



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
ENVIRONMENTAL MANAGEMENT BUREAU

REPUBLIC ACT NO. 9003

ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000



WHO WANTS GARBAGE?

SOLID WASTE

MOST VISIBLE ENVIRONMENT PROBLEM



- Total annual generation
= 20 M tons
17% MM
- To increase by 40% in next decade
- Mostly from households and Commercial establishments

Generation:

Urban areas - 0.50-0.70 kg/capita/day

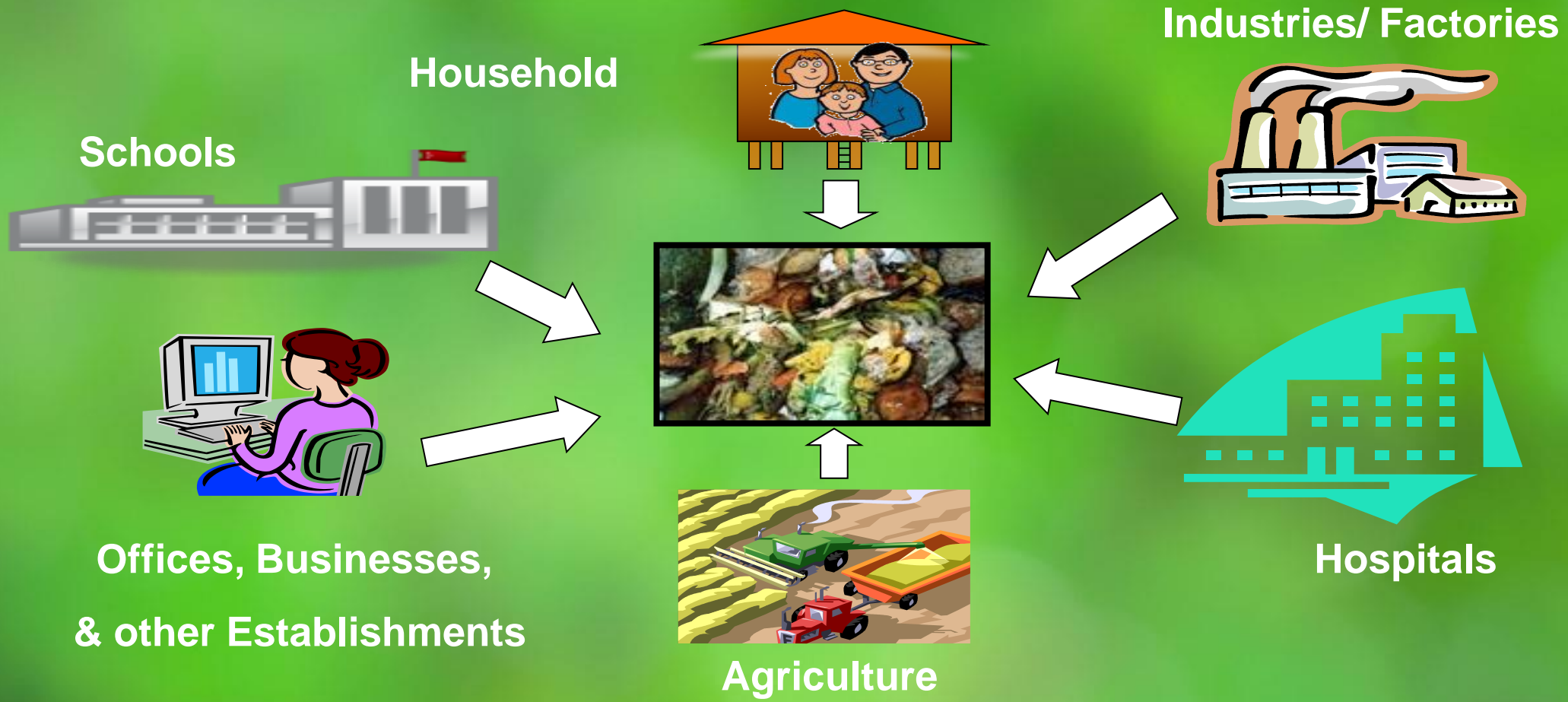
Rural areas - 0.30 kg/capita/day



WHO GENERATES GARBAGE?



