



Australian Government

NWP30222 Certificate III in Water Industry Operations

Release 1

NWP30222 Certificate III in Water Industry Operations

Modification History

Release 1 - This is the first release of this qualification in NWP National Water Training Package.

Qualification Description

This is a qualification for those engaged in generalist water industry operations or specialisations in catchment and dams, civil construction, irrigation water supply, networks, and treatment: water and wastewater, wastewater treatment or water treatment.

The general qualification covers skills and knowledge to obtain a broad range of skills in the water industry. It allows staff to apply operational and procedural practices under the appropriate level of supervision.

Group A: Specialist Elective - Catchment and Dams

This specialisation covers the skills and knowledge required to monitor, operate and maintain water catchment and dam operations.

Group B: Specialist Elective - Civil Construction

This specialisation covers the skills and knowledge required to monitor, operate and maintain civil construction operations.

Group C: Specialist Elective - Irrigation Water Supply

This specialisation covers the skills and knowledge required to monitor, operate and maintain irrigation water supply operations.

Group D: Specialist Elective - Networks

This specialisation covers the skills and knowledge required to monitor, operate and maintain network operations.

Group E: Specialist Elective - Treatment: Water and Wastewater

This specialisation covers the skills and knowledge required to monitor, operate and maintain treatment operations for both water and wastewater.

Group F: Specialist Elective - Wastewater Treatment

This specialisation covers the skills and knowledge required to monitor, operate and maintain wastewater treatment operations.

Group G: Specialist Elective - Water Treatment

This specialisation covers the skills and knowledge required to monitor, operate and maintain drinking water treatment operations.

Please note: RTO to insert on the testamur, the specialist elective unit group selected from the group choice above.

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

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

A total of **11 units of competency** comprising:

General Qualification

- **2 core units** listed below, **plus**
- **9 elective units** selected from anywhere within this qualification.

Specialisations

- **2 core units** listed below, **plus**
- **5 units** from one of the Groups: A, B, C, D, or F, **or**
- **7 units** from Group E: (select **6 units** from specialist elective Groups: F and G, with a minimum of **2 units** from each Group), the selection must include NWPGEN017, **or**
- **6 units** from Group G, the selection must include NWPGEN017, **and**
- all remaining elective **units** can be selected from anywhere within this qualification.

Up to 2 of the elective units may be selected, with appropriate contextualisation from a qualification in this or any other endorsed Training Package, provided selected units contribute to the vocational outcome of the qualification.

Where imported units are selected, care must be taken to ensure all prerequisite units specified are complied with. Prerequisites attached to any of the units must be obtained and are additional to the number of units required for the qualification.

Where a prerequisite is attached to a unit it is identified by the symbol \perp .

Core units

BSBWHS308	Participate in WHS hazard identification, risk assessment and risk control processes
NWPGEN019	Assess, implement and report environmental procedures

Group A: Catchment and Dams

NWPCAD001	Respond to blue-green algae outbreaks
NWPCAD003	Identify and confirm blue-green algae outbreaks
NWPCAD006	Monitor and coordinate catchment operations

NWPCAD008	Monitor and control dam operations
NWPCAD009	Monitor and implement dam maintenance
NWPCAD010	Inspect and report on concrete dam safety
NWPCAD011	Inspect and report on embankment dam safety
NWPCAD012	Route floods through storages
NWPCAD013	Conduct and report dam safety instrumentation monitoring
NWPCAD014	Inspect and report river performance
NWPCAD015	Operate and maintain locks and weirs
NWPCAD016	Operate and maintain fishways
NWPCAD017	Operate and maintain salt interception works
NWPCAD018	Monitor and operate bulkwater transfer systems
NWPCAD020	Inspect and operate groundwater regulation

Group B: Civil Construction

AHCSAW304	Implement erosion and sediment control measures
CPCCCM2004	Handle construction materials └ CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry
CPCCCM3005	Calculate costs of construction work
CPCCLDG3001	Licence to perform dogging
CPCCWHS2001	Apply WHS requirements, policies and procedures in the construction industry
FWPCOT2256	Trim and cut felled trees
PMBWELD301E	Join polyethylene plastic pipelines using butt welding
PMBWELD302E	Join polyethylene plastic pipelines using electrofusion welding
PMBWELD305E	Install polyethylene plastic pipelines for pressurised applications
PMBWELD308E	Install PVC plastic pipelines for pressurised applications
RIICBS310E	Conduct patching operations

