

## **Hazardous Substances Regulations, One School's Perspective**

There were new regulations enacted on the 14th December 1999 for Hazardous Substances and all workplaces, including schools, were required to comply by 1st June 2000. The new legalisation is not just for Victoria but for the whole of Australia. The new regulations affect not only science teachers but any person who handles chemicals. This includes cleaners, gardeners, maintenance personnel and staff who work in the Art, Technology, Photography and Science areas. It must be remembered that these regulations do not supersede the Dangerous Goods regulations but complement them. (The Dangerous Goods regulations state how chemicals should be stored and handled.)

Science teachers use the greatest number of chemicals in a school and the main implication of the new regulations for them is that all experiments must have a risk assessment completed for all hazardous chemicals before being used in a classroom.

Below is a summary of some of the steps that have to take place before a risk assessment can occur:

- A List of Designated Hazardous Substances [NOHSC:10005(1999)] needs to be obtained from the Government Book Shop, cost \$16.20.
- You need to refer to this register to see which chemicals are classified as hazardous and obtain Material Safety Data Sheet (MSDS) for these chemicals.
- A current, less than 5 years old, MSDS should be obtained from the supplier for each chemical. The manufacturer is legally obliged to supply safety data sheets for free.
- The chemicals need to be labelled as specified in the regulations.
- A risk assessment needs to be completed using the MSDS for each chemical used in each experiment.

In the regulations there are also:

- training requirements for all staff involved with handling chemicals.
- requirements to store a copy of the MSDS near the chemicals and another copy in the office.

## Risk Assessment

Firstly check your chemical stock-take list and determine which chemicals are designated as 'Hazardous Substances'. This can be most easily done by referring to the alphabetical list of 'Designated Hazardous Substances'. The MSDS for a particular chemical can be obtained from the manufacturer or you may have available a reference CD ROM. (The CD ROM must have the MSDS from the manufacturer of the chemical you use.) Complete the Risk Assessment Sheet by referring to the MSDS for the hazardous substance. The procedures used for an experiment may be changed to reduce the hazard, such as using gloves or a fume hood.

The risks are classified using R values.

For example;           R7 May cause fire,  
                              R10 Highly flammable  
                              R22 Harmful if swallowed  
                              R38 Irritating to the skin.

In each laboratory we have placed copies of the appendices from the Hazardous Substances list which have all the 'R' values listed.

To comply with the regulations we organised a meeting of all science teachers on our four sites to inform them of the new procedures. We used part of a curriculum day to in-service the teachers. Each of our four sites has a copy of the list of 'Hazardous Substances' and the reference MSDS's. As each experiment is about to be undertaken a Risk Assessment Sheet is completed. Since many experiments are repeated across a year level this is not too onerous. The risk assessment must be repeated every five years. There have been a number of sample risk assessment sheets published in LABLINES and there are also some produced commercially as part of a package to comply with the regulations.

All science teachers and laboratory personnel will need to work together to implement the new system. Its introduction provides a good opportunity to review experiments that we have all used over a number of years, for which we may not have been fully aware of the hazards involved.

### Resources

- A copy of the regulations can be downloaded from the web site <http://www.dms.dpc.vic.gov.au> and a copy of the code of practice can be obtained from the workcover authority or downloaded from [www.workcover.vic.gov.au](http://www.workcover.vic.gov.au)
- DE&T has contracted Noel Arnold & Associates, phone 98908811, to help school with OHS matters. This service is free to government schools.
- Heather Turner has written articles in the LABLINES and LABTALK about the regulations and as part of a DEET Circular 250/2000 OHS (Hazardous Substances) Regulations sent Tuesday, 22 August 2000

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