Chemical Safety Management Plan – Science August 2025

WILLIAM CAREY CHRISTIAN SCHOOL

Background

Liverpool City Council is seeking a Chemical Safety Management Plan as part of the approval procedure for the building of a new classroom block, including Science Laboratories. This Plan outlines how the School in general, and the Science Faculty in particular, manages the safe use of chemicals by staff and students.

Relevant Documents

- WHS Act 2011 and WHS Regulation 2017
- William Carey Christian School (WCCS) Work Health and Safety Manual
- Safework NSW Managing risks of hazardous chemicals in the workplace Code of Practice
- Association of Independent Schools – Chemical Safety in Schools (CSIS)
- Risk Assessment Tools for Primary & Secondary Schools (RiskAssess)

Management Priorities

The WCCS Work Health and Safety Manual outlines the School's priorities for the safe chemical use as follows: This school will ensure that:

- Any hazardous substances used in and around the school are identified and compiled in a central hazardous substances register.
- Chemicals are only used in compliance with regulations.
- All hazards arising from the use of chemicals and hazardous substances in the school are identified.
- A risk management program is implemented to eliminate or minimise chemical and hazardous substance hazards.
- Staff and students received appropriate training in the safe use of chemicals and hazardous substances.
- Safety data sheets (SDS) are obtained from suppliers of chemical and hazardous substances.
- SDS are maintained in a database accessible to staff and updated every 5 years.
- All chemicals are labelled clearly and correctly according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).
- Chemicals and hazardous substances are stored and transported correctly and safely.
- Appropriate supervision is provided to students working with chemicals.
- Appropriate safety equipment and spill containment systems are provided where necessary
- Chemical laboratory equipment (e.g., fume cupboards) is maintained in good condition.
- Appropriate signage is provided for chemicals in the workplace, where required
- Suitable personal protective equipment is provided to staff and students who need to work with chemicals as required.
- The emergency response plan includes procedures to be followed in the event of an emergency involving chemicals.
- Basic first aid facilities and spill kits are available in the event of chemical exposure.
- Waste chemicals and associated waste are disposed of safely and responsibly, according to CSIS guidelines.

Training of Staff
Staff working in schools must have appropriate training and awareness in the management of risks associated with the use of chemicals. Under the WHS Act, all staff are responsible for taking reasonable care for the health and safety of themselves and others at the workplace.
The school's WHS Management Team provides training to all relevant staff (teaching, maintenance, cleaning) on issues related to chemical safety in the school. This includes hazardous chemicals, labelling, safe use, storage and disposal. This is a mandatory training for all new staff.
Science staff provide training in relation to high school students as part of the general training in the risk assessment process students utilise when undertaking practical activities.

Chemical Stocktake
A chemical stocktake is conducted annually including which chemicals are stored, location, quantity, link to the current SDS and is recorded in the chemical stocktake register. It is the responsibility of the Laboratory Assistant to ensure that the latest SDS is provided with any chemical purchased. A physical copy of all SDS are stored in the Science Prep Room and are also provided to the school reception area for access to emergency services, if required.

Control Strategies
Hazardous chemicals within the school are managed according to the following control strategies:
Elimination: If the chemical is not essential, classified as restricted or banned as per the CSIS package, it should be removed completely from the school premises by Veolia - the authorised chemical waste disposal company.
Substitution: This involves replacing the chemical with a less hazardous substance (e.g., toxic lead compounds replaced with non-toxic alternatives).
Mitigation: This involves reducing risk by reducing the amount of the chemical kept on the school premises or using a more dilute solution in chemical reactions.
Isolation: This involves separation of the chemicals from people by the use of barriers, chemicals being stored in locked flammable liquid cupboards and locked chemical stores.
Engineering controls: This involves having engineering controls in place to reduce risks posed by chemicals such as fume cupboards.
Administrative procedures: This involves advising people of safety procedures for the safe use and disposal of chemicals e.g., requirement to risk assess practical activities or demonstrations prior to use..
Personal protective equipment (PPE): This involves providing protective clothing and equipment such as safety glasses, suitable gloves and laboratory coats to reduce risks posed by chemicals as required.

Chemicals for curriculum purposes (including disposal)
All chemicals used in school for curriculum purposes are labelled in accordance with the GHS Classification and Labelling of Chemicals. Chemicals additionally have the coloured dot system used in Chemical Safety in Schools to differentiate between chemicals appropriate for years K-12, 7-12, 11-12 and Teacher Only use.
Before using a chemical, staff must consult the RiskAssess program to undertake a risk assessment to be familiar with the use, health and safety and environmental impacts of these chemicals.
Chemicals used in classrooms are prepared in the Prep Room by the Laboratory Assistant and brought to the laboratory via lab trolley prior to the lesson. The used equipment and unused chemicals are returned to the Prep Room. Chemicals that are safe to dispose of down the sink (e.g., sodium chloride solution) are done so. Chemical waste products that are not safe to dispose of down the sink or as solid waste in regular garbage bins are returned to the Laboratory Assistant for safe storage and then disposal by Veolia, as required.