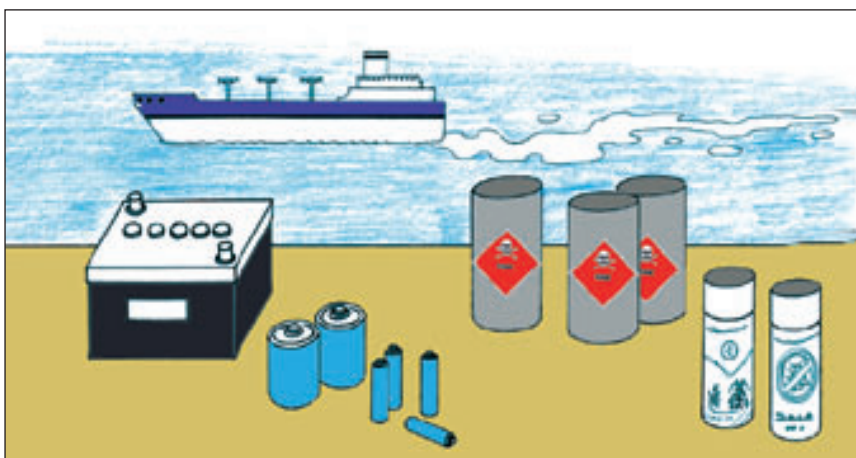




TOXIC WASTE



It is hard to give a simple, precise definition of what « toxic waste» means.

Generally speaking, it refers to all products which are harmful for our health and the environment, whether these products are radioactive, ionizing, inflammable, explosive, corrosive, carcinogenic or are likely to cause changes in chromosomes and genes, and which we find in the food chain.

The origins of toxic products

Toxic products are generated by industrial, chemical and biological activity. Even household and commercial waste contains tiny quantities of toxic products (especially batteries and pesticides).

Some examples of toxic products

1. Polyvinyl chloride (PVC): this is a non-inflammable product used as an insulator in big electricity networks; it can easily be eliminated by using special incineration techniques.

2. Dioxan: it results from the burning of products containing chlorine, like plastic, and from steel industries and from some organic chemical compounds, particularly pesticides. Dioxan is also found in paper which is bleached with chlorine.

3. Heavy metals: these are produced by heavy industry, particularly processing operations using cadmium, nickel and chromium, or are found in batteries (mercury, cadmium, lead) or fuel (leaded petrol).

4. Radioactive waste: this comes from nuclear experiments, atomic energy production, nuclear research activity, and medical use in the treatment of cancer.

How to get rid of toxic waste

There is no safe, completely danger-free way of definitively getting rid of toxic waste. The methods most frequently used are:

1 Burial

The toxic products are buried in ditches covered with an airtight or water-tight layer of clay or plastic covering, or are kept in concrete blocks to prevent contamination from soil and underground water.

2 Incineration

The toxic waste is incinerated at low temperature (with solid household waste) or at high temperature (alone), to change it

into little non-toxic particles.

High-temperature incineration is more suitable for industrial waste (tar, paint, pesticides, solvents) insofar as this prevents highly toxic dioxan gas escaping; this method is not used in most countries, particularly developing countries.

3 Chemical or biological treatment

With the help of chemical products or bacteria, it is possible to reduce or completely eliminate the harmfulness of toxic products, thus helping towards the evacuation or recycling of these products.

International trade in toxic products

The definitive and ecological evacuation of toxic products is a difficult, expensive operation, requiring considerable investment (not always available even in industrialised countries).

Further, as the evacuation of toxic products is never done in an entirely ecological way, some industrialised countries prefer to export their waste to the poor countries, getting rid of it by paying these countries modest financial sums in compensation.

Many poor or developing countries with cash problems have thus become an easy prey to brokers and intermediaries between them and the societies which are actually producing the toxic products.

One of the most serious dangers linked to this situation lies in the dumping at sea of these toxic products while they are being transported to the developing countries. These have neither the necessary technology nor the experience to fight against these products and their peoples are thus exposed to serious risks.

Aware of these dangers, the international community signed the Lomé and Basle Conventions and the OAU Convention on organising the transport and subcontracting of toxic products.

Solid waste and the law

Most countries' laws forbid the importing of toxic waste,

while laws on the producing and evacuating of this waste are still at an embryonic stage.

Bearing in mind the fact that the local industries are producing quantities of toxic produce, the laws in these countries are mainly directed towards organizing the processing, transporting and evacuating of these products, whereas it would be more logical that these laws should address the need to reduce the amount of this waste that is produced. This would be a more effective and more profitable means and would considerably reduce the costs and consequences of processing and definitively evacuating these products.

How can an industrial enterprise reduce the production of toxic products?

1. By using alternative, non-toxic, raw materials: oxygen can be used for bleaching paper, instead of chlorine, which produces dioxan.
2. By improving production techniques, and maintenance of equipment and material.
3. Recycling toxic products reduces pollution and costs. Toxic heavy metals can be recycled.

What part can you play?

1. Inform the concerned authorities in your country of any illegal discharge or evacuation of toxic products.
2. At home, do not use toxic products such as pesticides and batteries.

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