



Department of Inspection for Factories and Establishments
Ministry of Labour and Employment



Chemical Management



Chemicals such as cleaning agents, glue, paint, fuel, pesticides are useful for production. Some of those have **hazardous properties such** as flammable, poisonous, corrosive (cause burn to the skin), carcinogen (cause cancer) or have adverse effect on fertility and pregnancy.

The incorrect use of chemicals can cause **injuries, diseases, fire, explosion and death.**

Management is required to take the necessary actions to protect the workers.

- Management must clarify **who will manage chemicals in the factory.** In small factories, the *Safety/OSH* officer will probably be also in charge of this task. In larger factories, this might be a separate person called the “*chemical officer*”.
- Chemical management starts with the **acquisition.** The chemical officer and the person in charge of procurement need to work closely together. They need to ensure that:
 - the company purchases only authorized chemicals (e.g. in accordance with the restrictions of the buyers & government).
 - the company purchases only the minimum needed.

- the chemical suppliers provide the Material Safety Data Sheet of the chemical, and the **MSDS** is posted at the locations in the factory where the chemical is stored and used.
- the **label** on the chemical container has the required information and is in the language of the users in the factory.
- the chemicals are added on the **chemical inventory**, and the inventory is kept up to date.
- The factory staff must take the **preventive actions listed on the MSDS** (e.g. install **eye wash**; purchase **spill cleansing material**; required PPE)
- The Safety committee members must conduct **risk assessment**:
 - analyse the *specific risks in the cycle of use of the chemical* (storing, pouring, transporting, mixing, using and disposing).
 - analyse *dusts, fumes and vapor generated by specific activities during the production process* such as welding, grinding or cutting fabrics.
 - take necessary **actions to reduce exposure via inhalation, skin/eye contact and ingestion**: elimination or substitution of the chemical; closing container and using application tools; isolating the process with a separate room or canopy hood; ventilation / local exhaust; PPE.
- The Safety Committee/Safety Officer must organise different types of **trainings** for chemical officer, workers working with chemicals, and the other workers.
- They must conduct daily-weekly checks (e.g. proper recipient, label), send workers working with hazardous chemicals to **annual health checks** (BLR 68) and record time of exposure.
- BLR requires at least on **eyewash** station in the medical room as well as **washing facility**; Bangladesh building code requires an **automatic fire alarm** in areas where flammable material is stored.



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