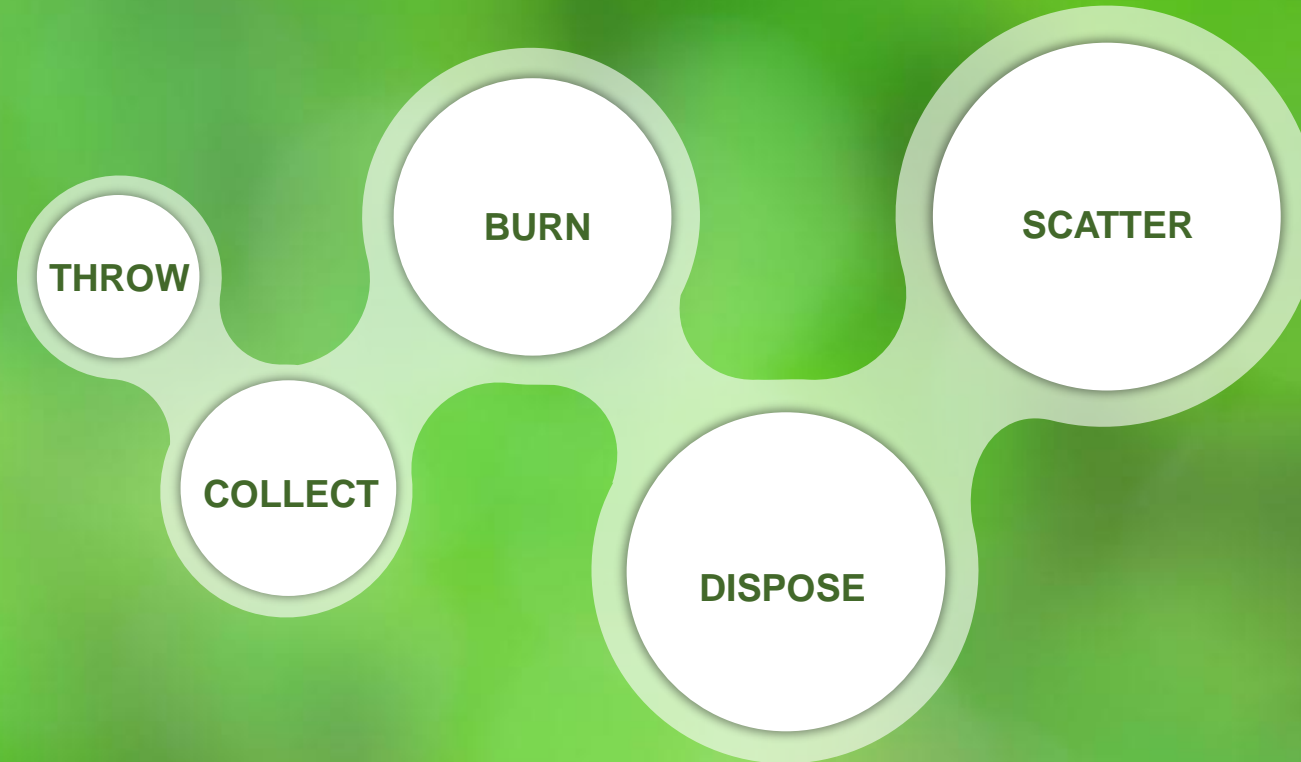
WASTE GENERATION





SITUATIONER

The system of garbage disposal can be described simply as:

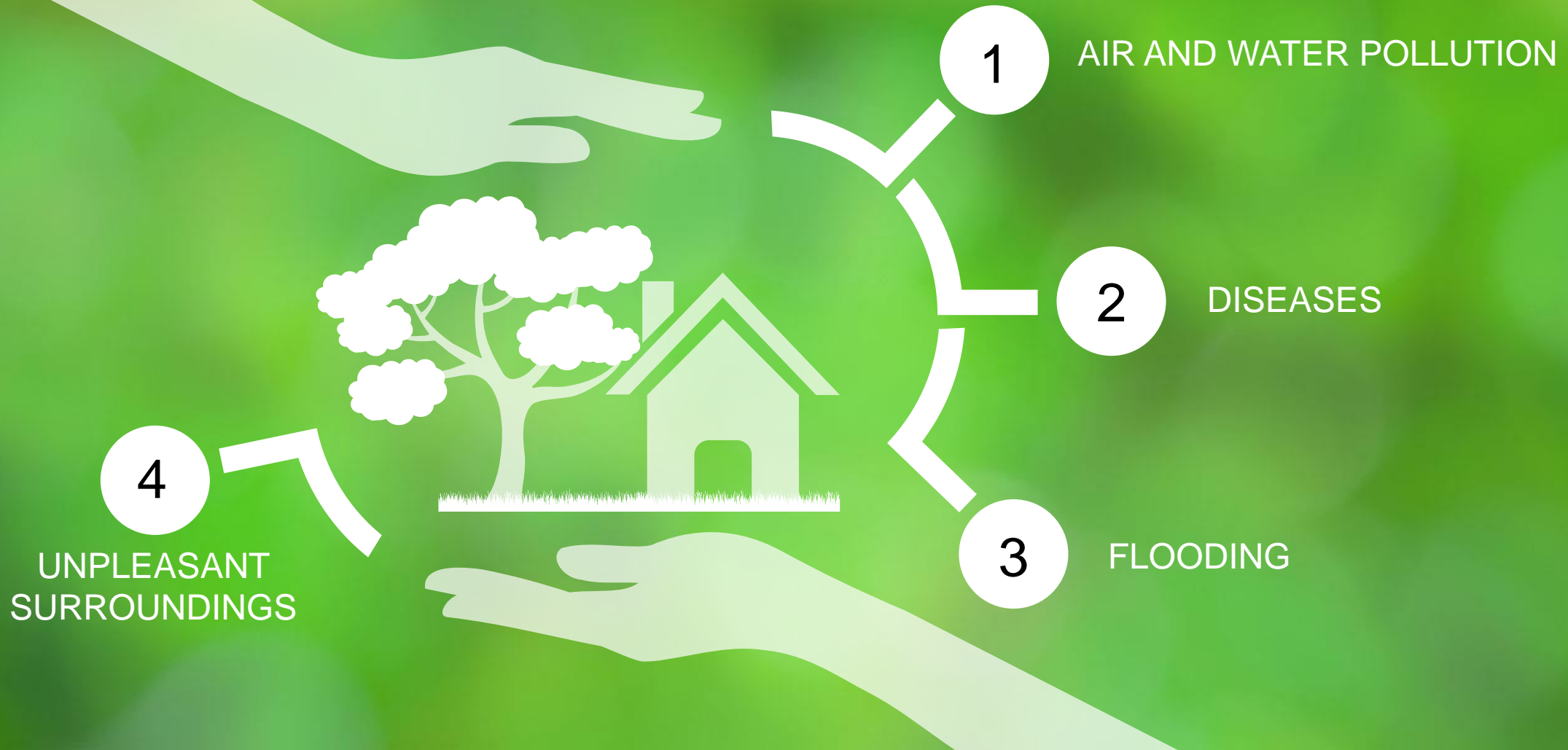




HOW DOES IT AFFECT THE
ENVIRONMENT AND HEALTH?



THE IMPACT OF IMPROPER WASTE MANAGEMENT





AIR AND WATER POLLUTION

Contamination of rivers and lakes;

Methane (emission from decaying garbage).

Causes global warming (21X more potent than carbon dioxide).







The Philippines has not been spared of the weather-related disturbances and disasters. The past typhoons have been unusually heavy and have brought devastation to our country and our people.

