

NWP30107 Certificate III in Water Operations

Revision Number: 2



NWP30107 Certificate III in Water Operations

Modification History

NWP30107 Release 2: Layout adjusted. Minor editorial changes.

NWP30107 Release 1: Primary release.

Description

To achieve this qualification the candidate must demonstrate competency in 11 units of competency, comprising three core and eight elective units.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Approved Page 2 of 9

Employability Skills Summary

Qualification code: NWP30107

Qualification title: Certificate III in Water Operations

The following table contains a summary of the employability skills as identified by the water industry for this qualification. The employability skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Communication • communicates effectively and appropriately with customers,	Employability Skill
colleagues and contractors communicates effectively in a diverse workforce negotiates and resolves disputes and minimises customer concerns uses complex communication techniques, including: verbal and non-verbal language two-way interaction constructive feedback active listening questioning to clarify and confirm understanding interpreting verbal and non-verbal messages observation techniques uses positive, confident and cooperative language controls tone of voice and body language uses language and concepts appropriate to cultural differences clear presents options and consequences demonstrates flexibility and willingness to negotiate communicates OHS policies and procedures communicates environmental plans and procedures within the workplace understands and interprets a range of technical documents, includin relevant: regulatory, legislative, licensing and organisational requirement codes and standards plans specifications organisational organisational, policies understands relevant definitions, terminology, symbols and language discusses organisational issues reports and records hazards and risks participates in ensuring compliance with standards, regulations and policies maintains calibration records and certificates according to	Communication

Approved Page 3 of 9

Employability Skill	Industry/enterprise requirements for this qualification include the following facets:
	organisational and statutory requirements
	collects and analyses data on system performance and usage and reports according to organisational requirements
	prepares clear and concise reports for use in court proceedings according to stakeholder and organisational requirements
	maintains and checks records and documents
Teamwork	works collaboratively and effectively with team members and contractors
	participates in regular reviews of environmental procedures
	uses resources to undertake team tasks and meet customer service levels
	• refers customer concerns related to organisational liability to appropriate persons or departments according to organisational policy
	monitors work processes and ensures safe work practices
	• contributes to the development, refinement and improvement of organisational quality service policies and standards
	relates positively to fellow workers and the management team
Problem solving	responds effectively to hazards, risks and emergencies
	conducts relevant tests and monitoring procedures
	• inspects water facilities (e.g. dams, distribution systems and treatment facilities) to identify actual or potential problems
	takes steps to resolve customer concerns or complaints according to organisational policies and procedures
	analyses problems and applies appropriate remedial solutions
	• controls and integrates processes to maintain and optimise operating parameters
	detects faults in operational condition of system and network
	performs various calculations
	rectifies equipment faults
Initiative and	identifies risks and hazards
enterprise	identifies typical faults and problems and takes necessary remedial action
	applies knowledge of the effects of weather and conditions on operation of collection and transfer systems
	identifies opportunities for improved water management
	proactively implements effective customer service strategies and tactics
Planning and organising	• participates in effective implementation of organisation's operational plans
- · - · · · · · · · · · · · · · · · · ·	monitors and assesses relevant water tests

Approved Page 4 of 9

Employability Skill	Industry/enterprise requirements for this qualification include the following facets:
	 investigates water quality problems and investigates the causes according to organisational and statutory requirements contributes to effective management of water operation's assets installs and commissions new assets and equipment
Self management	 manages own performance to ensure required levels of service standards, work quality and professional competence manages work priorities plans and applies team and work activities to meet customer satisfaction and minimise inconvenience uses feedback to improve own performance
Learning	 seeks feedback on personal performance uses information effectively to improve work performance learns from colleagues as part of effective teamwork reviews personal work performance to identify opportunities to improve service provision to customers identifies opportunities to improve services or processes and communicates them to colleagues
Technology	 reads meters uses water management equipment, including: pipes and fittings gravity systems pumping and valving systems control systems system hydraulics uses workplace computer equipment maintains and understands capabilities and limitations of plant, equipment and tools conducts maintenance on devices and equipment uses technology to improve efficiency and effectiveness of managing work

The high proportion of electives required by this qualification means that the facets of the above employability skills are representative of the water industry in general and may not reflect specific job roles. Learning and assessment strategies for this qualification should be based on the requirements as identified in units of competency that meet packaging guidelines. This table is a summary of employability skills that are typical of this qualification and should not be interpreted as definitive.

