Land Pollution Pertaining to Garbage Disposal in the Philippines

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DEFINITION OF TERMS (keywords)

• **Land pollution** – the deposition of solid or liquid waste materials on land or underground contaminating the *soil* and *groundwater* and threaten *public health*

• **Contaminate** – make something impure by exposure to or addition of a poisonous or polluting substance
NATURE AND SCOPE

Land pollution

- the degradation of Earth's land surfaces often caused by human activities and their misuse of land resources.
- occurs when waste is not disposed properly.

Major Causes:

- **Urbanization** – increasing number of people that live in urban areas
- **Industrialyzer** – a process that happens in countries when they start to use machines to do work that was once done by people
URBANIZATION

INDUSTRIALIZATION
NATURE AND SCOPE

Types of Waste Materials:

• **Municipal Solid Waste** (MSW, also called municipal refuse)
• **Construction and Demolition (C&D) waste** or debris
• Hazardous waste
MSW from homes, institutions, commercial establishments and industrial facilities include non-hazardous:

- **garbage** containing moist and biodegradable food wastes (meat and vegetable scraps)
- **rubbish** comprising mostly dry materials (paper, glass, textiles, and plastic objects)
- **trash** includes bulky waste materials and objects that are not collected routinely for disposal (discarded mattresses, appliances, pieces of furniture)
C&D waste (or debris) includes:

- wood
- metal objects
- wallboard
- concrete rubble
- asphalt
- inert materials (produced when structures are built, renovated, or demolished)
Hazardous wastes include harmful and dangerous substances by various:

- chemical manufacturing companies
- petroleum refineries
- paper mills
- smelters
- machine shops
- dry cleaners
- automobile repair shops
- many other industries or commercial facilities
RA 8749
THE PHILIPPINE CLEAN AIR ACT

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
ENVIRONMENTAL MANAGEMENT BUREAU
ENVIRONMENTAL QUALITY DIVISION
AIR QUALITY MANAGEMENT SECTION

REPUBLIC ACT 9003
THE ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000

Department of Environment and Natural Resources (DENR)
National Solid Waste Management Commission (NSWMC)

PROPER SEGREGATION OF SOLID WASTE

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HISTORY

Local Government Units (LGUs)
HISTORY

Sanitary Landfills
Material Recovery Facilities
Waste Management Hierarchy

1. Source Reduction & Reuse
2. Recycling / Composting
3. Energy Recovery
4. Treatment & Disposal

Most Preferred → Least Preferred
CAUSES

1. Throwing of garbage anywhere.
CAUSES

2. Undisciplined citizens not disposing garbage properly.
CAUSES

3. Improper segregation of waste materials.
EFFECTS

• Soil Contamination
EFFECTS

• Air Contamination
EFFECTS

- Animals and Marine Life
EFFECTS

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MITIGATION

• Pay-as-you-throw program for communities

  ex. purchasing special garbage bags from the municipality and through the purchase of special stickers that would need to be affixed to each can or bag that was to be collected
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