

# ENVIROFOCUS

Newsletter of the Environmental Protection Department

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Our heritage

An outcome of our actions

**DON'T POLLUTE OUR HERITAGE!**

# From the Director...

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The environment is continuously under threat. Sadly, illegal dumping, marine pollution and air pollution are ever present; and issues associated with e-waste and noise pollution are increasing. However, some of the most severe threats to the environment arise as a result of accidents. Such incidents can result in spills of hazardous substances and chemical fires, which in turn can impact human health and contaminate the environment.

There is no way to predict an accident; we can only prepare ourselves to respond quickly to such events so as to minimize their impacts. One way of preparing ourselves is through national response plans such as the National Oil Spill Contingency Plan. This plan aims to prevent or mitigate adverse environmental impacts of oil pollution, and protect and preserve human health and safety.

Over the period May 2nd – 6th 2011, the National Oil Spill Committee (NOSC) responsible for implementing the plan, in association with ESSO Barbados and the EXXON Mobil Latin America Regional Response Team, conducted a simulation exercise to test various aspects of the plan. Exercises like this ensure that all

emergency responders are aware of their roles during response to an oil spill incident; this ensures their safety and reduces damage to the environment. Moreover, these exercises identify areas in the existing plan that might be in need of strengthening, so that Barbados is better able to respond appropriately and posthaste to a national oil spill event.

As chair of the NOSC, I will endeavour to coordinate similar exercises annually. Not only for oil spills, but also with regard to hazardous substances, for example, chemical spills. In doing so, all those involved in emergency response will help to ensure that future generations inherit an environment which is healthy, productive and enjoyable.

## *In this issue*

<i>Construction and the Environment</i>	<i>2</i>
<i>Launch of the GHS</i>	<i>3</i>
<i>Minimizing Waste</i>	<i>4</i>
<i>Get to know your island</i>	<i>4</i>
<i>What a waste!</i>	<i>5</i>
<i>Fuel of the EPD</i>	<i>6</i>
<i>The EPD Experience</i>	<i>6</i>

# Construction and the Environment

“Homes”, “jobs”, “roads”, “progress” and “development” are words that may come to mind when one thinks of construction. However to the person living or working near construction activities some different words – “dust”, “noise”, “odours”, “inconvenience” and “headaches” – may come to mind. Therefore, even though construction is inevitable, it is important that construction activities have the least possible impacts on human health and the environment.

To this end, the Environmental Protection Department (EPD) invited stakeholders in the construction industry to an awareness-raising seminar entitled – “Environmental Best Management Practices for Building Contractors” on June 29, 2011. The topics covered were the impacts of construction, best management practices that can reduce the impacts of construction, safety management on construction sites and the process of applying for building approval.

The main environmental issues related to construction and best management practices to address these issues have been included in a booklet prepared by the EPD entitled “Environmental Best Management Practices for Building Contractors”.

Participants at the seminar engaging presenters and organizers in discussion.



The Department will revise the booklet, based on input from seminar participants, and it will be made available to a wider cross-section of stakeholders in the near future. In general the information was well received by the audience and further dissemination of the information was encouraged. Special thanks are extended to the Ministry of Labour and the Town and Country Planning Development Office for making presentations at the seminar, which aided in its success.

Some of the best management practices presented were:

- Erecting physical barriers,
- Wetting of roads,
- Placing noisy equipment as far as possible from sensitive receptors,
- Conducting renovations when staff is not at work,
- Restricting the hours of operation to times when persons will be least affected (typically after 7:00 am and before 6:00 pm in residential areas),
- Handling of storm water properly, and
- Disposing of construction waste properly.

## Ambient Air Quality Tips

- Do not burn any type of trash. It is a nuisance and can affect your health and the health of other persons in your area.
- Cover stockpiles of sand and stone. Vehicles transporting such material should also be appropriately covered.

# Launch of the GHS

Picture it! Barbados, April 11-13, 2011.

Representatives from Government agencies, industry, academia, and civil society assembled at the Lloyd Erskine Sandiford Conference Centre.

## Their purpose?

To participate in the launch of a project on the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) that aims to improve the management of chemicals in Barbados.

