

Guidelines for the Risk Assessment of Chemicals

1. Requirement for conducting a chemical risk assessment

Before using any chemical product, the Workplace Health and Safety Regulation (Part 13) requires that a risk assessment be undertaken to determine the possible hazards of the product and the control measures required for its safe use.

A risk assessment is also required to be conducted for dangerous goods under sections 17 and 18 of the Dangerous Goods Safety Management Regulation. For further information on carrying out a risk assessment for dangerous goods, consult DGSM Information Paper No. 6 – Carrying out a Risk Assessment for Dangerous Goods

(http://www.emergency.qld.gov.au/chem/publications/default.asp#info_paper6).

Although the information provided within this policy specifically discusses conducting a risk assessment for hazardous substances, it can also be applied to dangerous goods.

An evaluation of the risk associated with a hazard is necessary to determine if the risk is significant, in which case additional or improved measures will be required to control (prevent or minimise) exposure to the hazard. In addition to determining the level of significance of the risk, the risk assessment process serves to facilitate the decisions required for appropriate controls, training, air monitoring and health surveillance.

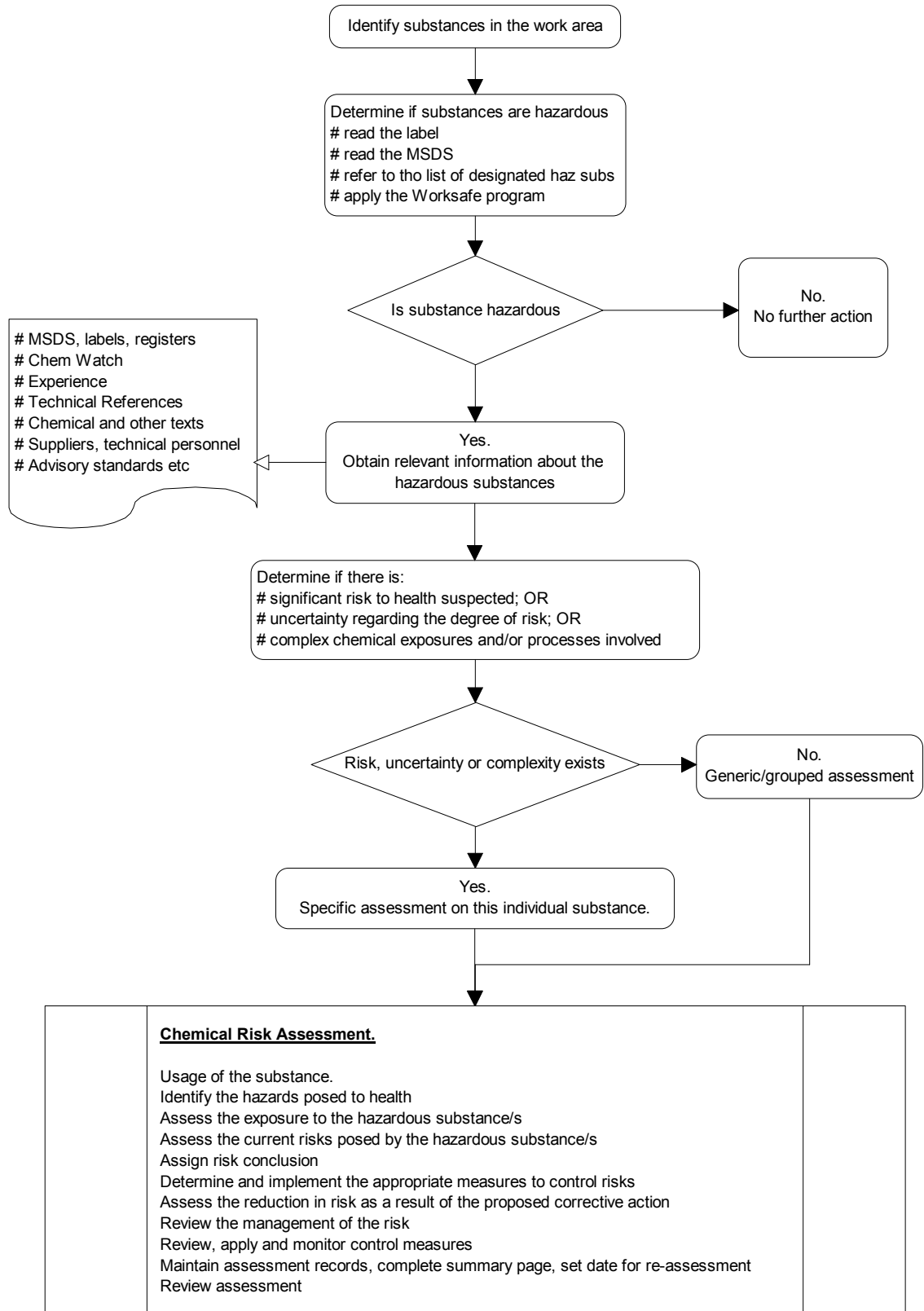
2. Who should undertake the risk assessment

Risk assessments should be conducted by those individuals who are undertaking work with chemicals as they have the greatest knowledge of the context in which the chemicals are used, and what control options may be available to manage the risk to an acceptable level. Where necessary, risk assessments can be undertaken by a group of people in order to reduce the subjectivity of risk assessment and to achieve the necessary training objectives at the same time. Where significant difficulties are encountered, the OH&S Unit is available to provide assistance.

It should be noted that it is not appropriate for the workplace health and safety officer or someone unfamiliar with the process to be solely conducting the risk assessment.

3.1 The process of risk management

The process of risk management for chemicals can be summarised by the following diagram.



3.2 Recording Risk Assessments

The University of Queensland has a database which enables staff and students to conduct and record chemical risk assessments. All staff, researchers and students are encouraged to use this database so that they can be maintained centrally and to the format required by the relevant Regulations. Hard copies of the risk assessments can be printed and kept on file once the risk assessment has been recorded.

The risk assessment database can be located at www.risk.admin.uq.edu.au. To conduct a chemical risk assessment, click on the 'chemical risk' tab at the bottom of the 'Task/Process details' page. Instructions for conducting a risk assessment can be found through the help screens and the training video icon at the bottom right hand side of the screen.

Training courses are also run periodically throughout the year by the OH&S Unit. Registrations and course dates can be determined by contacting the Teaching and Educational Development Institute at <http://www.tedi.uq.edu.au/sdh/>

3.3 Dividing work into processes for chemical assessments

It is not possible to undertake an assessment of all chemicals in a workplace in a single assessment. On the other hand it is not practical to assess every chemical individually. If the workplace is divided into work units, tasks or processes, it is then possible to undertake risk *assessments of the processes* and the group of chemicals utilised in each process. e.g. phenol/chloroform, extraction.

Generic assessments may be undertaken for a group of processes where the chemicals involved in each process have similar levels of hazard and the processes are essentially the same (e.g. assessment of the distillation of low toxicity organic solvents).