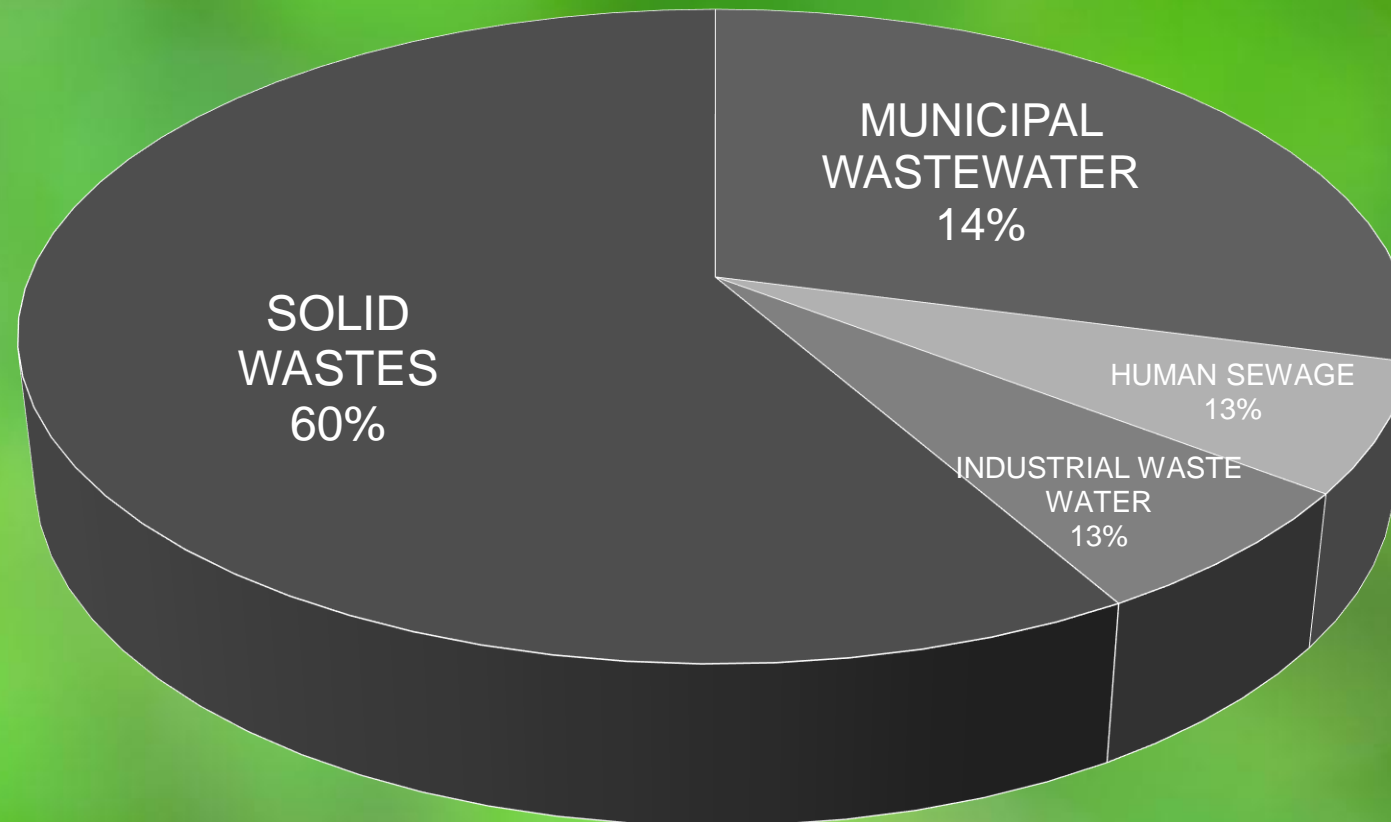




Methane Gas Emission from Garbage



GHG EMISSIONS FROM THE WASTE SECTOR





Global Warming: The Greenhouse Effect

(when there is too much greenhouse gases in the atmosphere)





DISEASES

- Rats, cockroaches, and Flies – typhoid fever, meningitis, diarrhea, tuberculosis, anthrax, worms, typhoid fever, dysentery, jaundice, etc.
- Mosquitoes – Malaria, yellow fever, dengue, etc.





FLOODING

- Clogging of the drainage system.
- Siltation of rivers and creeks

UNPLEASANT SURROUNDINGS

- Foul odor
- Loss of tourism potentials





IS THIS WHAT WE WILL
LEAVE TO THE FUTURE
GENERATION?



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ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000

RA 9003 institutes measures to promote a more acceptable system which corresponds to the vision of sustainable development. Generally, it aims to merge environmental protection with economic pursuits, recognizing the re-orientation of the community's view on solid waste, thereby providing schemes for waste minimization, volume reduction, resource recovery utilization and disposal



REPUBLIC ACT NO. 9003

ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000

Ecological Solid Waste Management Act of 2000

An ACT providing for an ECOLOGICAL SOLID WASTE MANAGEMENT PROGRAM, CREATING THE NECESSARY INSTITUTIONAL MECHANISMS AND INCENTIVES, DECLARING CERTAIN ACTS PROHIBITED AND PROVIDING PENALTIES, APPROPRIATING FUNDS THEREFOR, AND FOR OTHER PURPOSES

First law signed by former President Gloria Macapagal Arroyo

Approved on January 26, 2001

Took Effect on February 16, 2001



MILESTONE DATES FOR RA 9003

JANUARY 26, 2001

FEBRUARY 16, 2001

DECEMBER 21, 2001

FEBRUARY 16, 2004

FEBRUARY 16, 2006

1

APPROVAL OF
RA 9003

2

EFFECTIVITY
OF RA 9003

3

SIGNING OF
THE IRR OF
RA 9003

4

ALL OPEN DUMPSITES
SHOULD HAVE BEEN
CLOSED OR
CONVERTED TO
CONTROLLED
DISPOSAL FACILITIES
(SEC. 37)

5

ALL CONTROLLED
DISPOSAL
FACILITIES SHALL
BE DEEMED CLOSE
AND PHASE-OUT
(SEC. 37)



