



Australian Government

UEGNSG346 Launch and recover PIGs in gas transmission pipelines

Release: 1

UEGNSG346 Launch and recover PIGs in gas transmission pipelines

Modification History

Release 1. This is the first release of this unit of competency in the UEG Gas Industry Training Package.

Application

This unit involves the skills and knowledge required to prepare, launch and recover pipeline inspection gauges (PIGs) in gas transmission pipelines, to inspect and ensure the pipeline is clean and dry with no obstructions.

It includes liaising with stakeholders, analysing and interpreting the pigging data, and testing and inspecting pigging equipment in accordance with manufacturer instructions and workplace procedures.

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

Pre-requisite Unit

Not applicable.

Competency Field

Gas Transmission

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare and plan for pigging gas transmission pipelines

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Work health and safety (WHS)/occupational health and safety (OHS) workplace procedures and environmental measures for the site are identified, obtained and applied

- 1.2** Work schedule, drawings, plans, job requirements and workplace procedures for the work are obtained and communicated to relevant person/s in accordance with workplace procedures
- 1.3** WHS/OHS, environmental and sustainable energy policies and procedures are obtained, applied and communicated to relevant person/s
- 1.4** Work is prioritised and sequenced for completion within acceptable timeframes following consultation with others in accordance with workplace procedures
- 1.5** Hazards are identified, WHS/OHS risks are assessed and control measures prioritised, implemented and monitored in accordance with workplace procedures
- 1.6** Responsibilities under the relevant work permit/notification are obtained and confirmed with relevant person/s to access, isolate/de-energise systems and perform the work in accordance with regulatory requirements and workplace procedures
- 1.7** Person/s, equipment, tools and personal protective equipment (PPE) required for the job are identified, scheduled, obtained and checked for correct operation and safety in accordance with workplace procedures
- 1.8** Responsibilities for first aid and other emergency incidents at the work site are checked and confirmed with relevant person/s in accordance with workplace procedures
- 1.9** Communication issues with relevant stakeholders are resolved and work coordinated in accordance with work schedule and workplace procedures
- 1.10** Site preparation, safety plan and work schedule are confirmed in accordance with workplace procedures
- 1.11** Site, PIG, PIG trap, station and pipeline are prepared to minimise risk and damage to property, commerce and individuals in accordance with workplace procedures
- 1.12** Person/s participating in the work, including plant operators and contractors, are briefed and responsibilities confirmed in accordance with workplace procedures

- 1.13** Signage, barriers and warning devices are positioned in accordance with job requirements, workplace procedures and traffic management plan
- 2 Launch and recover gas transmission pipeline PIGs**
- 2.1** WHS/OHS risk control measures, schedule of work and workplace procedures for carrying out the work are followed
- 2.2** Materials, tools, equipment and measuring devices required for the work are selected and used correctly and safely in accordance with manufacturer instructions
- 2.3** Hazardous activities are performed safely in accordance with workplace procedures, codes and regulatory requirements
- 2.4** Gas transmission pipeline PIG is launched, tracked and recovered in accordance with work schedule and workplace procedures
- 2.5** Work is carried out to industry standards without waste of materials or damage to apparatus, circuits, and the surrounding environment or services using sustainable energy principles
- 2.6** Hazards and WHS/OHS risks are assessed and incidents reported to the authorised person/s for directions in accordance with workplace procedures
- 2.7** Data/results from transmission pipeline pigging operations is gathered/retrieved and analysed to determine internal pipeline conditions in accordance with workplace procedures
- 2.8** Testing and inspecting of the pipeline and pigging equipment is conducted in accordance with job requirements and workplace procedures
- 2.9** Unplanned events and non-routine problems are referred to authorised person/s for direction in accordance with workplace procedures
- 2.10** Fault-finding and troubleshooting techniques are applied to problems encountered with the PIG launch and recovery in accordance with requirements and workplace procedures
- 2.11** Quality and safety checks of the work are undertaken in accordance with industry standards and workplace

procedures

3 Re-establish transmission pipeline to operational condition, complete work and relevant documentation

- 3.1** WHS/OHS risk control measures and workplace procedures for completing the work are followed
- 3.2** Retrieved PIG is inspected to determine the wear sustained to the PIG material and anomalies reported in accordance with workplace procedures
- 3.3** Accidents and injuries are reported in accordance with requirements and workplace procedures
- 3.4** Waste materials are safely disposed of and work site is rehabilitated, cleaned up and made safe in accordance with workplace procedures
- 3.5** Tools, equipment and any surplus resources and materials are cleaned, checked and securely stored in accordance with workplace procedures
- 3.6** Appropriate person/s are notified of work completion in accordance with workplace procedures
- 3.7** Relevant work permit/s are signed off and pipeline returned to service in accordance with regulatory requirements and workplace procedures
- 3.8** Data is recorded and work completion records, reports, as modified drawings and documentation are completed, processed and appropriate person/s notified in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEG Gas Industry Training Package Companion Volume Implementation Guide.

pigging gas transmission pipelines must be demonstrated on at least three (3) of the following procedures:

- cleaning PIGs
- gauging PIGs
- drying PIGs
- intelligent PIGs
- PIG travel time calculations

Unit Mapping Information

This unit replaces and is equivalent to UEGNSG346A Launch and recover PIGs in gas transmission pipelines.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>