Packaging Rules

Approved Page 5 of 9

11 units of competency are required for this qualification including:

- 3 core units
- 8 elective units

Choose a minimum of 4 elective from the list below.

Choose the remaining 4 units from either the list below, **or** elsewhere in this Training Package, **or** another endorsed Training Package **or** Accredited Course, as long as:

- no more than three water industry specific elective units (coded NWP) are chosen from the Certificate II in this Training Package;
- no more than three units are chosen from the Certificate IV in this Training Package;
- no more than three units are chosen from a Certificate III or IV from another endorsed Training Package or Accredited Course.

All elective units selected from outside this qualification must be selected from qualifications aligned to AQF level 2, 3, or 4.

Elective units selected must not duplicate content already covered by other units in this qualification.

Specialisations are possible within this qualification. Details and examples of specialisation rules are included under the Industry Specialisation heading in the Qualification Framework section of this Training Package.

Core	
NWP301B	Implement, monitor and coordinate environmental procedures
BSBOHS303B	Contribute to OHS hazard identification and risk assessment
BSBWOR301B	Organise personal work priorities and development
Electives	
NWP300B	Provide and promote customer service
NWP302A	Install meters for non-potable, non-urban water supplies
NWP303A	Monitor and control maintenance of water and wastewater system assets
NWP304A	Maintain meters for non-potable, non-urban water supplies
NWP305B	Monitor and conduct minor maintenance of complex flow-control and metering devices
NWP308B	Test and commission wastewater collection systems
NWP309B	Test and commission water distribution systems
NWP310B	Monitor and operate water distribution systems
NWP311B	Monitor and operate wastewater collection and transfer systems

Approved Page 6 of 9

_
Investigate and report breaches of water industry legislation
Monitor and schedule water deliveries
Control water quality in distribution systems
Monitor and operate gated spillways
Monitor and control dam operations
Monitor and implement dam maintenance
Inspect and operate groundwater regulation
Inspect and operate surface water systems
Monitor and coordinate catchment operations
Inspect and report river regulation operations
Conduct and report dam safety instrumentation monitoring
Inspect and report on concrete dam safety
Inspect and report on embankment dam safety
Establish positions of underground utilities using locating devices
Inspect conduit and report on condition and features
Monitor, operate and control drainage operations
Monitor and control rural water distribution operations
Perform odour and infiltration investigations
Perform leak detection
Measure and process hydrometric stream discharge data using wading gaugings
Commission, decommission and monitor hydrometric sites, stations and facilities
Monitor, operate and control water treatment processes
Monitor, operate and control wastewater treatment processes
Monitor, operate and control coagulation and flocculation processes