RIICCM205F	Carry out manual excavation
RIICCM207E	Spread and compact materials manually
RIICCM208E	Carry out basic levelling
RIICCM209E	Carry out concrete work
RIICCM210E	Install trench support
RIICCM211E	Construct and dismantle fences and gates
RIICPL302E	Install stormwater systems
RIICPL304E	Install pre-cast gully pits
RIICPL305E	Install pre-cast access chambers
RIICRC202E	Install signs
RIICRC301E	Maintain drainage systems
RIICRC303E	Lay pavers
RIICRC314E	Handle concrete materials
RIICRC315E	Use concreting materials and equipment
RIICWM501E	Implement civil construction plans
RIIHAN211D	Conduct basic scaffolding operations
RIIHAN308F	Load and unload plant
RIIMPO327E	Conduct pipe layer operations
RIIRIS202E	Respond to site based spills
RIISAM203E	Use hand and power tools
RIISAM204E	Operate small plant and equipment
RIIWHS202E	Enter and work in confined spaces
RIIWHS204E	Work safely at heights
RIIWMG203E	Drain and dewater civil construction sites
TLILIC0023	Licence to operate a slewing mobile crane (up to 60 tonnes)

Group C: Irrigation Water Supply

NWPIWS001	Monitor and operate rural irrigation and domestic delivery systems
NWPIWS003	Inspect and operate water diversion systems
NWPIWS004	Install meters for rural water supplies
NWPIWS006	Maintain meters for rural water supplies
NWPIWS007	Detect and rectify faults with automated channel regulators
NWPIWS008	Monitor and conduct maintenance on rural irrigation assets
NWPIWS009	Monitor and control drainage operations
NWPIWS010	Monitor and control rural water distribution operations
NWPIWS012	Monitor and schedule water deliveries

Group D: Networks

NWPGEN027	Monitor and operate pump stations
NWPIWS003	Inspect and operate water diversion systems
NWPIWS004	Install meters for rural water supplies
NWPIWS006	Maintain meters for rural water supplies
NWPNET018	Disinfect network assets
NWPNET028	Monitor and operate network systems
NWPNET030	Identify and respond to water quality problems
NWPNET036	Perform leak detection
NWPNET037	Inspect sewer or stormwater assets
NWPNET040	Maintain and repair network assets for wastewater
NWPNET047	Install, maintain and repair hydrants
NWPNET048	Monitor and control vacuum sewer systems
NWPNET051	Monitor and operate water distribution systems
NWPNET052	Monitor and operate wastewater collection and transfer systems
NWPNET053	Test and commission water distribution systems
NWPNET054	Test and commission wastewater collection systems

NWPNET061	Maintain and repair network assets for drinking water
NWPNET062	Maintain network assets using high pressure water systems
NWPNET064	Control electrical risk on network pipes
NWPNET065	Perform odour and infiltration investigations
NWPTRT030	Operate and control odour removal processes
RIICCM205F	Carry out manual excavation
RIICCM209E	Carry out concrete work
RIICCM210E	Install trench support
RIICWM501E	Implement civil construction plans
RIIMPO327E	Conduct pipe layer operations
RIISAM203E	Use hand and power tools

Group E: Treatment: Water and Wastewater

Up to 6 units from Groups F and G with a minimum of 2 units from each group.

NWPGEN017	Apply the risk management principles of the water industry standards, guidelines and legislation
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Group F: Wastewater Treatment

NWPCAD001	Respond to blue-green algae outbreaks
NWPGEN021	Sample and test wastewater
NWPGEN022	Perform laboratory testing
NWPTRT010	Operate and control sedimentation and clarification processes
NWPTRT016	Operate and control dissolved air flotation processes
NWPTRT019	Operate and control granular media filters
NWPTRT020	Operate and control membrane filters
NWPTRT024	Operate and control chloramination processes
NWPTRT028	Operate and control reclaimed water irrigation
NWPTRT030	Operate and control odour removal processes

