

# WHAT CAN I DO TO REDUCE MARINE POLLUTION?

- Do not discharge waste, garbage or chemicals directly into the marine environment or into gullies, ravines and drainage structures that discharge to the sea.
- Treat industrial waste and chemicals in a manner approved by the EPD before disposal to the environment.
- Use good agricultural practices to reduce erosion and avoid excessive use of pesticides and fertilizers.
- Do not litter on the beach and participate in beach clean-ups.
- Stop illegal dumping, particularly in gullies and take waste to the approved landfill.
- Reduce storm water runoff by collecting rainwater for non-potable use.





#### ENVIRONMENTAL PROTECTION DEPARTMENT

### MINISTRY OF ENVIRONMENT & DRAINAGE

L.V. HARCOURT LEWIS BUILDING

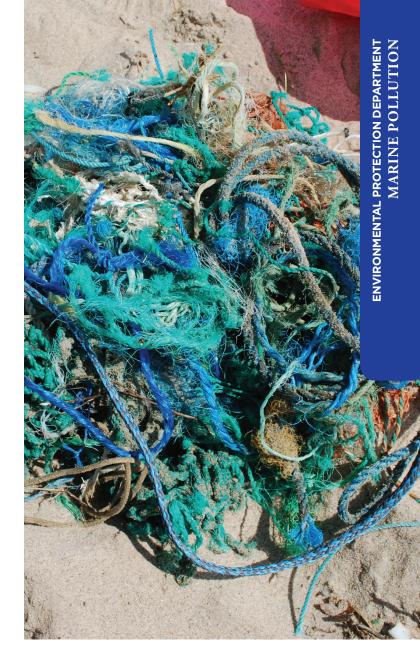
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MINISTRY OF ENVIRONMENT AND DRAINAGE



## Marine Pollution

### WHAT IS MARINE POLLUTION?

Marine pollution is the introduction of any substance or form of energy into the marine environment that may harm living organisms, negatively affect marine resources and amenities, reduce sea water quality and affect human health.

Pollutants may be discharged directly into the marine environment or may be discharged inland and travel to the marine environment over land, through gullies, through storm water drainage systems or underground with ground water flow through fissures and cave systems.

# WHAT ARE THE EFFECTS OF MARINE POLLUTION?

### **Death of Marine Organisms**

Fish and other marine organisms such as coral are sensitive to changes in the marine environment. Chemical and bacteriological contamination may adversely affect or kill marine organisms. Marine litter such as plastics and fishing nets can strangle species such as crabs, turtles and birds.

#### **Destruction of Marine Habitats**

The introduction of pollutants may destroy marine habitats such as coral reefs and make them unfit habitats for marine organisms. This can adversely affect the fishing and tourism industries which could have a severe impact on the economy. Coral reefs also protect beaches from erosion by wave action and their destruction can lead to the disappearance of our beaches.

The following sources may cause adverse effects on the marine environment:

- Industrial processes that produce toxic or nutrient rich by-products or wastes;
- Oil spills from land-based sources, ocean vessels or platforms;
- Sewage which contains bacteria, nitrates, phosphates and other contaminants;
- Storm water runoff which may contain contaminants such as sediment, garbage, nutrients (from humans or agricultural sources) and chemicals such as pesticides;
- Accidents at sea which can lead to loss of hazardous cargo; and
- Construction sediment can be introduced into the near shore from foundation de-watering and via run-off from construction sites.

# WHAT IS THE ROLE OF THE MARINE POLLUTION CONTROL SECTION?

The Marine Pollution Control Section (MPCS) of the Environmental Protection Department (EPD) investigates activities that affect or have the potential to affect the marine environment. The functions of the section are:

- Responding to complaints or pollution incidents related to the marine environment.;
- Monitoring and control of marine pollution;
- Conducting inspections of various sources to determine potential releases of pollutants;
- Oil spill contingency planning and response;

- Conducting research into marine pollution issues; and
- Preparing guidelines for various sectors and or activities aimed at reducing marine pollution.

# WHAT ARE THE LEGISLATION AND STANDARDS?

### Marine Pollution Control Act CAP. 392A (MPCA)

The Marine Pollution Control Act, CAP. 392A (MPCA) was established to prevent, reduce and control pollution of the marine environment of Barbados from the following sources and activities:

- Land-based sources,
- Sea-bed activities,
- Dumping activities and
- Airborne sources.

Under the MPCA, any person that releases or causes the release of any pollutant into the environment in violation of applicable standards, conditions or requirements specified under the Act or Regulations is guilty of an offence.

The onus of monitoring and sampling of pollutants lies with the polluter and not with the Department. However, the polluter is required to report and provide required information on their pollutants to the Department. Individuals or industries that fail to comply with the provisions of the Act may be prosecuted.

### **Marine Pollution Standards**

Under the Marine Pollution Control Act, CAP. 392A, the EPD is required to prescribe a list of pollutants and their prohibited concentrations. Standards for the list of pollutants have been proposed based on a comprehensive review of current international standards. The Australian and New Zealand Environment Conservation Council Guidelines for Fresh and Marine Water Quality (2000), form the basis of the proposed standards. However, where reliable local data was available the guidelines were adjusted for local conditions.