SOLID WASTE MANAGEMENT OUTREACH PROGRAMME

BARBADOS

THE DOS AND DON'TS
OF SOLID
WASTE DISPOSAL



DEFINITIONS

Illegal Dumping: The act of disposing of waste in a manner to national laws.

Litter: Waste that is not deposited in accordance with national la and regulations, and includes dust, dirt, oddments, bottles and ends of cigarettes.

Refuse/Waste/Garbage: This refers to all non-combustable material resulting from the handling, preparation, cooking, consumption and storage of food, along with the following materials:

Broken dishes, glass, rags, cast-off clothing, wastepaper, food containers, sawdust, grass cuttings, plastic, shrubbery, weeds, tree prunings, garden waste or such waste material as may accumulate as a result of construction or repairs.

Municipal Solid Waste: The combined residential and commercial waste material generated in a given municipal area.

INTRODUCTION

The protection and enhancement of the environment is essential to the maintenance of good health for residents and visitors. It is estimated that each person generates approximately 0.9kg (approx. 2 pounds) of solid waste per day. This translates into an estimated 450 tonnes per day or 163,880 tonnes of solid waste per year. Major contributors include organic (non-yard waste) (33%), yard waste (26%), paper (20%), plastic (9%). As a result, Barbados is very concerned for the potential threats that this large amount of waste may pose to its environment.

Currently only a small percentage of waste is removed from the waste stream for recycling. The majority of the remaining waste is disposed of at the landfill. While Government is attempting to implement island wide waste minimization measures, the garbage problem is greatly exacerbated by improper waste disposal practices on the island. Residents and businesses alike manifest this in wide spread littering and illegal dumping as well as the improper setting out of waste.

This brochure provides suggestions that will enhance each Barbadian's capability to set out waste in an environmentally responsible manner.

/LAND FILLING IN BARBADOS

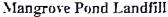
Sanitary Landfilling

This is a method of disposing of refuse on land without creating nuisances or hazards to public health or safety. Careful preparation of the fill area and control of water and drainage are required to assure proper landfilling. To confine the refuse to the smallest practical area and reduce



it to the smallest practical volume; heavy tractor-like equipment is used to spread, compact and cover the waste daily, usually with at least six inches of compacted soil or other fill meterial. After the area has been completely filled and covered with a final two to three foot layer of soil, it is allowed to settled for an appropriate period of time.

Following the closure of the landfill the reclaimed land may be turned into a recreational area such as a park or a golf course. The land may also be used as a plot on which buildings may be constructed under strictly controlled conditions.





he Mangrove Pond Landfill, the landfill site currently in operation is nearing the end of its lifespan. This landfill was the first of its type in Barbados to be fitted with a clay liner and leachate collection system. Over the years there have been many social issues aris-

ing out of the operation and management of the Mangrove Pond Landfill. Inadequacy of resources, which in the past had plagued its operations, gave rise to nuisances such as fires and offensive odours. In recent time however the management of the landfill has improve considerably. Landfilling activities at Mangrove Pond will cease when the new National Sanitary Landfill at Greenland becomes operational.

National Sanitary Landfill

he new landfill at Greenland is situated on a site that had been previously used as a quarry. The site which covers about 13.8 ha., has been designed and engineered to have an estimated lifespan of about twenty years. The Greenland landfill is a sanitary engineered landfill.



Bagatelle Bulky Waste Landfill



The solid waste disposal site at <u>Bagatelle</u>, St. Thomas is used for the disposal of "bulky" types of waste, such as building material, rubble, scrap automobiles and non-combustible items such as old appliances which comprise a significant proportion of the solid waste—ream. These items are not normally prone to producing odours, or large amounts of leachate with contaminants of environmental or health concern, and, as such, the

requirements and cons raints for disposing of bulky waste are le demanding than those for other constituents of the waste stream.

- ✓ Do wait until you reach a wastebin to dispose of your litter.
- ✓ **Do** put out your garbage on your collection day only. This reduces the risk of garbage bags being burst by vagrants, dogs or other animals.
- ✓ **Do** dispose of your garbage appropriately. Put garbage out in secure containers for the appropriate collection only.
- ✓ Do empty away stagnant water that may accumulate in your garbage bin and reduce the risk of dengue fever and other disease.
- ✓ **Do** call the Sanitation Service Authority (S.S.A.) at 430-5000 to arrange for the removal of bulky items.
- ✓ Do ensure that your garbage bin has a capacity of no more than 16 gallons.
- ✓ Do place only manageable amounts of garbage out in sturdy bags or bins.
- ✓ Do wrap broken objects in newspaper before disposing of them in the garbage to avoid injury to yourself and others including waste collection staff.
- ✓ Do secure needles and syringes immediately after use and deliver them directly to the Queen Elizabeth Hospital (Q.E.H.) for disposal.
- ✓ Do ensure that bags are securely tied and that waste is completely covered inside of the bin.
- ✓ **Do** ensure that the waste in the bin is free flowing.



