RA 9003 AND THE LEGAL FRAMEWORK SUPPORTING COMMUNITY BASED SOLID WASTE MANAGEMENT

Presented BY

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POINT TO PONDER

Natural systems can take a lot of stress and abuse, but there are limits.”
Our Waste Mismanagement Practices

Garbage Generation → Uncollected → Water bodies (Esteros, creeks, rivers, seas etc)

Collection → Uncollected

Vacant spaces (canals, low lying areas etc) → ???

Open Dumps → ???

We don’t care

Old concept of Cleanliness (Our war versus wastes): Not In My Backyard (Drive them out/send to dumpsite)
SOME RESULTS OF OUR ABUSES TO MOTHER EARTH……
WATER POLLUTION
WATER POLLUTION
WATER POLLUTION
WATER POLLUTION
WATER POLLUTION
WATER POLLUTION
WATER POLLUTION
WATER POLLUTION
AIR POLLUTION

BURNING OF PLASTICS, RUBBER ETC. PRODUCED THE TOXIC DIOXINS AND FURANS
AIR POLLUTION
AIR POLLUTION
LAND POLLUTION
(AESTHETICS PROBLEM)
LAND POLLUTION (AESTHETICS PROBLEM)
IS THERE A HOPE BEYOND THE BEND?
YES THERE IS LIGHT AHEAD OF US

RA 9003
THE ECOLOGICAL WAY TO MANAGE SOLID WASTES BASED ON R.A. 9003
The Required Practice: the Ecological Solid Waste Management

- **Household**
  - Segregation
  - Avoidance
  - Reduce
  - Reuse

- **Collection**
  - Segregated and Complete

- **Waste Disposal**
  - Use of sanitary landfill and/or alternative technology

- **Waste Diversion**
  - Recycling/Composting

**Fundamentals of Ecology & Environment**
WASTE DIVERSION THROUGH THE MATERIAL RECOVERY FACILITIES (MRF’S)
Section 32 of RA 9003 provides that *each barangay* or cluster of barangays shall establish and operate material recovery facilities (MRF’s) for the final sorting, segregation, composting and recycling of wastes and that the resulting residual wastes shall be transferred to a long term storage or disposal facility or sanitary landfill. It is further clarified in Section 1 Rule XI of the Implementing Rules and Regulations of RA 9003 that “*the MRF shall receive biodegradable wastes for composting and mixed non biodegradable wastes for final segregation, reuse and recycling*
Per Section 3 Article 2 of RA 9003 an MRF should have:

1. Drop off Station
2. Sorting Station
3. Recycling Station
4. Composting Station
5. Transfer Station

Biodegradable wastes

Non-biodegradable wastes

Residuals/Special wastes

Biodegradable wastes
RULE XI Section 4 (n) of the Implementing Rules and Regulation of RA 9003 provide that in composting “aerobic condition must be maintained at all times to prevent the generation of dangerous gases such as methane”
DECOMPOSITION OF ORGANIC WASTES

NO OXYGEN
(ANAEROBIC)

WITH OXYGEN
(AEROBIC)

CH₄ (methane)
N₂O (nitrous oxide)
H₂S (hydrogen sulfide)

CO₂ (carbon dioxide)
NO₂ (nitrogen dioxide)
SO₂ (sulfur dioxide)
COMMUNITY BASED SOLID WASTE MANAGEMENT AND CLIMATE CHANGE MITIGATION BASED ON RA 9729 (CLIMATE CHANGE ACT)
CLIMATE CHANGE

GLOBAL WARMING

GREENHOUSE EFFECT

EXCESSIVE EMISSION OF GREENHOUSE GASES (CO2, CH4, N2O, CFC’s, SF6, ODS ETC)
MITIGATION (DEFINED IN RA 9729 OR THE CLIMATE CHANGE ACT)

Mitigation” in the context of climate change, refers to human intervention to address anthropogenic emissions by sources and removals by sinks of all GHG, including ozone-depleting substances and their substitutes.
Composting as a tool against climate change

Nitrous oxide ($N_2O$)
Methane ($CH_4$)
Carbon Dioxide ($CO_2$)

Open dumping

Burning

Carbon dioxide ($CO_2$)

Aerobic composting

Organic wastes

Plant grows

$CO_2$ absorption by plants

Organic Fertilizer

CO$_2$ absorption by plants
BETTER OPTION : BIODIGESTER

Nitrous oxide ($N_2O$)
Methane ($CH_4$)
Carbon Dioxide ($CO_2$)

Organic wastes

BIODIGESTER

BETTER OPTION : BIODIGESTER

CO$_2$ absorption by plants

FUEL

Carbon dioxide

Plant Grows

COMPOST

ORGANIC FERTILIZER

BETTER OPTION : BIODIGESTER

Fundamentals of Ecology & Environment

PCO COURSE  Module 1 – Basics in Environmental Science and Pollution Prevention
MONITORING THE EMISSION OF GREENHOUSE GAS IN THE WASTE SECTOR

IN THE ASPECT OF WASTE COLLECTION

1. EMISSION FROM GARBAGE TRUCKS, ETC
2. EMISSION FROM INDUSTRIAL PLANTS PRODUCING THE SPARE PARTS OF THE GARBAGE TRUCKS, ETC

IN THE ASPECT OF WASTE DISPOSAL

1. EMISSION FROM THE DECOMPOSING GARBAGE
2. EMISSION DURING THE BURNING OF GARBAGE
HENCE WITH COMMUNITY BASED SWM EMISSION OF GREENHOUSE GAS IN THE WASTE SECTOR IS MINIMIZE

IN THE ASPECT OF WASTE COLLECTION

1. LESS OR NO EMISSION FROM GARBAGE TRUCKS, ETC
2. LESS EMISSION FROM INDUSTRIAL PLANTS PRODUCING THE SPARE PARTS OF THE GARBAGE TRUCKS, ETC

IN THE ASPECT OF WASTE DISPOSAL

1. LESS OR NO EMISSION FROM THE DECOMPOSING GARBAGE
2. NO OR LESS EMISSION DURING THE BURNING OF GARBAGE
COMMUNITY BASED SOLID WASTE MANAGEMENT AND RA 9512 (ENVIRONMENTAL EDUCATION AND AWARENESS ACT OF 2008)
THE COLLABORATION: Section 6 par 2 of RA 9512 requires mandated agencies and barangay units to ensure that information are disseminated to the subject students.

Diagram based on presenter's interpretation of the law:

DepEd, CHEd, DOST, DENR, TESDA, DSWD

Introduction of environmental protection & conservation practices:

Schools

- Practiced in Schools

- Appreciation of practice by the students

Students Practice at home

- TESDA trainings

- Practiced by TESDA trainees

- Community practices environmental protection & conservation

- DSWD trainings

- DSWD dependents

- TESDA trainings

- Practiced by TESDA trainees

- Community practices environmental protection & conservation

- DSWD trainings

- DSWD dependents
People did not weave the web of life they are merely strands in it. Whatever they do to the web they do to themselves... 1854
KEY IDEAS
EVERYONE IS PART OF THE PROBLEM THUS EVERYONE SHOULD BE PART OF THE SOLUTION