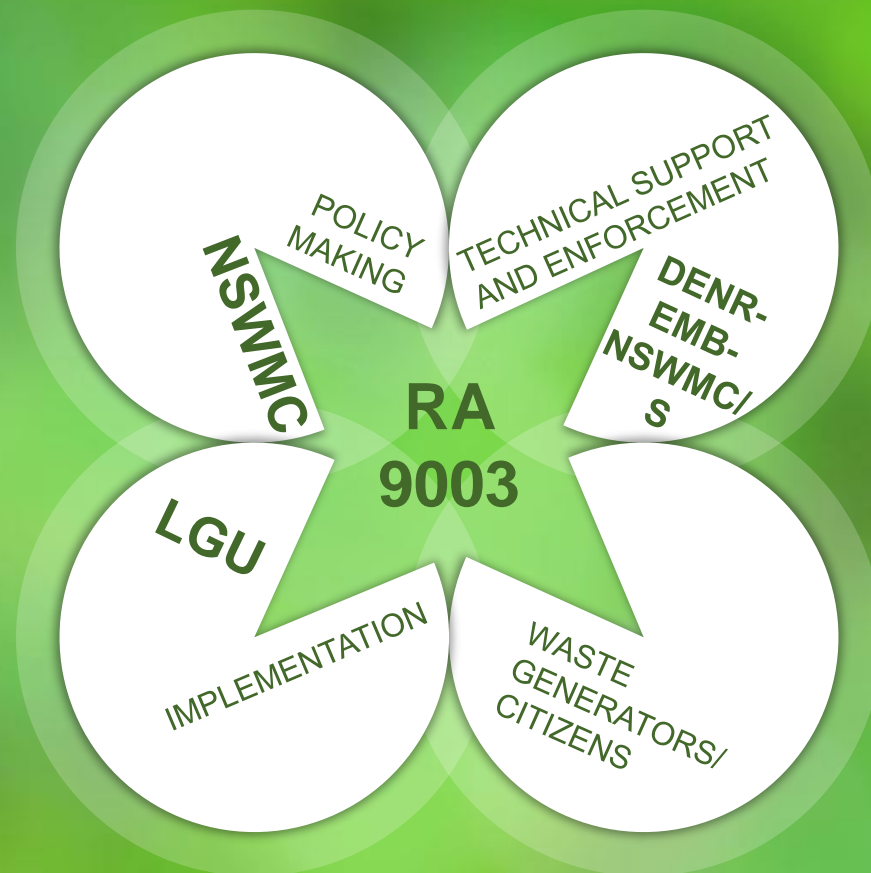
OBJECTIVE OF THE LAW

The over-all principle and objective of R.A. 9003 is that all waste should be brought to where they can be resources again - the recyclables to factories and the biodegradables either used as animal feed or composted for soil enhancement. Only materials that currently cannot be composted or recycled should go to the landfills.

The implementing rules and regulations of R.A. No. 9003 are contained in DENR Administrative Order No. 2001-34



INSTITUTIONAL STRUCTURE





NSWMC Members

Government Sector:

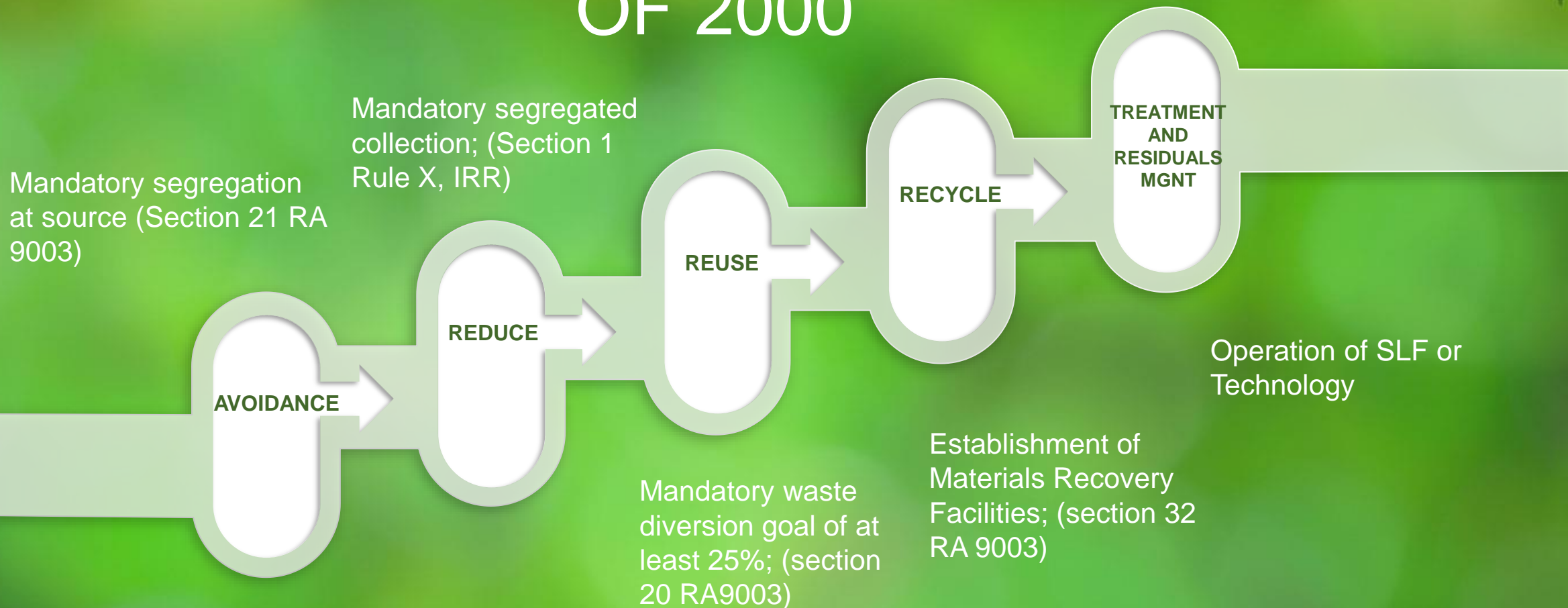
- | | |
|-------------------|--------------------------|
| • DENR (Chairman) | TESDA |
| • DILG | PIA |
| • DOST | MMDA |
| • DPWH | League of Provinces |
| • DOH | League of Cities |
| • DTI | League of Municipalities |
| • DA | Liga ng mga Barangay |

Non-Government Sector:

- 1 - representative from the NGO sector
- 1 - representative from the Recycling Industry
- 1 - representative from the Manufacturing/Packaging Industry



