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| **UNIT CODE** | CPCSIL1001 |
| **UNIT TITLE** | Prepare to work safely with products and materials containing crystalline silica |
| **APPLICATION** | This unit of competency specifies the skills and knowledge required in preparation to work with products and materials containing crystalline silica (CS).<br><br>The unit requires the person to identify relevant health and safety legislative requirements in order to work safely with products and materials containing CS.<br><br>This unit covers:<br><br>• identifying products and materials containing crystalline silica<br>• risk control measures to manage respirable crystalline silica (RCS)<br>• workplace equipment including respiratory protective equipment (RPE) and personal protective equipment (PPE); and<br>• applying workplace clean up and storage requirements.<br><br>Licensing, legislative, regulatory or certification requirements may apply to this unit. Relevant work health and safety state and territory regulatory authorities should be consulted to confirm jurisdictional requirements. |
| **PREREQUISITE UNIT** | |
| **COMPETENCY FIELD** | Building and Construction |
| **UNIT SECTOR** | Building and Construction |

| ELEMENTS | PERFORMANCE CRITERIA |
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| Elements describe the essential outcomes of the unit. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Identify crystalline silica (CS) and legislative requirements for working with CS. | 1.1 Identify health and safety documents, WHS procedures, legislative requirements, codes of practice and other sources of information relevant to working with CS.<br>1.2 Identify and confirm employer/employee duty of care responsibilities and employee responsibilities of own workplace health and safety.<br>1.3 Identify products and materials containing CS.<br>1.4 Identify how silica dust is generated and the health and safety risks from the inhalation of silica dust in consultation with supervisor. |
| 2. Identify hazards and control measures for working with CS. | 2.1 Identify and confirm the basic principles of risk management when working with CS.<br>2.2 Identify measures for controlling worksite hazards created by silica dust in accordance with WHS procedures.<br>2.3 Identify personal protective equipment (PPE) and respirable protective equipment (RPE) for working with products and materials containing CS, in accordance with manufacturer's instructions and WHS procedures.<br>2.4 Identify fit checking requirement for RPE in accordance with manufacturer's instructions and WHS procedures.<br>2.5 Identify requirements of work site safety signs and symbols.<br>2.6 Identify tools and equipment, including on-tool wet and dry extraction devices for working with products containing CS. |
| 3. Prepare to work with products containing crystalline silica (CS). | 3.1 Confirm work requirements and clarify job priorities and sequencing in consultation with supervisor.<br>3.2 Check classifications of level of risk for working with selected products and materials containing CS, hazard controls and protective equipment requirement in accordance with safety data sheets.<br>3.3 Seek feedback from supervisor where CS content is unknown or unclear.<br>3.4 Identify and confirm highest risk control measure(s) so far as reasonably practical, appropriate to work activity, in accordance with WHS procedures and in consultation with supervisor. |

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| | 3.5 Contribute to safe work method statement (SWMS) in consultation with supervisor and in accordance with WHS procedures.<br>3.6 Confirm workplace health and safety process to follow if risk controls fail or become limited in consultation with supervisor and in accordance with WHS procedures. |
| 4. Apply workplace clean up and storage requirements. | 4.1 Identify cleaning up and disposal requirements of dust and slurry from PPE and work areas in accordance with WHS procedures.<br>4.2 Perform cleaning up activities of a work area and disposal of dust and slurry in accordance with WHS procedures.<br>4.3 Identify cleaning and storage requirements of non-disposable RPE in accordance with manufacturer's instructions.<br>4.4 Clean and store non disposable RPE in accordance with manufacturer's instructions. |
| **FOUNDATION SKILLS**<br>Foundation skills essential to performance are explicit in the performance criteria of this unit of competency | |
| **UNIT MAPPING INFORMATION** | No equivalent unit. |