## How will the GHS improve chemicals management?

The GHS is a tool developed by the United Nations for defining the hazards posed by chemicals, and communicating these hazards to users on labels and Safety Data Sheets (SDS). Educating individuals to










the dangers of chemicals through the use of labeling, SDS and training is an integral part of chemical management. This is the starting point for empowering chemical users to utilize, handle, store, and dispose of chemicals in a manner that reduces any negative impacts to themselves, others, or the environment.

As training is an integral part of chemical management, during the gathering on April 11-13, participants also undertook a training exercise. Participants were made aware of:

- the procedures for classifying the dangers,
- the components of GHS labels such as pictograms, and
- what they could expect to find on SDS.

The two-year project, spearheaded by the Environmental Protection Department (EPD), will seek input from various sectors across Barbados, particularly, industrial workplaces, agriculture, transport and consumers.

The Department will keep you informed on further developments of this new project through this newsletter and other media.

 Oxidizers	 Flammables Self Reactives Pyrophorics Self-Heating Emits Flammable Gas Organic Peroxides	 Explosives Self Reactives Organic Peroxides
 Acute Toxicity (severe)	 Corrosives	 Gases Under Pressure
 Carcinogen Respiratory Sensitizer Reproductive Toxicity Target Organ Toxicity Mutagenicity Aspiration Toxicity	 Environmental Toxicity	 Irritant Dermal Sensitizer Acute Toxicity (harmful) Narcotic Effects Respiratory Tract Irritation

## FYI

We need to manage our chemicals properly to:

- Protect human health and the environment from the dangers posed by chemicals.
- Decrease potential dangers during the production, usage or disposal of chemicals.

You must play your part.

- Read the packaging information to understand associated dangers and emergency procedures.
- Ensure that all chemicals are properly labelled.
- If unsure about correct disposal methods for chemicals, contact the Environmental Protection Department for assistance.

# Minimizing Waste

The term environment refers to our surroundings, which include the land, sea and air around us. All of our activities can negatively affect the environment. Therefore, it is important that we learn to minimize these impacts and ensure that future generations inherit an environment that is healthy, productive and enjoyable.

Recycling is one way to minimize impacts to the environment. It is the process of converting waste into useable material or returning waste to a previous stage in the production cycle to produce a new product.

In Barbados, there is currently a trend where persons have set up recycling and recycling preparation operations in order to reduce the volume of waste sent to the landfill. At present there are a number of items, which can be recycled, these include:

- Plastic
- Cardboard
- Glass
- Electronic Waste

- Ferrous Metals
- Used cooking oil

This concept is a good one; however, care must be taken to ensure that the activities at these facilities do not have an adverse effect on the environment. The following are some of the guidelines that recyclers should follow in order to develop sound recycling operations in Barbados:

1. Prior to the establishment of any recycling or recycling preparation operation, persons must obtain permission from the Town & Country Development Planning Office and the EPD.
2. Operators of recycling or recycling preparation companies should put provisions in place to reduce the possibility of environmental degradation due to their activities.

Consumers also have a role to play when using these recycling facilities. They should ensure that the operators are reputable and that their operations are not harming the environment.

## GET TO KNOW YOUR ISLAND

Barbados is an island with fantastic geology and ecology. From its deepest gullies to its highest mount, from the lush west coast to the rugged east coast and the cliffs to the north and south of the island. With today's busy and hectic lifestyle, it is often heard "I just don't have the time for that". Let's make some time even if it is just a Sunday afternoon after lunch, take a drive around the island and get to know it better. You could even hop on a bus bound for a destination unknown, and see where you end up. Take a walk on the beach, any beach! Search out our wetlands. Visit Turner's Hall Woods, Welchman Hall Gully, Sailor Gully or Chancery Lane Swamp.

This could be an event for family and friends, to get to know our island and to learn how important our environment is to the people of today and tomorrow. Did you know that there is a gully system that runs from Chalky Mount in St. Andrew all the way to Holetown, St. James? Water flows from gullies starting

in the centre of our island to meet the sea carrying with it, not only nutrients, but also debris and litter which was unfortunately disposed of into our gullies. Our ecosystem is so delicate, it is important that we protect it for future generations. So get out and see the beauty and then determine within your minds and your hearts that you will protect it, because it truly is priceless.

