

1. Title	Maintain and repair mechanical installations of drainage systems									
2. Code	EMPDOR303A									
3. Range	Carry out repair and maintenance of mechanical installations of drainage systems at repair workshops or work sites according to repair instructions and standards.									
4. Level	3									
5. Credits	3									
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <table border="0"> <tr> <td style="vertical-align: top;">6.1</td> <td style="vertical-align: top;">Construction and operating principles of mechanical installations of drainage systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Understand the construction, functions and operating principles of various types of mechanical installations of general drainage systems, including:               <ul style="list-style-type: none"> <li>• Fully vented one pipe drainage system with ventilation pipe</li> <li>• Two-pipe drainage system with ventilation pipe [stink (manure) pipe and waste drain]</li> <li>• Single stack drainage system (without ventilation pipe)</li> <li>• Storm-water drainage system</li> </ul> </li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Methods and procedures of repairing and maintaining mechanical installations of drainage systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Master the procedures and methods of repairing and maintaining mechanical installations of drainage systems and installations, including the procedures of inspection, cleaning, installation, removal, replacement, repair and testing</li> <li>◆ Examine the damage condition of accessories such as pipes and diving pumps according to repair instructions</li> <li>◆ Diagnose the problems and repair or replace damaged accessories</li> <li>◆ Use general pipe fitting tools such as threading machine and pipe-bending machine</li> <li>◆ Use general workshop equipment and tools effectively</li> <li>◆ Use appropriate testing equipment to conduct functional tests after repair</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">6.3</td> <td style="vertical-align: top;">Professionalism in repairing and maintaining mechanical installations of drainage systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Carry out maintenance and repair of mechanical installations of drainage systems independently according to installation instructions and standards</li> <li>◆ Understand the safety guidelines as required by the law and the code of practice in undertaking repair and maintenance of mechanical installations of drainage systems</li> </ul> </td> </tr> </table>	6.1	Construction and operating principles of mechanical installations of drainage systems	<ul style="list-style-type: none"> <li>◆ Understand the construction, functions and operating principles of various types of mechanical installations of general drainage systems, including:               <ul style="list-style-type: none"> <li>• Fully vented one pipe drainage system with ventilation pipe</li> <li>• Two-pipe drainage system with ventilation pipe [stink (manure) pipe and waste drain]</li> <li>• Single stack drainage system (without ventilation pipe)</li> <li>• Storm-water drainage system</li> </ul> </li> </ul>	6.2	Methods and procedures of repairing and maintaining mechanical installations of drainage systems	<ul style="list-style-type: none"> <li>◆ Master the procedures and methods of repairing and maintaining mechanical installations of drainage systems and installations, including the procedures of inspection, cleaning, installation, removal, replacement, repair and testing</li> <li>◆ Examine the damage condition of accessories such as pipes and diving pumps according to repair instructions</li> <li>◆ Diagnose the problems and repair or replace damaged accessories</li> <li>◆ Use general pipe fitting tools such as threading machine and pipe-bending machine</li> <li>◆ Use general workshop equipment and tools effectively</li> <li>◆ Use appropriate testing equipment to conduct functional tests after repair</li> </ul>	6.3	Professionalism in repairing and maintaining mechanical installations of drainage systems	<ul style="list-style-type: none"> <li>◆ Carry out maintenance and repair of mechanical installations of drainage systems independently according to installation instructions and standards</li> <li>◆ Understand the safety guidelines as required by the law and the code of practice in undertaking repair and maintenance of mechanical installations of drainage systems</li> </ul>
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7. Assessment Criteria	The integrated outcome requirement of this unit of competency is:  (i) Capable to perform the tasks of repairing and maintaining mechanical installations of drainage systems efficiently and correctly.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses elementary knowledge and skill in repairing and maintaining mechanical installations of drainage systems.