

CHEMICALS THAT CAN CAUSE HARM TO THE ENVIRONMENT**Scope**

This control sheet is part of the ILO Chemical Control Toolkit. It provides general advice on the control of chemical waste. It describes the key points you need to follow to provide adequate control and ensure that environmental exposure is reduced to acceptable levels. Other sheets in this E series provide guidance on emissions into air and water. Your local authority or environment control authority will have rules and paper audit procedures for disposing of waste chemicals. Ask them for details. Some chemicals and products are flammable, corrosive or toxic to humans as well as harming the environment.

Types of wastes**Solid waste**

- Some solid wastes can be recycled, e.g. metal swarf, wood dust, slag. These can be collected in open skips or wagons. It is important to protect the waste from rainwater, and from wind stripping. Fly ash and boiler ash may be contaminated with dioxins, and these substances should not be recycled.
- Other solid wastes should be sealed in drums or lidded skips and labelled clearly.

Sludge

- Sludge is not normally suitable for recycling, often being contaminated with heavy metals, pesticides or solvent residues. Special tankers may be available to collect sludge. Otherwise it has to be dug from the sump manually and sealed into clearly labelled drums.

Liquid waste

- Liquid hydrocarbon and flammable solvent waste is recycled by distilling, incinerated or used as fuel, e.g. in making cement. Waste chlorinated hydrocarbons are not suitable for incineration. Liquid acid and alkali or metal salt waste is sealed in drums, or held in a tank until collected by waste tanker for specialist disposal.

Waste articles

- Articles such as deformed drums, broken glass, pallets, etc. can, once decontaminated, be disposed as non-dangerous waste.

General precautions

- Dispose of solids, sludge and waste solvents as special waste.
- Do not dump waste except in a specified tip.
- Check with your local environment authority how to classify the collected waste for disposal.

- Make sure the waste is clearly labelled and disposed through an authorised waste contractor.
- Do not reuse chemical drums or containers for food or water storage.
- Do not mix incompatible wastes (e.g. oxidising agents with solvents, chlorinated solvents with ketones, metal dusts or alkalis).
- Make sure the waste container is suitable – acids can attack metal drums.
- Never use a flame or mechanical cutter to cut up scrap metal drums unless they have been filled with water first.
- Waste may be flammable, corrosive or poisonous – wear protective equipment and wash it off your skin.