NWPTRT036	Operate and control activated sludge processes
NWPTRT037	Operate and control nutrient removal processes
NWPTRT038	Operate and control fixed film processes
NWPTRT039	Operate and control solids handling processes
NWPTRT040	Operate and control digestion processes
NWPTRT046	Operate and control incineration processes
NWPTRT047	Monitor, operate and control lagoon processes

Group G: Water Treatment

NWPCAD001	Respond to blue-green algae outbreaks
NWPGEN017	Apply the risk management principles of the water industry standards, guidelines and legislation
NWPGEN020	Sample and test source or drinking water
NWPGEN022	Perform laboratory testing
NWPTRT008	Operate and control iron and manganese removal processes
NWPTRT009	Operate and control coagulation and flocculation processes
NWPTRT010	Operate and control sedimentation and clarification processes
NWPTRT016	Operate and control dissolved air flotation processes
NWPTRT017	Operate and control activated carbon processes
NWPTRT018	Operate and control ion exchange and softening processes
NWPTRT019	Operate and control granular media filters
NWPTRT020	Operate and control membrane filters
NWPTRT021	Operate and control desalination processes
NWPTRT024	Operate and control chloramination processes
NWPTRT039	Operate and control solids handling processes

Group H: General elective units

AHCCHM101	Follow basic chemical safety rules
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BSBINS302	Organise workplace information
BSBOPS304	Deliver and monitor a service to customers
BSBOPS305	Process customer complaints
BSBOPS402	Coordinate business operational plans
BSBPEF301	Organise personal work priorities
BSBTWK201	Work effectively with others
BSBWHS307	Apply knowledge of WHS laws in the workplace
BSBWHS309	Contribute effectively to WHS communication and consultation processes
BSBWHS311	Assist with maintaining workplace safety
CPCCE3014	Remove non-friable asbestos └ CPCWHS1001 Prepare to work safely in the construction industry
CPCCE3015	Remove friable asbestos └ CPCCE3014 Remove non-friable asbestos └ CPCWHS1001 Prepare to work safely in the construction industry
CPCCE4008	Supervise asbestos removal └ CPCCE3014 Remove non-friable asbestos and/or └ CPCCE3015 Remove friable asbestos
CPCCOM1015	Carry out measurements and calculations
CPCPPS5024	Conduct a water audit and identify water-saving initiatives
CPCWHS1001	Prepare to work safely in the construction industry
CPPHES4006	Assess household water use and efficiency improvements
FSKNUM021	Apply an expanding range of arithmetical calculations for work
MSL904002	Perform standard calibrations
MSL922001	Record and present data
MSMWHS216	Operate breathing apparatus
MSS402061	Use SCADA systems in operations
MSS404061	Facilitate the use of SCADA systems in a team or work area

NWPCAD002	Control vegetation on a site
NWPCAD019	Monitor and operate groundwater extraction
NWPGEN017	Apply the risk management principles of the water industry standards, guidelines and legislation
NWPGEN023	Use maps, plans, drawings and details
NWPGEN024	Identify the role and functions of the water industry
NWPGEN025	Apply principles of chemistry to water systems and processes
NWPGEN026	Provide and promote customer service
NWPGEN028	Investigate and report on breaches of water industry legislation
NWPGEN034	Operate and maintain flood warning sites
NWPNET019	Prepare and restore worksite
NWPNET060	Clean networks using air scouring, chemical or swabbing techniques
NWPNET062	Maintain network assets using high pressure water systems
NWPNET063	Use digital imaging equipment in the field
NWPTRT005	Monitor and operate water treatment processes
NWPTRT006	Monitor and operate fluoride addition processes
NWPTRT007	Monitor and operate liquefied chlorine gas disinfection processes └ MSMWHS216 Operate breathing apparatus
NWPTRT022	Monitor and operate hypochlorite disinfection processes
NWPTRT023	Monitor and operate ultraviolet processes
NWPTRT026	Monitor and operate ozone processes
NWPTRT027	Monitor and operate wastewater treatment processes
RIIWHS302E	Implement traffic management plans
TLID0021	Store and handle dangerous goods and hazardous substances

Qualification Mapping Information

This qualification replaces and is equivalent to NWP30219 Certificate III in Water Industry

Operations.

Links

Companion Volume Implementation Guides are found in VETNet -

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