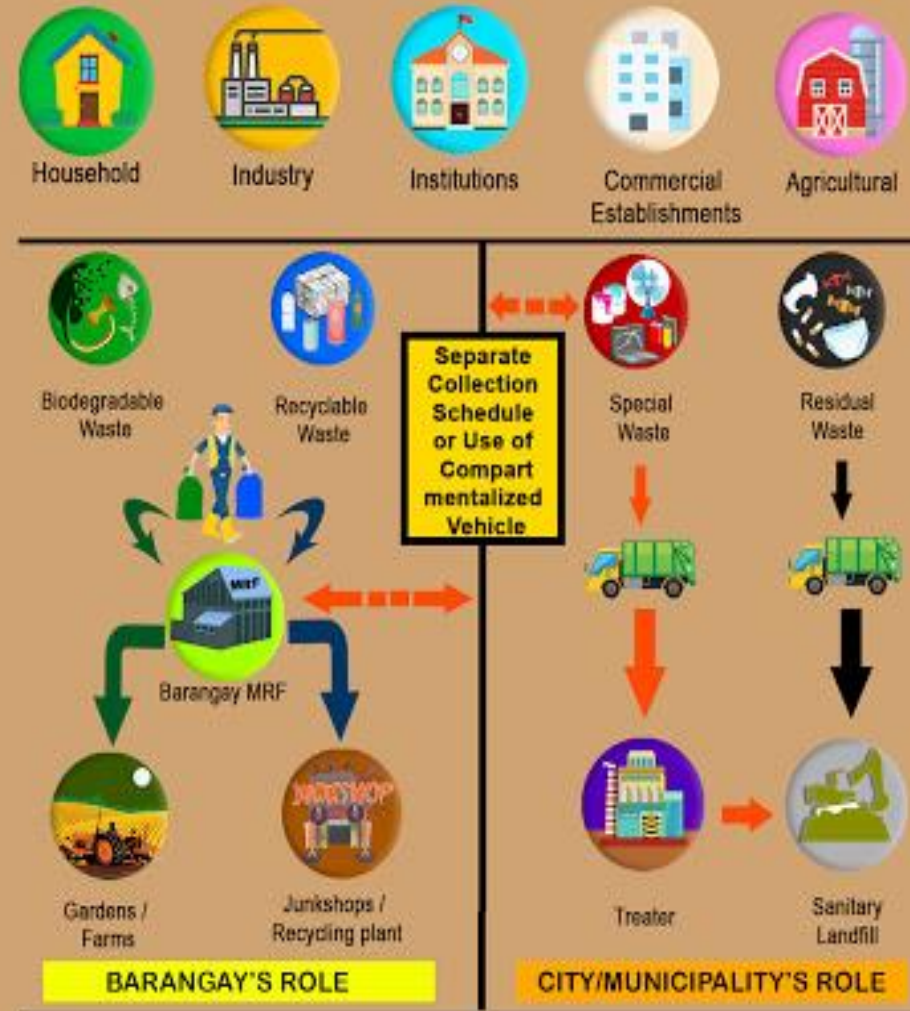
ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000





CONCEPTUAL FRAMEWORK OF RA 9003

“Ecological Solid Waste Management Act of 2000”





Materials Recovery Facility (Section 32)

2 Main Physical Components of a MRF



Composting
area



Eco-shed or warehouse



FINAL DISPOSAL: SANITARY LAND FILL (SLF) SECTION 37



Sanitary Landfill (SLF) provides control over significant potential environmental impacts arising from the disposal operation as it considers the physical and hydro-geologic attributes of the site prior to landfill development.



WASTE CLASSIFICATION



COMPOSTABLE WASTE

Compostable wastes are biodegradable wastes such as food waste, garden waste and animal waste.

Fruit and vegetable peelings, leftover foods, vegetable trims, fish/fowl/meat/animal entrails/, soft shells, seeds, leaves, etc.,



RECYCLABLE WASTE

Recyclable materials refer to any waste material retrieved from the waste stream and free from contamination that can still be converted into suitable beneficial use.

Newspaper, ferrous and non-ferrous scrap metals, corrugated cardboard, aluminum, tin cans, glass, papers, etc.,



SPECIAL WASTE

Special waste refer to household hazardous wastes.

Paints, thinner, household batteries, lead-acid batteries, spray canisters, bulky wastes, consumer electronics (which refer to worn-out, broken and other discarded items), white goods (which refer to large worn-out or broken household appliances), oil, tires, etc.,



RESIDUAL WASTE

Residual wastes are solid waste materials that are non-compostable and non-recyclable.

Sanitary napkins, disposable diapers, worn-out rugs, ceramics, candy wrappers/sachets, cartons which contain a plastic lining usually used for milk and juice containers, etc.,



NON TRADITIONAL RECYCLABLES

CDs, DVDs, VCDs and VHS tapes

Empty Ink and Toner Cartridges

Broken electrical and electronic equipment and appliances

Obsolete computers

Car Tires



REPUBLIC ACT NO. 9003

ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000

PROHIBITED ACTS AND PENALTIES

SEC. 48 & 49



FINES AND PENALTIES

Section 48 and 49 prescribe the punishable acts under RA 9003 and the corresponding fines and penalties therefore;

LGUs need only to pass the Ordinance that would spell out (a) how & where community service as a penalty would be served, and (b) the amounts and duration of fines and imprisonment penalties for 1st, 2nd, 3rd, 4th, etc, offense;

If the offense is committed by a corporation, partnership, or other juridical entity, the chief executive officer, president, general manager, managing partner or such other officer-in-charge shall be liable for the commission of the offense penalized under the Act.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

¹ *“Littering, throwing, dumping of waste matters in public places, such as roads, sidewalks, canals, esteros or parks, and establishment, or causing or permitting the same.”*

Fine: P300 – P1,000, or

Community service: 1-15 days in LGU where violation was made, or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

² *“Undertaking activities or operating, collecting or transporting equipment in violation of sanitation operation and other requirements or permits set forth in established pursuant.”*

Fine: P300 – P1,000, or
Imprisonment: 1-15 days or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

³ *“The open burning of solid waste.”*

Fine: P300 – P1,000, or
Imprisonment: 1-15 days or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

⁴ *“Causing or permitting the collection of non-segregated or unsorted wastes.”*

Fine: P1,000 – P 3,000, or
Imprisonment: 1-15 days or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

⁵ *“Squatting in open dumps and landfills.”*

Fine: P1,000 – P 3,000, or
Imprisonment: 15 days – 6 months, or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

⁶ *“Open dumping, burying of biodegradable or non-biodegradable materials in flood prone areas.”*

Fine: P1,000 – P 3,000, or
Imprisonment: 15 days – 6 months, or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

⁷ “Unauthorized removal of recyclable material intended for collection by authorized persons;”

Fine: P1,000 – P 3,000, or
Imprisonment: 15 days – 6 months, or both.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

⁸ *“The mixing of source-separated recyclable material with other solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal.”*

First Offense: Fine of P5,000 + 5-10% of net income during the previous year



PROHIBITED ACTS AND CORRESPONDING PENALTIES

⁹ *“Establishment or operation of open dumps as enjoined in this Act, in violation of Sec. 37.”*

Penalty

First Offense:

Fine of P500,000 + 5-10% of net income during the previous year;

Subsequent Violations: Imprisonment of 1-3 yrs. In addition to the fine.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

¹⁰ *“The manufacture, distribution or use of non-environmentally acceptable packaging materials.”*

Penalty

First Offense:

Fine of P500,000 + 5-10% of net income during the previous year;

Subsequent Violations:

Imprisonment of 1-3 yrs. In addition to the fine.



