

TOXIC WASTE AND CHEMICALS

Toxic chemicals and their associated wastes are closely linked to our industrialised lifestyle. A toxin or chemical becomes a waste when it is no longer in use (for example, left over, expired or deregistered) or is unwanted as a result of having served its purpose.

There may also be restrictions in place regarding a product's use. Examples include clinical waste, septic tank and grease trap waste, contaminated soils and holding waters from mining operations such as gold and uranium, solvents, industrial liquid wastes and asbestos. When it is dumped, accidentally spilled or improperly managed, it can cause extreme health problems or death, as well as poisoning land and water and the animals that rely on them. An example of this is how the use of DDT as a pesticide on crops led to egg shell thinning in some birds (including endangered species). This caused the eggs to break before chicks could hatch. Although DDT is now banned, it is unknown how long into the future the impacts will continue.

The actual volumes of toxic and hazardous wastes are difficult to judge. However, approximately 90% of the world's toxic waste is produced by industrialised nations. Much of this waste has been disposed of in less developed countries that are ill-equipped to manage the waste properly and with a minimal amount of environmental and health safeguards, for example regulations requiring protective clothing. In 1989, international outrage of this practice led to the United Nations drafting the Basel Convention. The Basel Convention aims to protect human health and the environment by minimising toxic and hazardous waste production wherever possible. This encompasses controls for toxic waste generation to its storage, transport, treatment, reuse, recycling, recovery and disposal. As of 1998, ratified countries do not export

any toxic waste, even for recycling. However, the United States of America (the biggest exporter of toxic waste) has not ratified the convention and continues to seek 'free trade' of toxic wastes with developing countries (BAN).

Many countries, including Australia, also have national and state regulations in place to manage toxic wastes. For example, the Policy for the Regulation of Asbestos Waste Under the Environmental Protection (Controlled Waste) Regulations 2001 applies to the handling, transportation and disposal of asbestos waste. Unfortunately, there is currently no feasible recycling or treatment method for asbestos, so it is buried in landfill. Another example is that clinical and medical wastes must be destroyed through processes such as incineration or gasification due to the risk of infection from pathogens and the radioactivity of some waste.

Waste minimisation or avoidance is the best way of dealing with toxic wastes. However, a range of strategies are required for successful elimination of toxic chemicals and their waste including product substitution; extended producer responsibility, appropriate use of regulations, as well as reuse and treatment of wastes instead of disposal. The dangers posed by toxic wastes are generally poorly understood making effective management policies difficult. Thankfully, as industry shifts away from simply containing or destroying toxic wastes produced and moves towards avoiding production through technology and better management strategies, damage to the health of humans and the environment will be reduced.

Reference: BAN (Basel Action Network), online at <http://www.ban.org>

WHAT CAN I DO?

- Look for ways to reduce or eliminate the use of toxic chemicals as we go about our daily lives in order to keep our homes safe for our children, our pets, and ourselves.
- Help reduce the amount of unwanted dangerous chemicals that may be hazardous. Dispose of them responsibly by contacting your local Council to find out about an annual chemical collection program near you or visit <http://www.chemclear.com.au> for more details.
- Never mix different chemicals together as this could lead to toxic fumes being given off or explosions.
- Never pour chemicals down the drain. Please refer to the manufacturer's advice for disposal or ask your local council.

MORE INFORMATION

- <http://www.oztoxics.org/> - community-based organization working toward toxic pollution reduction
- <http://www.moea.state.mn.us/campaign/toxics/index.html> - info on reducing toxic chemicals in the home, including house cleaning, controlling pests and beauty product tips with great links.
- <http://www2.gol.com/users/bobkeim/RUBBISH/toxicbat.html> - Toxic Waste: An Export from the U.S. to Brazil - an interesting report on toxic dumping in developing countries
- <http://www.basel.int/> - the U.N.'s Basel Convention
- <http://www.safealternatives.org/> - The Alliance for Safe Alternatives is a U.S. based group that aim to phase out persistent toxic chemicals
- <http://www.returnmed.com.au> or call 1300 650 835 find out about returning your old and unwanted medicines to any pharmacy for free and safe disposal.
- <http://www.phonerecycling.com.au> - locate your nearest outlet for recycling of old mobile phones and their batteries or call 1300 730 070.