Science laboratory and preparation area safety

Science laboratories and preparation areas have unique risks which are not common in other areas of the workplace. Control measures must be implemented to reduce these risks and training must be provided to staff in the procedures to follow when working in these areas. AS 2243.1:2005 Safety in Laboratories, Part 1: Planning and operational aspects specifies that instrument and preparation areas are included as part of the laboratory, therefore these areas should be treated in the same manner as laboratories. AS/NZS 2243.1:2005 Safety in Laboratories also provides the following information – precautions should be taken to ensure that reading and writing materials do not become contaminated or damaged. Write up areas shall be separated from areas where hazardous materials or harmful processes are undertaken. (S2.2.6) and:

- Do not handle, prepare, store or consume food or drink for personal consumption in the laboratory
- Do not store food or drink for personal consumption in a refrigerator, freezer or cupboard which is used to store laboratory materials (S4.1)

Key points to remember are:

- Provide adequate facilities for the storage, handling and preparation of chemicals.
- Keep computer stations and write-up areas separate from areas where chemicals are used or stored and where chemical activities are undertaken.
- Provide sufficient hand washing facilities for the number of staff and tasks being undertaken.
- Provide emergency showers and eyewashes that are compliant with Australian Standards.
- Appropriately store any laboratory records, stores and equipment which are not in use.
- Provide appropriate PPE and ensure it is worn when required.
- Any heating or cooling system provided should be designed to maintain a temperature of 22+/– 2°C except where another temperature is required.
- Install appropriate local exhaust ventilation to minimise the contamination of the laboratory air by removing contaminants at the point which they are generated.
- Prevent direct sunlight from entering the interior of the laboratory, preparation or chemical storage area.
- Ensure a suitable chemical spill kit is available for emergency use.
- Do not take, prepare or consume food in the laboratory or preparation area.

For further information please refer to:
Managing Risks with Chemicals in Department of Education (DoE) Workplaces