



Australian Government

Department of Education, Employment and Workplace Relations

RIINHB206A Assist large diameter auger drilling

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers assisting with large diameter auger drilling in civil construction and drilling industries. It includes planning and preparing for assisting with drilling, assisting with the augering process, mixing drilling fluids, cleaning equipment and carrying out basic maintenance of tools and equipment.

Application of the Unit

Large flight augers include short-flight and bucket augers and are used for foundation construction drilling. This unit is appropriate for those working in drillers' assistant roles, at worksites within:

- Civil construction
- Drilling

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for assisting with large diameter auger drilling	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Obtain, confirm and apply work instructions for the allocated task 1.3. Identify, manage and report all potential hazards 1.4. Resolve coordination requirements with others at the site prior to commencing and during work activities 1.5. Load, unload, move, handle, use and store large diameter auger equipment and all associated tools and connecting equipment 1.6. Take necessary safety precautions when handling potentially contaminated spoil 1.7. Wear all necessary personal protective equipment and protective clothing when assisting with auger drilling
2. Assist with augering process	2.1. Fit and remove bits and cutting teeth to and from the cutting head 2.2. Insert remove augers and extension pipe to and from the drill string and assist with auger to auger connections 2.3. Regularly maintain cleanliness around the hole collar by removing spoil only when rotation is stopped 2.4. Observe housekeeping and site safety measures while conducting auger assistance
3. Mix drilling fluids	3.1. Wear appropriate protective clothing 3.2. Check, read and interpret safety information/hazard codes 3.3. Apply correct mixing procedure for the drilling fluid 3.4. Carry out storage of drilling mud components and additives safely and according to recommendations
4. Clean equipment	4.1. Use high pressure cleaners and/or steam cleaning equipment to clean augers and equipment 4.2. Avoid or confine the spread of contamination from auger and equipment

	cleaning processes 4.3. Follow safe work practices for use of cleaning equipment, chemicals and materials 4.4. Remove and dispose of or neutralise excess spoil from site operations in accordance with environmental regulations
5. Carry out basic maintenance of tools and equipment	5.1. Perform inspection and checks on serviceability of augers including condition of flights, threads, socket connectors and D clips 5.2. Inspect serviceability of pressure cleaning equipment 5.3. Maintain all auger equipment in serviceable condition 5.4. Observe occupational health and safety procedures in carrying out equipment maintenance

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to assist with large diameter auger drilling:

- apply legislative, organisation and site requirements and procedures
- apply basic maintenance and servicing of auxiliary equipment
- identify thread types in use on site
- identify bits in use and how to measure them
- apply safe storage of tools
- use various load handling equipment on site
- apply refuelling procedures for vehicles, drill rigs and ancillary equipment
- apply good housekeeping principals

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to assist with large diameter auger drilling:

- occupational health, safety and environment requirements and procedures

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for assisting with large diameter auger drilling • implementation of requirements, procedures and techniques for the safe, effective and efficient assisting with large diameter auger drilling • working with others to undertake and complete the large diameter auger drilling that meets all of the required outcomes • consistent timely completion of assisting with large diameter auger drilling that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non

	English speaking background may have second language issues. • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances. • Where applicable, physical resources should include equipment modified for people with disabilities. • Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the large diameter auger drilling tasks
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Relevant compliance documentation may include:	• legislative, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Work instructions may come from:	• briefings, handovers, plans and work orders and may be written or verbal, formal or informal and may include: • nature and scope of tasks • specifications • quality of finished works • achievement targets • operational conditions • obtaining of permits required • site layout • out of bounds areas • worksite inspection requirements • lighting conditions • plant or equipment defects • hazards and potential hazards • coordination requirements or issues • contamination control requirements • environmental control requirements • barricade and signage requirements
Hazards may include:	• release of gases from formation or spoil recovered • exposure to contaminated soil that may be toxic, poisonous, or harmful either through contact with skin or eyes, inhalation of vapours, or ingestion

	• spread of contaminants as a result of drilling or cleaning processes • change in the chemistry of contaminants as a result of drilling • working in proximity to drilling rig • working on construction sites in proximity to other heavy/mobile construction equipment • entanglement in flights or rotating pipe/kelly • string makeup and breakout hazards • hazards with the use of high pressure/steam cleaners
Coordination requirements may include:	• drill team • other equipment operators • maintenance personnel • supervisors • worksite personnel
Personal protective equipment includes:	• steel-capped boots and hardhat • gloves • dust mask • eye and hearing protection • general protective and reflective clothing

Unit Sector(s)

Drilling (General)

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.