PROHIBITED ACTS AND CORRESPONDING PENALTIES

¹¹ “Importation of consumer products packaged in non-environmentally acceptable materials.”

Penalty

First Offense:

Fine of P500,000 + 5-10% of net income during the previous year



PROHIBITED ACTS AND CORRESPONDING PENALTIES

¹² *“Importation of toxic wastes misrepresented as “recyclable” or “with recyclable content””*

Penalty

Fine: P10,000 – 200,000, or

Imprisonment: 30 days – 3 years, or both



PROHIBITED ACTS AND CORRESPONDING PENALTIES

13 *“Transport and dumping in bulk of collected domestic, industrial, commercial, and institutional wastes in areas other than centers or facilities prescribe under this Act.”*

Penalty

Fine: P10,000 – P200,000, or

Imprisonment: 30 days – 3 years, or both



PROHIBITED ACTS AND CORRESPONDING PENALTIES

14 “Site preparation, construction, expansion or operation of waste management facilities without an Environmental Compliance Certificate required pursuant to Presidential Decree No. 1586 and this Act and not conforming with the land use plan of the LGU”

Penalty

Fine: P100,000 – P1M, or

Imprisonment: 1-6 years, or both



PROHIBITED ACTS AND CORRESPONDING PENALTIES

¹⁵ “The construction of any establishment within two hundred (200) meters from open dumps or controlled dumps, or sanitary landfill.”

Penalty

Fine: P100,000 – P1M, or

Imprisonment: 1-6 years, or both



PROHIBITED ACTS AND CORRESPONDING PENALTIES

¹⁶ “The construction or operation of landfills or any waste disposal facility on any aquifer, groundwater reservoir, or watershed area and or any portions thereof”

Penalty

Fine: P100,000 – P1M, or

Imprisonment: 1-6 years, or both



WHAT KIND OF CASE MAY BE FILED?

The following cases may be filed:





CITIZEN SUIT

Any citizen may file civil, criminal or administrative action against:

- Any person who violates or fails to comply with RA 9003 and its IRR.
- DENR or other implementing agencies for orders, rules and regulations inconsistent with RA 9003.
- Public officer who willfully or grossly neglects performance of duty, abuses his authority, and in any manner, improperly performs his duties under RA 9003 and its IRR



WHAT DOES RA 9003 REQUIRE BEFORE A CASE OR SUIT CAN BE FILED?

RA 9003 provides that no case or suit can be filed until after a public officer or alleged violator has been given a 30-day notice during which no appropriate action has been taken by the alleged offender.



IS CONVICTION REQUIRED BEFORE THE FINE AND/OR PENALTY CAN BE IMPOSED ON SOMEONE WHO COMMITTED A PROHIBITED ACT UNDER RA 9003?

Yes. The law provides that the fine and/or penalty shall be imposed upon conviction.

The requirement of conviction means that a case has to be filed in court against a person who commits a prohibited act and judgment has to be rendered by the court finding the person guilty of committing the prohibited act.



IF THE PROHIBITED ACT IS COMMITTED BY A CORPORATION, PARTNERSHIP, OR OTHER JURIDICAL ENTITY DULY ORGANIZED IN ACCORDANCE WITH LAW, WHO SHALL BE LIABLE FOR THE OFFENSE COMMITTED?

The chief executive officer, president, general manager, managing partner or such other officer-in-charge shall be liable.



WHAT ADDITIONAL PENALTY WILL BE IMPOSED IF THE OFFENDER IS AN ALIEN?

If the offender is an alien, he or she shall be deported without further administrative proceedings after serving his/her sentence.



ARE THE FINES PRESCRIBED IN RA 9003 FIXED AMOUNTS?

No. The fines prescribed under RA 9003 shall be increased by at least 10 % every three years to compensate for inflation and to maintain the deterrent function of such fines.



What Offices / Establishments/Industries Can Do



Setting up your SWM Program

1. Preparation of Policy and Organization

➤ Secure management policy and guidelines

- Board Resolution
- Memorandum Circular
- Building Rules
- Sanctions and Rewards

➤ **Form a strong lead group (SWAT)**

- Assign a program coordinator and support staff
- Must be part of job description, clear definition of functions
- Handles day-to-day program implementation



