

LEARNING OUTCOMES

17.4 Process Hazards (Chemical)



Participating in the management of process hazards (chemical) is not a core function for OHS professionals. However, these learning outcomes address the role of an OHS professional who may be working with such hazards.

	Cognitive level	What the graduate should be able to do	Context	Level
Operational activities that a <u>new graduate</u> generalist OHS professional would be expected to undertake related to the topic	4	17.4-1 <u>Develop</u> criteria for design or modification of the workplace to minimise hazards related to chemicals.	For a nominated situation or workplace. Within a small organisation or section of a larger organisation. With support/input by experienced professionals and /or technical specialists	In liaison with managers, supervisors and technical personnel. Taking account of relevant legislation and standards.
	5	17.4-2 <u>Facilitate</u> development and implementation of control strategies for hazardous chemicals.	For a nominated situation or workplace. Within a small organisation or section of a larger organisation. With support/input by experienced professionals and /or technical specialists.	In liaison with managers, supervisors, technical personnel and worker representatives. Taking account of relevant legislation and standards.
	5	17.4-3 <u>Develop and maintain</u> a safe system of work relating to chemical hazards.	For a nominated situation or workplace. For a nominated scenario. Within a small organisation or section of a larger organisation. With support/input by experienced professionals and /or technical specialists.	System of work includes routine and non-routine operations.
Well developed / advanced cognitive and technical skills to analyse, critically evaluate and transform information to complete activities related to the topic	6	17.4-3 <u>Apply</u> knowledge of the health effects and other hazards associated with chemicals such as fire and explosion to identify and <u>assess/evaluate</u> the hazard and associated risks.	For a nominated situation or workplace. For a nominated scenario. Within a small organisation or section of a larger organisation. With support/input by experienced professionals and /or technical specialists as appropriate.	In consultation with appropriate workplace personnel. With sign off by a technical specialist where the risk may be critical. Documented in a report to management.
	5	17.4-5 <u>Develop</u> processes to monitor and evaluate control strategies.	For a nominated situation or workplace.	Documented in a report to management.

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	Cognitive level	What the graduate should be able to do	Context	Level
			For a nominated scenario. Within a small organisation or section of a larger organisation.	
Analyse and generate solutions to complex problems related to the topic	3	17.4-6 <u>Identify</u> when specialist advice is required and define the scope of work to engage services of appropriate specialists.	For a nominated situation or workplace. For a nominated scenario. Within a small organisation or section of a larger organisation.	Documented in a report to management.
	5	17.4-7 <u>Apply</u> knowledge of the health effects and other hazards associated with chemicals such as fire and explosion, the work environment and the regulatory framework and standards to <u>develop</u> a hazard management strategy for chemicals in a process environment.	For a nominated situation or workplace. For a nominated scenario. Within a small organisation or section of a larger organisation.	Documented as a management system document.
	3	17.4-8 Engage with relevant personnel to implement the chemical hazard management strategy.	For a nominated situation or workplace. Within a small organisation or section of a larger organisation.	Relevant personnel include managers, supervisors, job planners and worker representatives.
Transmit knowledge, skills and ideas to others	3	17.4-9 Interpret information to explain the health and other effects of chemicals, the way in which they may cause harm, the level of risk and rationale for control strategies.	Information may include specialist reports.	Communication strategies and language appropriate to the audience.
	2	17.4-10 Explain the work, health and safety procedures relating to chemical hazards in a process environment.	In induction and similar processes.	To staff and contractors. Communication strategies and language appropriate to the audience.
Demonstrate the required underpinning science and/or psychology knowledge		Underpinning science: as it relates to the behavior of chemicals and the physiological effects of chemicals on the human body. The Human: 7As a biological system related to the effect of hazardous chemicals on the body.		
Integration of knowledge from other chapters		12.1 Systems; 31.1 Risk (as it applies to chemical hazards in a process environment). 32 Models of Causation: Safety; 33 Models of Causation: Health 34.1 Prevention and Intervention		