Australian Government

RIINHB203X Support drilling processes

DRAFT

Release: 1

RIINHB203X Support drilling processes

Modification History

Release	Comments
1	This unit of competency was first released in RII Resources and Infrastructure Industry Training Package Release 13.0.

Application

This unit describes the skills and knowledge required to support drilling processes in the resources and infrastructure industries. It prepares individuals to operate ancillary equipment, clean equipment at the drilling site, maintain supply levels, perform and report basic measurements and carry out basic operator maintenance.

It applies to those working in the assistant driller role. They generally work under supervision to undertake a prescribed range of functions involving known routines and procedures.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

N/A

Unit sector(s)

Drilling

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Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Plan and prepare to support the drilling process	1.1 Obtain and confirm work instructions, site layout, workplace procedures and complete relevant documentation during briefing or handover 1.2 Identify, minimise and manage environmental hazards and risks within scope of own role and according to legislative and workplace requirements 1.3 Access and confirm emergency procedures in case of fire, accident and other emergencies 1.4 Select and wear personal protective equipment appropriate to supporting drilling activities 1.5 Identify and erect safety systems to prevent unauthorised entry to work area
2. Set up, operate and dismantle ancillary equipment	2.1 Set up ancillary equipment according to operational requirements and safe work instructions 2.2 Connect services to and from equipment 2.3 Carry out prestart and start-up checks on ancillary equipment according to manufacturer requirements and workplace procedures 2.4 Run and monitor ancillary equipment 2.5 Dismantle ancillary equipment according to operational requirements
3. Clean all equipment at drilling site	3.1 Maintain clean working conditions according to workplace procedures and safety requirements 3.2 Routinely clean and return vehicles to designated areas after use according to operational and safety requirements 3.3 Clean and decontaminate machines and equipment to schedule according to safety and environmental requirements 3.4 Confirm all cleaning equipment is kept in good working condition
4. Maintain levels of supplies	4.1 Check and communicate current stock levels to driller

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	4.2 Check availability of consumable items in the workplace 4.3 Complete stocktake counts and written records
5. Carry out and record basic measurements and calculations	5.1 Carry out basic measurements and calculations according to operational requirements 5.2 Record data on reports according to operational requirements and workplace procedures
6. Assist in carrying out basic maintenance	6.1 Identify and minimise hazards when conducting basic maintenance in the field 6.2 Maintain fluids, oils, water and other consumable items according to manufacturer specifications and workplace requirements 6.3 Carry out routine operator-support checks on machines and equipment, and report faults or servicing needs outside scope of own role to relevant personnel 6.4 Overcome minor breakdowns and bogging using recovery techniques as required 6.5 Carry out housekeeping to workplace requirements

Range of conditions

N/A

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Assessment Requirements for RIINHB203X Support drilling processes

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- undertake the following tasks to support drilling processes on at least two occasions:
    - setting up, checking, operating, monitoring and dismantling ancillary equipment
    - connecting services to and from equipment
    - cleaning plant, vehicles and equipment, including operating and maintaining cleaning equipment
    - carrying out basic operator servicing and maintenance on plant and vehicles
    - checking, recording and reporting stock levels of supplies and consumables
    - carrying out and recording basic measurements and calculations

During the above, the candidate must:

- locate and apply documentation required to support drilling processes
- apply workplace procedures and techniques required to support drilling processes, including:
    - identifying and controlling hazards and environmental risks within scope of own role
    - using lifting equipment and manual handling aids
- communicate and work with others to meet required outcomes, including:
    - receiving and clarifying work instructions
    - coordinating work activities before and during tasks
    - complying with reporting requirements and procedures.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key policies, procedures and established requirements for supporting drilling processes, including those for:
    - work health and safety (WHS) requirements relevant to the drill site, including:
        - hazard identification and control
        - personal protective equipment relevant to supporting drilling tasks, including:

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        - personal protective equipment specific to using high pressure cleaning equipment
      - safe manual handling techniques, including using a manual handling aid
    - emergency response procedures for fire, chemical spill, load collapse and other incidents
    - environmental management practices, including those for:
      - containing, dispersing and disposing of waste fluids
    - levels of supplies, including stock and consumables
    - records required to be completed during drilling processes and workplace procedures for completing them, including:
      - timing and frequency
    - routine equipment operation and maintenance, including:
      - hazard identification and control including reporting requirements
      - workplace procedures for maintaining fluids, oils, water and other consumable items, including:
        - signs of fluid or consumable deterioration, contamination and shortage
      - types of faults or servicing needs that fall outside the scope of own role, and requirements for reporting these to relevant personnel
    - recovery techniques and equipment appropriate to bogging situations and ground conditions, including:
      - associated hazards and how to minimise them
    - types of schedules for cleaning and storing equipment, vehicles and machines
    - communication techniques with other personnel throughout work activities
    - housekeeping tasks to maintain a clean and safe work area
- purpose and required content of pre-start checklists and documentation used during drilling and cleaning processes
- basic principles of hydraulic and pneumatic systems:
    - principles of how these systems generate and transmit power to operate ancillary equipment
    - common signs of faults and action required according to workplace procedures
- simple calculations and measurements conducted during drilling activities, including:
    - using a tape measure
    - units of measurement commonly used in drilling work and how measurements are recorded

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- methods for reading and interpreting graphical representation, including maps and diagrams
- drilling team roles and objectives
- basic ground conditions encountered at drill sites and their effect on vehicle movement, bogging and recovery.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
    - personal protective equipment
    - general drilling equipment and vehicles
    - basic measuring equipment
    - workplace documentation such as drill plans, site plans and procedures, manufacturer instructions and safety data sheets
- be conducted in a safe environment
- be assessed in the context of this sector's work environment
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector’s workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

*Guidance on simulated environments has been stipulated in the RII Companion Volume Implementation Guide.

Industry Experts

An industry expert engaged by an RTO to wholly or partially conduct assessment, independently or together with another assessor, or be involved in an assessment judgement, must also satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards.

Assessors and industry experts delivering training in the drilling sector must also have a minimum of two (2) years industry experience, directly relevant to the training and assessment being provided.

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Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
RIINHB203E Support drilling processes	Equivalent	Updates to application, elements and performance criteria, performance and knowledge evidence, and assessment conditions

Links

Companion volumes, including implementation guides, are found on the national training register - https://training.gov.au/training/details/RII.

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