Setting up your SWM Program

2. Conduct situational analysis

WASTE AUDIT/CHARACTERIZATION





Setting up your SWM Program

- **ESTABLISH MINIMUM REQUIREMENTS**



PUSH CARTS



SEGREGATION BINS



COLLECTION SCHEDULE



Setting up your SWM Program

SEGREGATION BINS MUST CONFORM WITH THE BUILDING STANDARDS





ENSURE EFFICIENT SEGREGATION OF MATERIALS

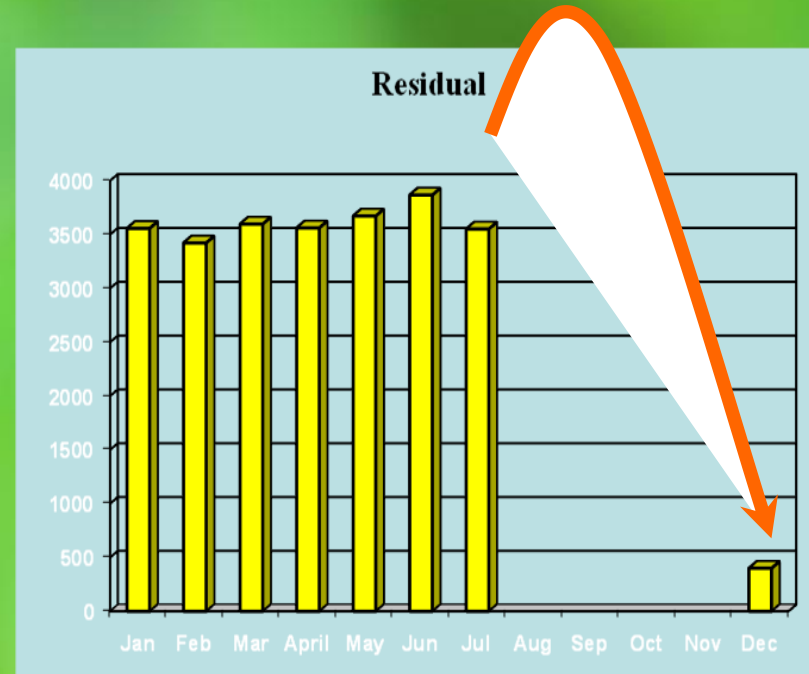
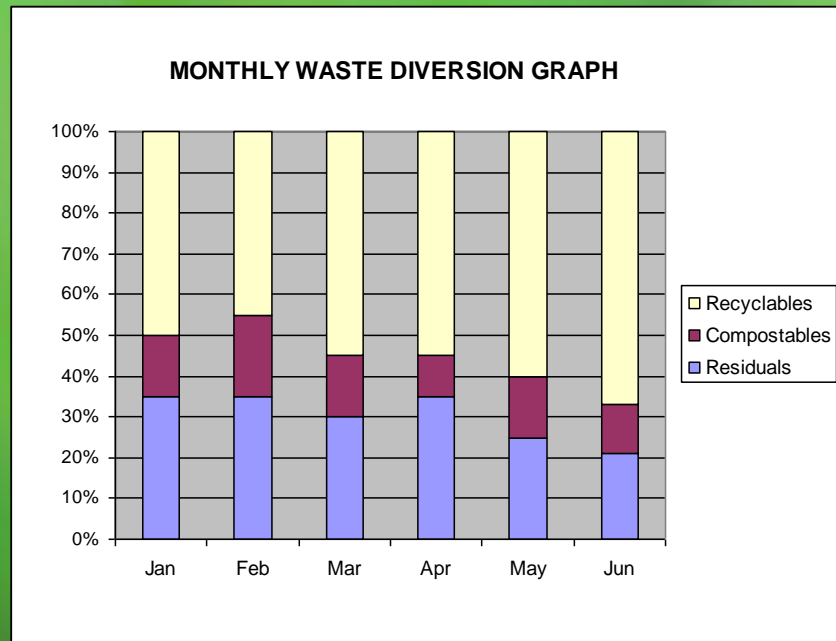




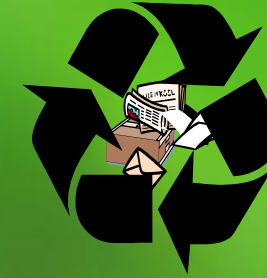
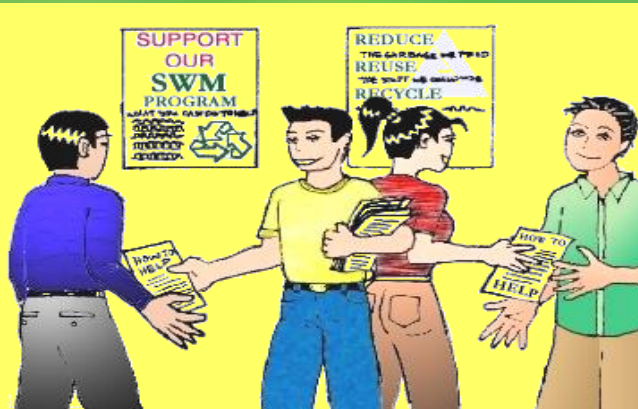
3. Formulate Plan

Set your goals

- % reduction of residual waste – waste avoidance plan
- % increase in recovery of recyclables – waste diversion plan
- % compliance of tenants/occupants – IEC plan
- % decrease in solid waste handling cost – maximum use of resources



4. Conduct information campaign



RECYCLING ONE THOUSAND KILOS OF PAPER SAVES

- ♣ 17 trees
- ♣ 390 gallons of oil
- ♣ 7,000 gallons of water
- ♣ 4200kwh of electricity

Let's do our share... Recycle Now!

PAPER RECYCLING TIPS

1. Make sure paper is used on both sides before disposing
2. Do not crumple, fold or tear paper. Just lay them flat on the designated container
3. Dismantle and flatten boxes to save space
4. Do not contaminate paper with any liquid and food left-overs