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| **TITLE** | Assessment Requirements for Prepare to work safely with products and materials containing crystalline silica. |
| **PERFORMANCE EVIDENCE** | A person demonstrating competency in this unit must satisfy the requirements of the elements, performance criteria and foundation skills, of this unit, in addition to the specific performance and knowledge evidence described below.<br><br>Candidates must be able to:<br>• identify three different work activities that can generate respirable silica dust and the risk management strategies and control measures for each work activity<br>• identify compliant use of PPE and RPE for at least three different activities relevant to working with CS<br>• identify how to perform RPE fit checking requirements in accordance with manufacturer's instructions<br>• demonstrate cleaning and storage of non-disposable RPE in accordance with manufacturer's instructions<br>• demonstrate clean up and disposal of dust and slurry from a work area in accordance with WHS procedures. |
| **KNOWLEDGE EVIDENCE** | To be competent in this unit, a candidate must demonstrate knowledge of:<br>• health and safety risks of working with products and materials containing crystalline silica<br>• hierarchy of control measures:<br>  ○ elimination<br>  ○ substitution<br>  ○ isolation<br>  ○ engineering controls<br>  ○ administrative controls<br>  ○ PPE/RPE<br>• products and materials containing crystalline silica, such as:<br>  ○ concrete<br>  ○ mortar<br>  ○ bricks<br>  ○ pavers<br>  ○ tiles<br>  ○ natural & engineered stone bench tops<br>  ○ cement sheeting<br>  ○ aerated concrete |

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| | • features, commonalities and differences between crystalline silica and respirable crystalline silica<br>• mechanical processes that generate silica dust, such as:<br>  ○ crushing<br>  ○ cutting<br>  ○ drilling<br>  ○ grinding<br>  ○ cutting, grinding and/or abrasive polishing of engineered stone<br>• worksites where silica dust can be found:<br>  ○ manufacturing environment<br>  ○ residential construction<br>  ○ commercial construction<br>• employer responsibilities and duty of care requirements:<br>  ○ communication processes<br>  ○ health monitoring<br>  ○ personal exposure monitoring<br>• employee responsibilities and requirements<br>• RPE:<br>  ○ half face disposable<br>  ○ half face reusable<br>  ○ full face reusable<br>  ○ tight-fitting powered air purifying respirators<br>• factors affecting fit of PPE and RPE<br>• safe disposal of crystalline silica waste<br>• safe cleaning & housekeeping methods with silica dust<br>• dust control measures<br>• relevant documents with information on safe work practices and technical information on products containing CS, such as:<br>  ○ Workplace health & safety policies and procedures<br>  ○ Relevant jurisdictional legislation<br>  ○ Relevant codes of practice<br>  ○ Safety Work Method Statements (SWMS)<br>  ○ Job Safety & Environmental Analysis (JSEA)<br>  ○ Safety Data Sheets (SDS)<br>  ○ Product manuals<br>  ○ Technical specifications |

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| | ○ Product labels<br>• relevant Australian Standards or their successors:<br>○ AS/NZ 1715:2009<br>○ AS/NZ 1716:2012. |

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| **ASSESSMENT CONDITIONS** | Assessment of performance must be undertaken in the workplace or simulated workplace environment. A simulated workplace is one that fully replicates the resources, environment and any time and productivity pressures that exist in the actual workplace, and which meets industry standards for safety and environmental practices.<br><br>Candidates must be provided with access to:<br>▪ appropriate documents, materials, tools, equipment, personal protective equipment (PPE), P2 half-face disposable and re-usable respiratory protective equipment (RPE) currently approved for use in industry, as per codes of practice, Australian Standards: AS/NZ 1715:2009, requirements of legislation, regulations and requirements of workplace policies and procedures as required by Commonwealth, state and territory regulators.<br><br>Note: Where required, candidates must be clean shaven to wear relevant RPE, in accordance with manufacturer's instructions. |
| **LINKS** | Link to Companion Volume Implementation Guide will be inserted here. |