wood o magamit sa mga kahoy metal o mga tanang broken appliances Sastrador sa pagkabit sa basura

Gikinahanglan nga "Segregated" na ang tanang basura sa inyong paglulan diri sa dili pa kaulan sa atong garbage collectors.

"WALAY SEGREGATION, WALAY KOLEKTA SA BASURA."

Katong masaklan sa atong solid waste enforcer o eco-warrior nga dili motuman niini, pagamulahan sa saktong bayranan.





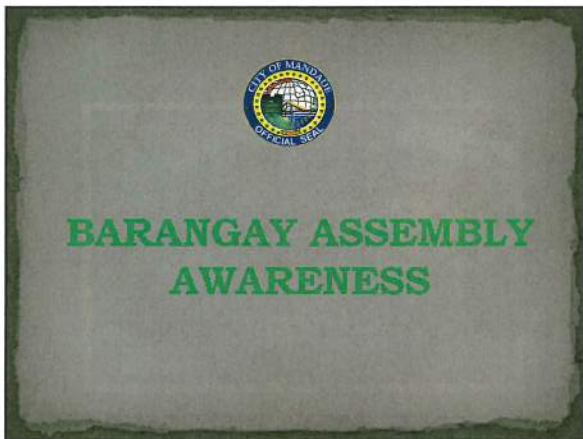


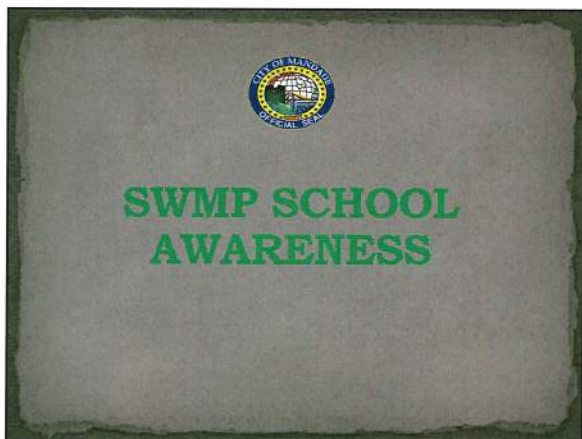
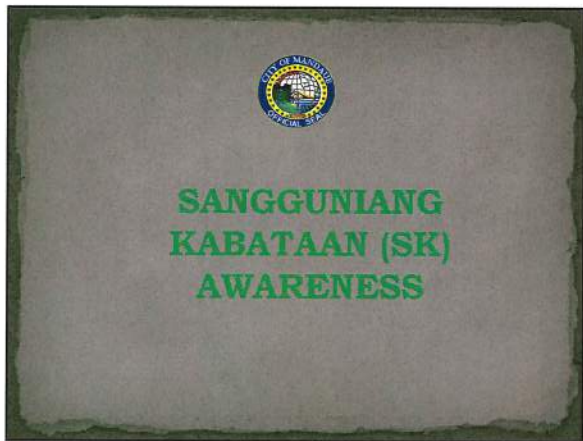
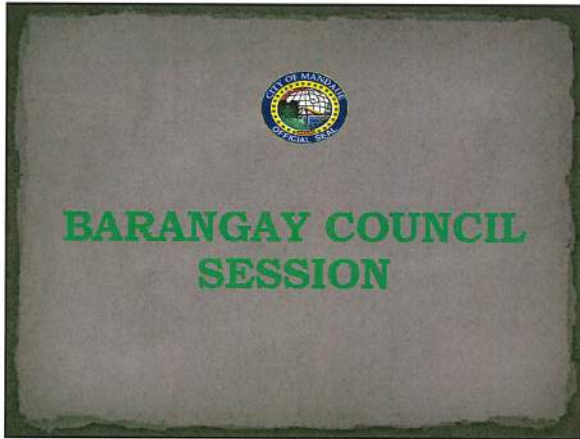
TOTAL DEPUTIZED ECO-WARDEN

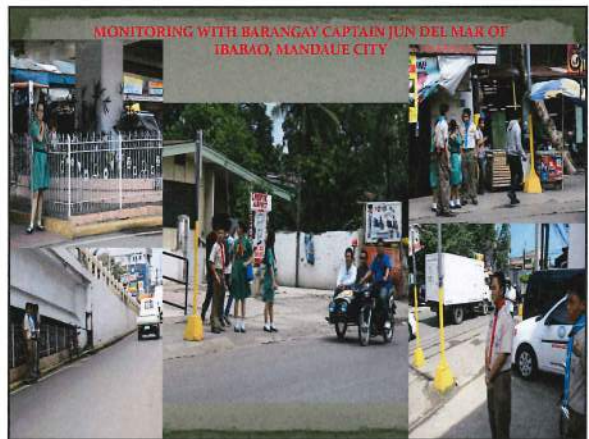
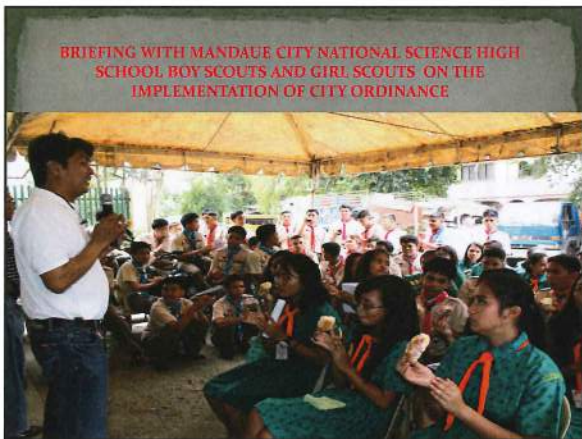
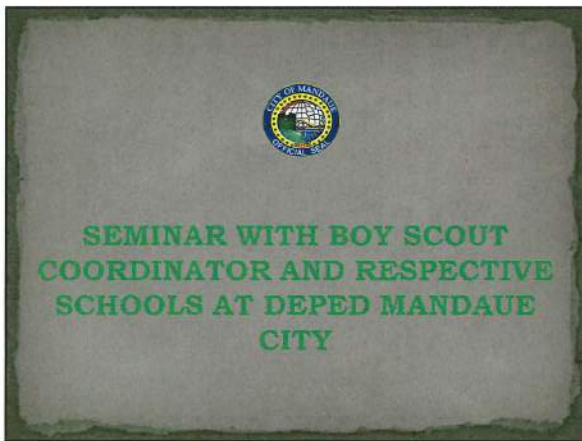
NAME OF BARANGAYS	NO. OF ECO-WARDEN
1. Alang-alang	8
2. Bakilid	5
3. Banilad	21
4. Basak	4
5. Cabanalan	5
6. Cambaro	4
7. Canduman	5
8. Casili	3
9. Casuntingan	6
10. Centro	4
11. Cubacub	5
12. Guizo	6
13. Ibabao-Estancia	2