Approved Page 7 of 9

NWP349B Monitor, operate and control sedimentation and clarification proc NWP349B Monitor operate and control incineration processes NWP350B Monitor, operate and control aerobic bioreactor processes NWP351B Monitor, operate and control activated sludge processes NWP352B Monitor, operate and control dissolved air flotation processes NWP353B Monitor, operate and control anaerobic bioreactor processes NWP353B Monitor, operate and control granular media filtration processes NWP355B Monitor, operate and control membrane filtration processes NWP355B Monitor, operate and control ion exchange processes NWP356B Monitor, operate and control reverse osmosis and nano filtration processes NWP357B Monitor, operate and control nutrient removal processes NWP359B Monitor, operate and control dewatering processes NWP360B Monitor, operate and control gas scrubber treatment processes NWP361B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing NWP365A Identify and confirm blue green algae outbreaks	esses
NWP350B Monitor, operate and control aerobic bioreactor processes NWP351B Monitor, operate and control activated sludge processes NWP352B Monitor, operate and control dissolved air flotation processes NWP353B Monitor, operate and control anaerobic bioreactor processes NWP353B Monitor, operate and control granular media filtration processes NWP354B Monitor, operate and control membrane filtration processes NWP355B Monitor, operate and control ion exchange processes NWP356B Monitor, operate and control reverse osmosis and nano filtration processes NWP357B Monitor, operate and control nutrient removal processes NWP359B Monitor, operate and control dewatering processes NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP351B Monitor, operate and control activated sludge processes NWP352B Monitor, operate and control dissolved air flotation processes NWP353B Monitor, operate and control anaerobic bioreactor processes NWP354B Monitor, operate and control granular media filtration processes NWP354B Monitor, operate and control membrane filtration processes NWP355B Monitor, operate and control ion exchange processes NWP356B Monitor, operate and control reverse osmosis and nano filtration processes NWP357B Monitor, operate and control nutrient removal processes NWP359B Monitor, operate and control dewatering processes NWP360B Monitor, operate and control gas scrubber treatment processes NWP361B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP352B Monitor, operate and control dissolved air flotation processes NWP353B Monitor, operate and control anaerobic bioreactor processes NWP354B Monitor, operate and control granular media filtration processes NWP354B Monitor, operate and control membrane filtration processes NWP355B Monitor, operate and control ion exchange processes NWP356B Monitor, operate and control reverse osmosis and nano filtration processes NWP357B Monitor, operate and control nutrient removal processes NWP359B Monitor, operate and control dewatering processes NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP353B Monitor, operate and control anaerobic bioreactor processes NWP354B Monitor, operate and control granular media filtration processes NWP355B Monitor, operate and control membrane filtration processes NWP356B Monitor, operate and control ion exchange processes NWP357B Monitor, operate and control reverse osmosis and nano filtration processes NWP357B Monitor, operate and control nutrient removal processes NWP359B Monitor, operate and control dewatering processes NWP360B Monitor, operate and control gas scrubber treatment processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP354B Monitor, operate and control granular media filtration processes NWP355B Monitor, operate and control membrane filtration processes NWP356B Monitor, operate and control ion exchange processes NWP357B Monitor, operate and control reverse osmosis and nano filtration processes NWP357B Monitor, operate and control nutrient removal processes NWP359B Monitor, operate and control dewatering processes NWP360B Monitor, operate and control gas scrubber treatment processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP355B Monitor, operate and control membrane filtration processes NWP356B Monitor, operate and control ion exchange processes NWP357B Monitor, operate and control reverse osmosis and nano filtration processes NWP359B Monitor, operate and control nutrient removal processes NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP356B Monitor, operate and control ion exchange processes NWP357B Monitor, operate and control reverse osmosis and nano filtration processes NWP359B Monitor, operate and control nutrient removal processes NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP357B Monitor, operate and control reverse osmosis and nano filtration processes NWP359B Monitor, operate and control nutrient removal processes NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP359B Monitor, operate and control nutrient removal processes NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP360B Monitor, operate and control dewatering processes NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP361B Monitor, operate and control gas scrubber treatment processes NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP362B Monitor, operate and control reclaimed water irrigation NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP363B Monitor performance and control maintenance of treatment plant NWP364B Perform laboratory testing	
NWP364B Perform laboratory testing	
, ,	assets
NWP365A Identify and confirm blue green algae outbreaks	
NWP366A Monitor, operate and control chloramination disinfection processor	:s
NWP367A Monitor, operate and control activated carbon adsorption processor	es
NWP368A Respond to blue green algae incidents	
NWP369 Monitor, operate and control lagoon processes	
NWP370 Perform water industry calculations	
BSBSUS201A Participate in environmentally sustainable work practices	
LGAWORK405A Plan and supervise roadworks	

Approved Page 8 of 9

LGAWORK406A	Supervise concrete works
-------------	--------------------------

Approved Page 9 of 9