

Appendix E: Guidance about Using Chemicals

Chemical storage

A storage location will be allocated for all chemicals, and all chemicals should be promptly returned to those locations after use. Bulk chemicals should always be housed in the chemical storeroom or cabinets for dangerous goods, such as corrosive cabinets or flammable liquids cabinets.

You should also keep incompatible materials away from each other, unless mixing is part of your work.

No food or drinks is permitted in areas that are used for keeping chemicals

Flammable liquids

Flammable liquids should never be stored in standard refrigerators due to the risk of explosions occurring. Ignition sources – such as electrical equipment, power points and light switches - should be removed from defined hazardous areas or special equipment should be used to reduce the explosion risks.

The requirements of hazard area zoning are detailed in AS/NZS 60079.10.1.

Classification of Hazardous Areas-Explosive Gas Atmospheres is required for more than 1 litre in an open container for continuous use, more than 5 litres for occasional use, more than 25 litres when decanting, or more than 100 litres in closed containers. The *hazardous area* near minor storage of flammable-liquids is 300 mm. The *hazardous area* that is near a flammable-liquids storage cabinet is 3 metres horizontally and 1 metre vertically. *Hazardous areas* need zoning drawings, special equipment, a verification dossier to prove compliance, and

Laboratory Gases

Affix chains to all gas cylinders and store outside, if feasible.

Refer to AS 4332 and AS/NZS 1596 for *The Storage and Handling of LP Gas* for LPG in cylinders.

Radioactive Substances

Comply with the radiation safety regulations if radioactive substances are used

Placarding, Site Manifest, Licensing, Notification & Additional Security

Gain the authorisation of the relevant State WHS regulator for the use of prohibited or restricted carcinogens

A site manifest is required for some dangerous goods (>500-10 000 kg/L) and WHS regulator notifications are required for some dangerous goods (>500-10 000 kg/L). Additional security is required for Schedule 4 and Schedule 8 poisons/therapeutic goods, chemicals of security concern, chemical weapons and/or precursors.