

# OUR ENVIRONMENT OUR HERITAGE



## IMPORTANCE OF WASTE MANAGEMENT IN SAMOA

PROPER WASTE MANAGEMENT WILL KEEP OUR ENVIRONMENT CLEAN, HEALTHY AND BEAUTIFUL!!!



Solid Waste Management has long been identified as a priority issue. The need to develop appropriate waste management technologies is the need for better education and awareness techniques to help reduce the amount of waste we create. Waste Minimization must become a goal of all waste management programmes if they are to remain sustainable in the long term. *Effective education and awareness programmes coupled with suitable, user friendly resources will help to achieve this.*

### WHAT IS WASTE MATERIAL?

Waste includes all discarded materials from homes, businesses, restaurants, workplaces, industries, hospitals and other places. It is important for us to understand the types of different waste generated today, because some of these waste materials are hazardous to human health and the environment. Plastics bags, plastic bottles and unused empty drums are biodegradable item but it takes a long time to decompose. However, these materials can be reused in various ways to avoid creating hazardous waste.

### CLASSIFICATION OF WASTE

This classification is based on types of premises or places where waste is generated:

- Municipal Waste
- Industrial Waste
- Hazardous Waste
- Special Waste (Hospital Waste)

### WASTE RELATED PROBLEMS

Poor management of our waste and rubbish will lead to the following problems:

- Pollutants discharged directly into the sea and other marine environment will adversely affect the quality of life of living plants and animals in these ecosystems.
- Adverse effects on human health from diseases spreading to man due to lack of knowledge on proper waste management procedures.
- Increased demand on land for use as refill.
- Government will spend a lot of money to find ways to deal with these waste problems.
- Potential hazard to our children and future generations.
- Reduce availability of natural resources such as land and decrease in biodiversity.

### FOUR SIMPLE METHODS OF WASTE MINIMIZATION

**Reduce:** Individual effort in trying and avoid producing waste. This is so to make fewer and less litter.

**Reuse:** This method will reduce the amount of waste generated and be disposed. Do not throw away plastic bags, plastic bottles, boxes and other reusable rubbish material. Instead, reuse them. This method will reduce the amount of waste generated and to be disposed.

**Recycle:** Some local companies collect and recycle waste material. One example is a company in Samoa recycling waste oil.

**COMPOST:** Food scraps and green leaves are commonly used as raw materials for making compost. Compost is an excellent material to improve soil for agricultural farming and gardens

### COMPOSTING

**Composting can reduce tones of solid waste that we throw away every day. A better choice for Samoa in solving solid waste problems. Good composting helps green plants to grow and produce nutritional healthy food like corn, vegetables and fruits.**

### WHAT IS COMPOSTING?

Composting is a rotting or decomposing process which takes advantage of nature's own way of breaking down organic materials (by worms, insects and microorganisms) to make a humus which can be used to enrich our gardens soil for better plants growth and performance, or sell the produced compost to gardeners.

### ORGANIC MATERIALS THAT CAN BE USED FOR COMPOSTING:

- Vegetables, fruits, tree leaves and branches, weeds and grass clippings.
- Food scraps, egg shells and small bones
- Animal manure (chickens, cows, pigs etc..)

### FACTS ABOUT COMPOSTING

- Composting is a process in which organic waste are decomposed under controlled conditions to produce an end product which is used as a fertilizer and soil conditioner.
- The nutritional value of the compost depends on the type of materials used in the compost.
- Adding animal manure to the compost will not only speed up the decomposition but also improve its nutritional value.
- Collect large amount of organic materials before the compost heap is built up.
- The final compost quality depends on the amount of carbon and nitrogen used.
- Microbial activity is reduced at higher C/N rations (low nitrogen supply) and valuable nitrogen may be lost as ammonia gas.

### COMPOSTING INGREDIENTS

**The essential ingredients of a compost heap are organic materials, microorganisms, moisture, oxygen soil and dolomite or lime.**

### HELPFUL HINTS

- Air is essential for efficient composting. Lack of air causes the organic material to compost slowly and creates terrible odors of ammonia or rotten eggs.
- Turning your compost regularly with a spade will help the air to get in.
- In cold weather, frequent turning will allow too much heat to escape.
- You may wish to start your compost with a special 'starter'
- Packet available from your garden supply shop.
- Adding nitrogen (nitrogen fertilizer from the garden

center) is helpful to speed up the process.

- Smaller, chopped up or shredded rubbish will compost faster.
- Sawdust from timber, which has been treated to kill insects, will slow down the composting process.
- Keep the compost covered to keep out excess moisture.
- Avoid using insect killing sprays near the bin.
- When your bin is full and ready for use, some of the well-rotted compost can be used as a starter for your next compost heap.
- Mix the compost thoroughly with the soil in your garden.

### WHY COMPOST?

Waste is fast becoming a global issue due to the increase in population and change in consumption patterns. This has resulted in an increase in health and environmental problems.

### DON'T COMPOST..

- Meat and fish bones
- Fat and dairy products
- Food and beverage packaging
- **PLASTICS**
- Glass & Ceramics
- Cardboards
- Treated products
- Noxious weed
- Textiles, leather & vinyl
- Diseased plants
- Coal ash.

### COMPOST USE

Compost is ready for use within 3 to 4 months, when the temperature in the pile drops to the temperature of the surrounding air. Fermentation normally ends at this stage and the product is both chemically and physically stable. Other signs that compost is ready for use include:

- It looks like a dark, crumbly soil with a nice fresh earthy smell-not sour
- It no longer heats up after being turned over or watered

### BENEFITS OF COMPOSTING

- **Compost is mother nature's free soil improvement product and can be used anywhere to improve soil, conserve moisture and prevent soil erosion**
- **It is an organic fertilizer, therefore decreases the adverse effects of chemical fertilizers such as water pollution**
- **You save money because you don't need to buy chemical fertilizers for your gardens**
- **Composting is easy, effective and minimizes waste sent to landfills and incinerators.**

For more information contact Tafaigata Section at the Tafaigata Landfill ph# 22267 / 22281.

**Produced by the Ministry of Natural Resources and Environment**