NAME OF BARANGAYS	NO. OF ECO-WARDEN
14. Jagobiao	3
15. Labogon	11
16. Looc	12
17. Maguikay	10
18. Mantuyong	9
19. Opao	5
20. Pagsabungan	8
21. Pakna-an	12
22. Subangdaku	9
23. Tabok	11
24. Tawason	4
25. Tipolo	3
26. Tingub	0
27. Umapad	11

1. BIN (Barangay Intelligence Network)	12
2. SWMT Enforcer	20
TOTAL	216
TOTAL VIOLATORS APPREHENDED	171
TOTAL PAYMENT MADE TO THE TREASURER'S OFFICE	51,000 pesos







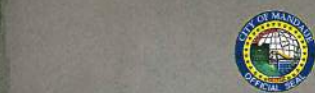
**VIOLATORS APPREHENDED BY BOY SCOUTS
THROWING CIGARETTE BUTT**



**VIOLATORS APPREHENDED BY BOY SCOUTS AND ECO-
WARDEN**

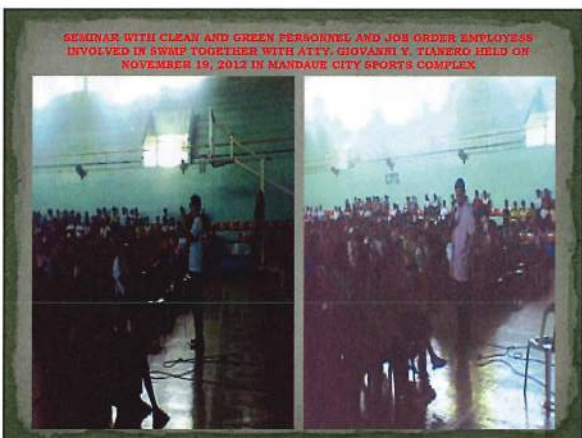
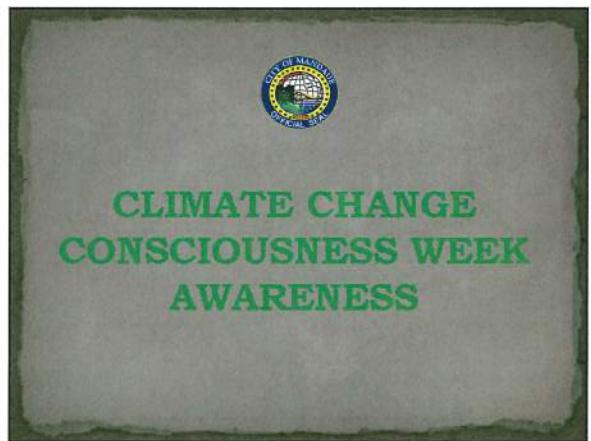


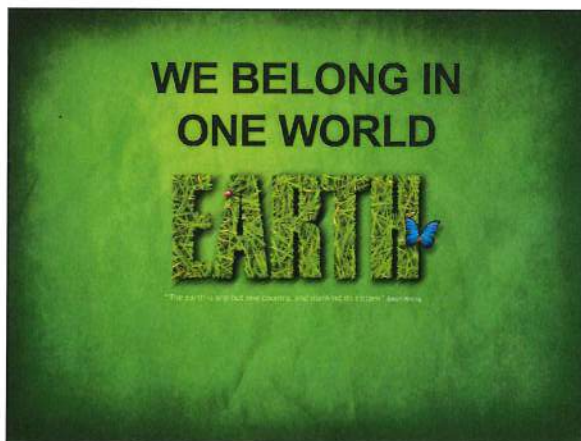
**TESTIMONIAL EXPERIENCES OF EACH GIRL
SCOUT AND BOY SCOUT STUDENTS**




**MEETING WITH CITY PAID
CLEAN & GREEN AND JOB
ORDER EMPLOYEES INVOLVED
IN SWMP**









Thank you
For
Listening!
God Bless!

Presented in behalf of
Engr. Ricardo D. Mendoza, MPA
Solid Waste Management Director
is
DEXTER PAUL C. FORTUNA, LLB, CZI.
Assistant Solid Waste Management Office