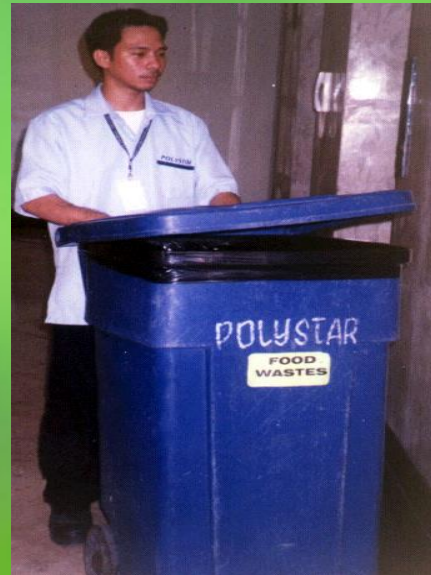


5. Dry Run and Implement Plan

- Adopt an appropriate segregation scheme



- Devise a systematic collection of segregated materials





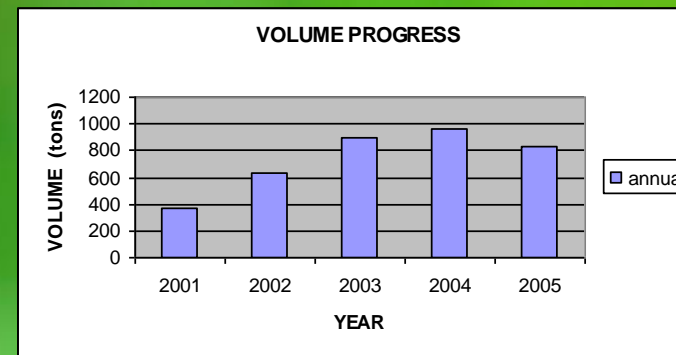
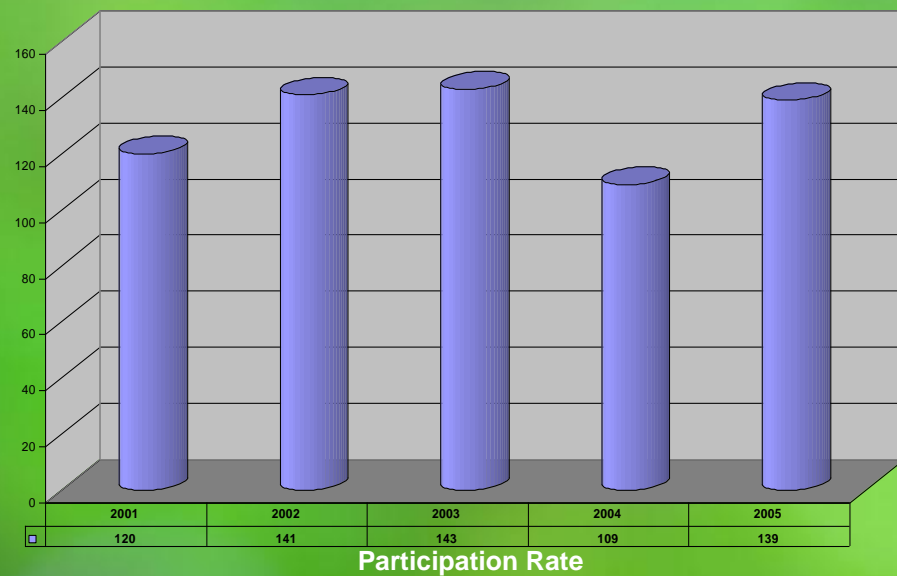
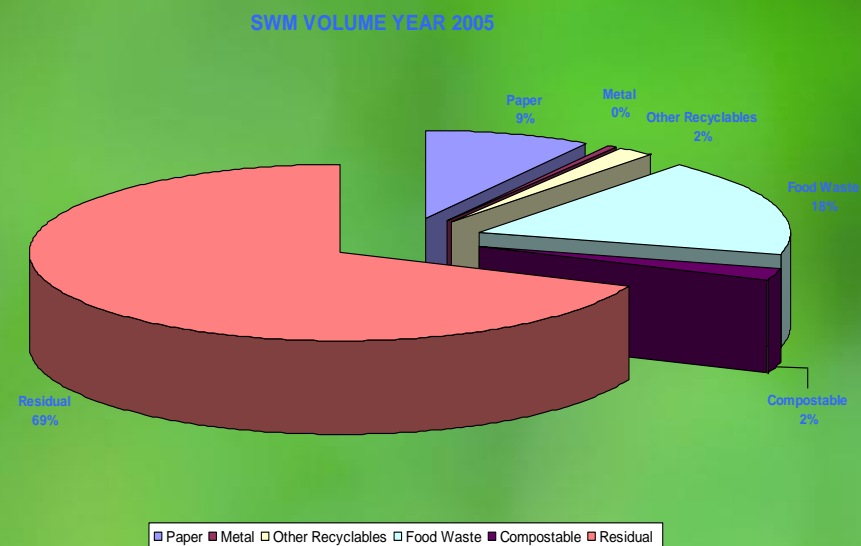
6. Monitoring and Evaluation

➤ Draft monitoring checklist

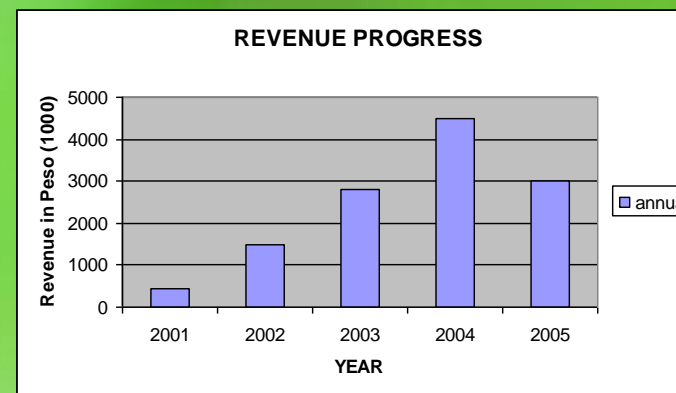
SOLID WASTE MANAGEMENT PROGRAM				
MONTHLY COLLECTION REPORT OF RECYCLABLE MATERIALS				
For the month of _____				
Name of Building: _____				
MATERIALS	Volume (kilos)	Unit Price	Amount	
A. Recyclables				
Bottles				
a. softdrinks				
b. beer				
c. catsup/patis/vinegar				
d. medicine				
e. bubog				
f. others				
Plastics				
a. gallon				
b. spoon/fork/cup				
c. bags				
d. PET				
e. hard plastic				
Paper				
a. continuous form				
b. white				
c. waste				
d. newspaper & magazine				
e. kraft/cartons				
Metals				
a. aluminum cans				
b. hard aluminum				
c. aluminum jalousy				
d. scrap metal				
Others				
Car battery				
Ballast				
Printer ink jet				
Total Recyclables				%
B. Food Waste				%
C. Residual Waste				%
D. Special Waste				%
Grand Total				100%
Accomplished by: _____				
Designation: _____				
Date: _____				



Prepare reports



2001	2002	2003	2004	2005
363 tons	635 tons	891.2 tons	965 tons	836.4 tons



2001	2002	2003	2004	2005
P0.432M	P1.5M	P2.796M	P4.493M	P3.018M



MAJOR PROBLEM WITH OUR SOLID WASTE MANAGEMENT

The problem with waste management is not the system, but the
BEHAVIOR

“

Earth provides enough to satisfy every man's needs, but not every man's greed. — Mahatma Gandhi

”



IT'S TIME TO MAKE A
CHANGE



Thank you

DENR-NSWMC

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