Long Pond



# What a Waste!

Research into water usage has shown that as much as 80% of the total amount of water used can be disposed of as wastewater. As the owner of a small home the significance of this may not be immediately apparent. However, imagine hotels, villas or large industries that use hundreds of gallons of water daily and spend significant sums to dispose of it as waste. Suddenly that 80% seems like a squandered resource. In fact, many countries, including our own, have begun to recognise the benefits of reusing wastewater. Much like recycling, where our old bottles, newspapers and cardboard boxes get a new lease on life, wastewater is being collected, treated and reused for various purposes. Around the world its applications range from the watering of lawns to the irrigation of crops and flushing toilets.

In Barbados the applications are restricted in many cases to landscaping purposes. Any person or business intending to reuse wastewater must seek permission from the Environmental Protection Department. This is to ensure that in any case where reuse is considered, that water is treated to the highest levels for its intended use. Treatment must include some form of disinfection, often with chlorine, to eliminate any bacteria that may be present. We do this to safeguard public health and to protect both the groundwater and the marine environment.

So the next time you wash those dishes or take that shower, remember that with a little treatment that water going down the drain may not be such a waste after all.

## Garbage vs. Litter

Garbage is any waste item that has no further use and is ready for final disposal in an approved manner.

Litter is any item, including garbage, that has been improperly disposed of to the environment whether intentionally or unintentionally. In the marine environment, litter can choke or maim fish, turtles, sea mammals and birds.

You can play your part to protect our environment from garbage and litter. These are a few pointers to remember:

- Store garbage securely until pickup day.
- Recycle when you can. This also reduces the amount of garbage going to our landfills.
- Never litter! Place garbage in the garbage bin so that it does not become litter.
- Do not dump illegally, use the government managed and regulated disposal facilities.

Drip Irrigation: an approved form for treated wastewater



# FUEL OF THE EPD

The Environmental Protection Department (EPD) is able to pursue its goal of environmental protection through collaboration between its administrative and technical sections. Our administrative team is made up of an Executive Secretary, an Administrative Officer, a Senior Clerk, a Computer Operator, a Stenographer/Typist, three Clerical Officers, two Clerk/Typists and a Receptionist/Typist.

In pursuing the mandate of the organization, the administrative team lends support by performing a number of roles. These include, but are not limited to:

- Document preparation;
- Speech preparation;
- Data management (including entering data from various sampling programmes into databases); and
- Liaise with the public, other ministries and the private sector.

The administrative staff prepares documents such as

Cabinet Papers, which are used, among other things, to advise the Government regarding what policy direction to follow with respect to environmental matters and the implications of these policies on the society. They also prepare speeches in a manner that is easily understood by the public. The data management function of this section enables the technical staff to produce reports quickly and respond to enquiries from the public in a timely manner.

Probably, the most critical function of this section is its interaction with the public. As the primary form of contact with the public, they are charged with being ambassadors for the Department and ensuring that healthy relationships exist between the public and the EPD.

As a wise man once said, “...if the technical staff is the engine of an organization, then the administrative staff is its fuel.” Nowhere is this sentiment more exemplified than at the EPD.



Working at the Environmental Protection Department has been an opportunity of a lifetime and a great stepping stone within my journey of seeking to be a well rounded individual. Everything that I learnt within the classroom was tested in a very interesting, practical and everyday manner. The experience of working at EPD brought a new meaning to the saying “things are better learnt through experience”.

From my first day at work I was quickly informed of the various roles EPD played, along with the various activities they conducted and supervised. It was only a matter of time before I was out in the field, observing and being hands on. While working with each section I was exposed to many new and exciting experiences. My experiences ranged from landfill sites visits to water sample collections, and with

each experience a new wealth of knowledge was there to be acquired.

I also had the opportunity to attend workshops and meetings where I was able to develop many skills along with being able to interact with persons from all walks of life. Each interaction taught me more about the environment along with valuable life lessons.

The experience at EPD was also made all the more wonderful due to the friendly staff which surrounded me; it was like we all were family working together with one goal in mind.

In closing I would say EPD is one department with many sections however it has a true sense of working together to get the job done. I personally would not trade my experience at EPD for anything because it was more than work experience, it was a life experience.



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