1. Title	Maintain and repair mechanical installations of large-scale water heater systems
2. Code	EMPDOR403A
3. Range	Carry out maintenance and repair of mechanical installations of large-scale water heater systems at repair workshops or work sites.
4. Level	4
5. Credits	3
6. Competency	<u>Performance Requirements</u> 6.1 Construction and operating principles of mechanical installations of large-scale water heater systems ♦ Understand the construction, functions and operating principles of various types of mechanical installations of water heater systems 6.2 Methods and procedures of maintaining and repairing mechanical installations of large-scale water heater systems ♦ Master the procedures and methods of maintaining and repairing various types of water heater systems and installations, including the procedures of inspection, cleaning, installation, removal, replacement, repair and testing ♦ Assess the damage condition of accessories such as switching valves and pipes ♦ Diagnose the problems and repair or replace damaged accessories ♦ Use appropriate testing equipment to conduct functional tests independently after repair 6.3 Professionalism in maintaining and repairing mechanical installations of large-scale water heater systems ♦ Carry out maintenance and repair of mechanical installations of water heater systems independently according to repair instructions and specifications ♦ Understand the safety guidelines required by the law and codes of practice in maintaining and repairing mechanical installations of water heater systems
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to assess the damage condition of large-scale water heater systems, diagnose the problems and repair or replace damaged accessories; and (ii) Capable to maintain and repair various types of mechanical installations of large-scale water heater systems efficiently and correctly.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses knowledge and skill in maintaining and repairing plumbing mechanical installations.