



Australian Government

NWPTRT012 Operate and control fluoride addition process

Release: 1

NWPTRT012 Operate and control fluoride addition process

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to NWP276A Monitor, operate and report fluoridation systems. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • Unit title changed to better reflect unit outcomes. • Element 4 reworded • One new PC added to Element 3

Application

This unit describes the skills required to monitor and operate fluoridation processes and to report on water quality control.

This unit applies to those working as water operators responsible for fluoridation processes in water treatment. It may be a requirement for compliance with state and territory legislation and government water quality guidelines.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to, particularly those relating to WHS.

Those undertaking this unit would work under supervision, while performing routine tasks, in a range of familiar contexts.

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

Competency Field

Treatment

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Plan and prepare for work	1.1 Determine work requirements. 1.2 Select and check equipment and tools required to meet safety requirements of task and site. 1.3 Select, fit and use personal protective equipment.
2. Monitor process performance	2.1 Monitor fluoridation processes. 2.2 Collect process samples and conduct standard tests. 2.3 Maintain and monitor relevant WHS requirements. 2.4 Collect and record process data and perform calculations.
3. Prepare and apply fluoride dosing	3.1 Handle, use and store fluoridation chemicals. 3.2 Apply fluoride dosing and perform calculations. 3.3 Monitor fluoride levels.
4. Complete documentation	4.1 Maintain information relating to fluoride supply and usage. 4.2 Produce information relating to maintenance and operation. 4.3 Record information and submit for continuous improvement and incident management.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Range of Conditions

Types of fluoridation processes:	• sodium fluoride • fluorosilicic acid • sodium fluorosilicate
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Unit Mapping Information

This unit supersedes and is equivalent to NWP276A Monitor, operate and report fluoridation systems.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

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Assessment Requirements for NWPTRT012 Operate and control fluoride addition process

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages. Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. To be deemed competent the candidate must be assessed in at least one of the fluoridation processes listed in the Range of Conditions. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- applying policies, regulatory standards and standard operating procedures relevant to fluoridation
- receiving, clarifying and confirming work instructions
- performing chemical dosing calculations
- identifying and reporting control system faults and operational problems
- identifying and reporting hazards
- using literacy skills to produce reports and logs and interpreting a range of workplace documents
- interpreting and following safety data sheets (SDS)
- preparing for work
- selecting and using appropriate tools and equipment, including personal protective equipment
- calculating average fluoride concentrations
- collecting process samples and determining fluoride residuals
- collecting and reporting process data
- preparing and applying fluoride dosing safely
- completing log sheets

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- properties of fluoridation chemicals
- fluoridation and its relationship to public health
- fluoride sampling and record keeping
- fluoride addition points
- fluoride system layout and security
- policies and standard operating procedures for fluoride processes
- safe handling using SDS and disposal of fluoride compounds
- risk factors and potential hazards associated with fluoridation
- work-related fluoride calculations
- fluoride dosing processes
- automatic feed rate control systems

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Some components of this unit require assessment in a workplace environment therefore the unit is not suitable for fully external or electronic based assessment.

Consideration must be given to holistic assessment for this unit. Refer to advice in the companion volumes.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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