

METRO MANILA'S SHAME

EACH PERSON IN METRO MANILA GENERATES AN AVERAGE OF HALF A KILOGRAM OF WASTE EVERYDAY

- The estimated total solid waste generated in Metro Manila daily is 6,700 tons (based on 2003 population estimates). This is equivalent to about 2,061 dump trucks.
- Only 720 tons (about 10.7 percent) of the 6,700 tons is recycled or composted.
- About 6,000 tons is either hauled to the city's dump sites, dumped illegally on private land, in rivers, creeks, Manila Bay, or openly burned.
- Given this average, 2.4 million tons of garbage will be generated every year.
- In the next 30 years, Metro Manila will generate over 70 million tons of solid waste.
- This is equivalent to over 230 million cubic meters of waste, an amount that equates to a knee deep layer of waste over the entire metropolis (over 630 square kilometers). Collection of this waste will require a line of waste trucks going three times round the earth and over halfway to the moon.
- Local governments in Metro Manila spend about P3.54B annually on waste collection and disposal.

SOURCE: THE GARBAGE BOOK: SOLID WASTE MANAGEMENT IN METRO MANILA PUBLISHED BY THE ASIAN DEVELOPMENT BANK IN 2004



OPEN DUMP IN PIER 18, MANILA

IN 1999, FORD MOTOR COMPANY USED MORE THAN 60 MILLION 2-LITER PLASTIC SODA BOTTLES (7.5 MILLION POUNDS) TO MAKE GRILLE REINFORCEMENTS, WINDOW FRAMES, ENGINE COVERS AND TRUNK CARPETS FOR ITS NEW VEHICLES

MESSAGE IN A BOTTLE



The next time you buy a beverage to drink, look twice at the bottle before throwing it away. If it's plastic, it will likely contain a symbol consisting of arrows cycling clockwise, forming a triangle, with a number in the middle. The number is the resin identification code - it indicates what kind of plastic the container is made of. If the number is 1, it indicates that the bottle is made of PET, or Polyethylene Terephthalate.

PET is a common plastic used for packaging a wide range of food products and other consumer goods, such as soft drinks, alcoholic beverages, detergents, cosmetics, pharmaceutical products, and edible oils.



PET is also fully recyclable. Used PET bottles are crushed, shredded into flakes, and then sold to manufacturers who use them as raw materials for clothing, pillows, carpets, polyester sheets, or non-food containers. Worldwide, approximately 1.5 million tons of PET bottles are collected for recycling.

Plastic recycling companies in the Philippines buy PET bottles for P15 a kilo. So the next time you drink mineral water, softdrinks, or flavored tea drinks, don't mix the empty bottle with the trash. Send it down the recycling path by keeping it in a separate container with other plastic bottles, and giving it to the Eco-Aide who collects the recyclables in your community.

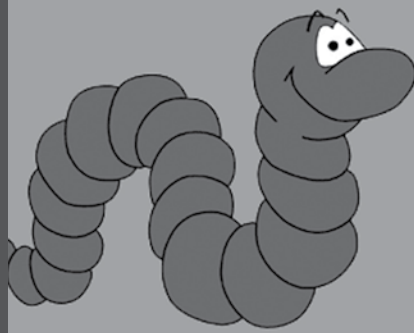
8 WAYS TO SHOP SMART

You can help reduce waste not just by recycling, but also by choosing well the products that you buy. Here are some tips from The Women's Environmental Network (<http://www.wen.org.uk>) to remember on your next trip to the grocery:

- 1 **Choose goods with the least packaging.** One layer is enough; layers and layers of plastic are not necessary.
- 2 **Buy non-perishables in bulk** such as household cleaning products. You'll only have one container to throw away and it's cheaper.
- 3 **Buy fruit and vegetables loose,** not pre-packed. This is cheaper and cuts down on packaging.



- 4 **Go for glass bottles** and jars or tins. Cartons and plastic can be difficult and expensive to recycle.
- 5 **Buy refills** for the products you buy regularly. Save on money and packaging—ideal for items such as washing detergents.
- 6 **Use reusable goods** which last longer than single use items. Examples: reusable dish cloths, dusters, razors and nappies.
- 7 **Take your own shopping bag** and avoid free plastic bags. If you say no to plastic bags, supermarkets might just get the message!
- 8 **Buy recycled goods.** This means that materials can be used for a second time, reducing our dependence on raw materials and finite resources.



LET WORMS EAT YOUR GARBAGE

Earthworms can help reduce your garbage by eating biodegradable waste

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Tim Greenway/Kennebunk Post

This practice is known as vermicomposting, or the production of organic fertilizer through the action of earthworms. Worms can consume organic materials such as kitchen and garden waste and excrete it out as vermicompost, a high-quality organic fertilizer.

Vermiphil, a company based in Bacolod City, practices vermicomposting in the 18-hectare Buro-Buro Vermi Farm. The vermicompost is used to fertilize vegetables, which are sold in the local market. The earthworms (whose population can double within the composting time) are used to feed fishes, chickens, and other farm animals.

According to Vermiphil, the advantages of vermicomposting are many: it's environment friendly; it doesn't require imported inputs (they use the African night crawler, a type of earthworm introduced to the Philippines in the 80s); and the end-products are highly profitable when sold. Vermicompost is also more effective than ordinary compost.

According to cityfarmer.org, vermicomposting is also an ideal way for apartment dwellers with little or no space to dispose of their food scraps, as the composting can be done within a container, such as a wooden box, earthen pot, or plastic basin.

DEGRADABLE PLASTICS

- Can you imagine a plastic bag degrading into dust within six weeks? Normally it would take 100 to 400 years to degrade naturally. But with modern technology, it is now possible for plastic to degrade within a shorter period of time. According to the US Energy Information Administration (www.eia.doe.gov), Mc Donalds in Australia and Sweden have been using biodegradable plastic cutlery for three years. Biodegradable plastic contains a small percentage of non oil-based material, such as cornstarch, that enables it to break down more easily. It enables Mc Donalds to compost their catering waste without segregation. Six-ring carriers for packs of beer cans are also now being manufactured in a plastic which photo-degrades (breaks down when exposed to sunlight) in six weeks.
- But there are concerns that these plastics will not degrade if disposed of in inappropriate conditions. For example, if a photodegradable plastic is buried in a landfill it will not degrade because it is not exposed to light. Another concern is that the mixture of degradable and non-degradable plastics may complicate recycling systems. There are also fears that the use of these materials might encourage more people to use plastic, if they believe that it will simply disappear when discarded. But who knows, there might be a time when scientists will find a way to make plastics do just that.



