



Australian Government

Department of Education, Employment and Workplace Relations

RTE2114A Monitor water supplies

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of monitoring the supply of potable water for livestock from water storages and sources. It requires the ability to record and report water supply information, activities and system performance, read and follow manufacturers procedures, identify blockages, check flow rates and follow OHS procedures. Monitoring the supply of water requires knowledge of water delivery systems and components and their operation, enterprise procedures for carrying out inspections, recording and reporting water information and system performance and OHS requirements for working outdoors, with water supplies. This work is undertaken under routine supervision.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Monitor water supplies	1.1 Routine inspections of water supplies are carried out in accordance with enterprise policy and procedures 1.2 High and low water levels are recognised and reported 1.3 Where water quality problems or pathogens are found, treatment is carried out in accordance with enterprise procedures 1.4 Information on water supplies is recorded and reported in accordance with enterprise policy and procedures
2 Inspect and clear intake and outlet points	2.1 Intakes and outlets are inspected 2.2 Potential blockages are reported and actual blockages are cleared in accordance with safe working procedures 2.3 Water filters are checked and replaced as required. 2.4 Intake lines are repositioned as necessary to ensure unobstructed suction 2.5 Strainers are cleared of debris and sludge
3 Operate water delivery equipment	3.1 Water delivery equipment is prepared and checked in accordance with enterprise procedures 3.2 Water delivery equipment operated in accordance with manufacturers procedures and OHS requirements 3.3 Outflow is checked to ensure water delivery equipment is operating correctly 3.4 Water delivery equipment is shut down as required in accordance with enterprise procedures 3.5 Activities and water delivery equipment function are reported in accordance with enterprise procedures

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in monitoring water supplies and pumps requires evidence that a person can inspect and report on water supplies with only routine supervision, inspect equipment for blockages, and clear them using safe working procedures.

The skills and knowledge required to monitor water supplies must be **transferable** to a different work environment. For example, this could include maintenance, monitoring and operation of different bores, pumps and water supply systems.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

Water delivery systems and components and their operation

Enterprise procedures for carrying out inspections, recording and reporting water information and system performance

OHS requirements for working outdoors, with water supplies

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

Record and report water supply information, activities and system performance

Read and follow manufacturers procedures

Problem solve to identify potential as well as actual blockages

Check outflow rates

Follow OHS procedures relating to outdoor work, water supplies

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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|--|---|
| 1. How can communication of ideas and information (1) be applied? | Through verbal and written reports of water levels, activities and pump function. |
| 2. How can information be collected, analysed and organised (1)? | Recording data for water supplies and sources. |
| 3. How are activities planned and organised (1)? | Checking operation of water supply on a daily basis. |
| 4. How can team work (1) be applied? | Co-ordinating monitoring activities with others. |
| 5. How can the use of mathematical ideas and techniques (1) be applied? | Estimating water level depths and recognising when these are low. |
| 6. How can problem solving skills (1) be applied? | Identifying potential blockages and repositioning intake lines. |
| 7. How can the use of technology (1) be applied? | Preparing records and reports. |

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available

What is covered under routine inspections ?	Routine inspections may include water levels, water quality, colloids, salts and water supplies may also need to be tested for evidence of pathogens. Checks are made of medication tanks, drinker lines, filters, fogging systems, pumping systems, dams or town supplies as applicable.
What water supplies may need to be monitored?	Water supplies may include rivers, dams, ponds, bores, tanks, town or mains water, and recycled water.
What might be included in enterprise policy and procedures ?	These may include operating manuals, recording and reporting requirements and OHS procedures for outdoor work such as protection from solar radiation, dust and noise, protection from drowning in rivers or dams and procedures for working at heights to monitor water levels in tanks.
How might water need to be treated ?	Where pathogens are found to be present, water should be sanitised before being provided to livestock. In line water medicators should be checked if applicable. Hand dosing of water supply may also be necessary.
What information on water supplies may be recorded?	Information may include water levels, water quality problems such as presence of gross pollutants, oil and plant/algal growths, evidence of pathogens.
What blockages might need to be cleared?	Blockages may be caused by vegetation overgrowth, sludge, animal carcasses and debris.
What safe working procedures might be relevant to clearing blockages?	These might include the selection and use of relevant personal protective clothing and equipment, safe use of hand tools, relevant manual handling procedures, protection

against contamination and safe disposal of materials causing pump blockages.

What **strainers** are relevant to this standard?

Strainers include only those external to the pump.

Livestock water supply systems may incorporate water filter systems which need to be regularly checked.

What types of **water delivery equipment** may be relevant to this standard?

Water delivery equipment may include pumps types such as centrifugal, submersible, rotor, jet, diaphragm, piston, windmill and multi-stage centrifugal types, and axial flow.

What **OHS requirements** relate to starting pumps?

OHS requirements may include procedures for prevention of electrical injury and protection of hearing, working outdoors, and working in confined spaces.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.