DONTs

- **X** Do not litter. If we drop litter it will encourage others to litter.
- **X** Do not put out garbage too early, especially garbage that contains meat and fish scraps.
- **Do not** dump or litter illegally at the sides of the roads or in gullies, it is not only unsightly but dangerous and hazardous to health.
- **Do not** allow water to collect in your garbage bin.
- **X** Do not place your old stoves, refrigerators, or other big or bulky items at the side of the road.
- **X** Do not use an oversize bin (e.g. 50 gallons (190L) drum) to contain your garbage. They are generally too heavy to lift.
- **Do not** overload your garbage bags; they may burst as a result of excessive weight or bulk.
- **Do not** throw broken objects (e.g. glass, ceramic, etc.) into the garbage without wrapping them first.
- **Do not** place needles and syringes in the garbage or leave them lying around.
- **Do not** overload your waste bin or put out loosely tied or untied bags for collection.
- **Do not** compact waste in the waste bin. This makes it difficult to extract the waste.

Materials Not Collected by Regular Collection Trucks:

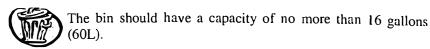
The following items are <u>NOT</u> collected by the regular solid waste collection trucks:

manure
 tree stumps
 turf
 earth
 large furniture
 roots
 major household appliances
 large metal auto parts

Please call the S.S.A. at 430-5000 to arrange collection for these items

THE ATTRIBUTES OF A GOOD WASTE DISPOSAL CONTAINER

good waste disposal container is of watertight, rust resistant construction, has a circular design with a smooth rim, rigid fixed handles, a watertight cover, and has drainage holes at the bottom.



As an alternative, a sturdy plastic bag can be used. The bag must be securely tied at the top when ready for collection. It should be no more than 76 cm in height, and no more than 46 cm in width, and must be capable of withstanding the weight of its contents.



TIMES OF COLLECTION



o find out the day and times of collection in your area call the Sanitation Service Authority (SSA) at 430-5000.

WORD SEARCH



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E	R	Ι	R	A	\mathbf{U}	Y	A	S	T	K
S	P	A	В	${f E}$	H	\mathbf{L} .	U	\mathbf{M}	S	N
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1.	BAG	11.	\mathbf{OIL}

- 2. BIN3. DIRTY12. PLANKTON13. POLLUTION
- 4. DRAIN 14. RAW
- 5. ENVIRONMENT 15. REFUSE
- 6. FILTHY 16. SEWAGE
- 7. FISHES 17. SHIPS
- 8. GARBAGE 18. SPILLAGE
- . HEALTH 19. TRASH
- 10. NEAT 20. WASTE

ILLEGAL DUMPING

Illegal dumping in gullies and at the side of the road is not only unsightly but is also dangerous! Illegal dumping leads to diseases such as dengue fever and leptospirosis and it also contaminates our water supply. In short, illegal dumping can kill. The Barbados Environmental



Association has estimated that over 60% of the island's gullies are affected by illegal dumping. Further more, photographs taken over a period of time, as well as photographic records kept by members of communities confirm that at lease some of the gullies are, at times, overflowing due to systematic dumping of residential, agricultural and commercial refuse.

The majority of current efforts to curb litter and illegal dumping are founded in education, rather than enforcement. Though there are statutes available, the costly process of identifying and prioritizing problem areas, sorting refuse to obtain "evidence" and enduring long courts proceedings can be daunting for enforcement agencies faced with limited budgets and a myriad of other community problems.

The implementation of the Integrated Solid Waste Management Program with its broad based public education components, improved waste collection, transportation and disposal, together with a reduction in littering and illicit dumping, will, in turn, lead to a cleaner environment, less water and soil pollution and will impact positively on the quality of life of Barbadians and visitors alike.

BE PROUD OF BARBADOS

Barbados is our country and we should be proud of it!

- If you visit the park or beach for a picnic please take your garbage home or place it in the waste bins provided.
- Please wait until you get home to put the fast food box in the garbage instead of throwing it through the car or bus window.
- Why not carry a bag in your car for litter? This bag can be emptied at home.
- You may not live in the area where you are inclined to drop waste, but remember, the entire island is ours to keep clean.
- Let us dispose of our waste responsibly. If you see persons littering ask them to pick up their waste and place it in a waste bin.