

UNIT CODE	NAT11429008
UNIT TITLE	Conduct a drinking water assessment
APPLICATION	<p>This unit describes the performance outcomes, skills and knowledge required to assess pollutants in drinking water.</p> <p>It requires knowledge of drinking water pollutants contained in tap, tank, bore/well and bottled water such as microorganisms, inorganic and organic pollutants, radioactive nuclides, disinfectants and their by-products, as well as those arising from the water supply network and storage vessels. It requires knowledge of the adverse health effects arising from ingesting drinking water pollutants and an understanding of water filtration systems, including their advantages and limitations.</p> <p>This unit applies to building biologists or individuals who, as part of their occupation or work role, assess drinking water quality.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
COMPETENCY FIELD	050999 Environmental Studies, nec
ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes of the unit	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Plan to conduct a drinking water quality assessment	<p>1.1 Consult the client to clarify objectives, scope, budget for the drinking water assessment</p> <p>1.2 Research pollutants in drinking water including established and emerging contaminants</p> <p>1.3 Assess adverse health effects associated with drinking water pollutants</p> <p>1.4 Review and interpret exposure standards in the Australian Drinking Water Guidelines</p>
2. Undertake a drinking water quality assessment	<p>2.1 Determine the client's primary source of drinking water and responsible water supplier</p> <p>2.2 Obtain and review water quality reports, comparing key parameters to the Australian Drinking Water Guidelines</p> <p>2.3 Inspect and assess the water supply infrastructure unique to the site, including mains, domestic reticulation system, storage tanks and fixtures for potential sources of pollutants</p>
3. Recommend strategies to minimise drinking water pollutants	<p>3.1 Research and compare water filtration systems, their benefits and limitations</p> <p>3.2 Select water filtration options that address pollutants and satisfy the client's needs and budget</p> <p>3.3 Recommend key personnel required to assist in implementing the solutions (e.g., licensed plumber, water filtration specialists)</p>

4. Report assessment findings and recommendations	<p>4.1 Compile and document assessment findings and recommendations in a professional report using clear, client-appropriate language</p> <p>4.2 Present objective evidence and recommendations with references to authoritative sources</p>		
<p>FOUNDATION SKILLS</p> <p>Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.</p>			
UNIT MAPPING INFORMATION	Code and Title Current Version	Code and Title Previous Version	Comments
	NAT11429008 Conduct a drinking water assessment	NAT10913003 Conduct a drinking water assessment	<p>Equivalent unit</p> <p>Minor amendments to terminology</p> <p>Change from core to elective unit</p>
TITLE	Assessment Requirements for NAT11429008 Conduct a drinking water assessment		
PERFORMANCE EVIDENCE	<p>The learner must show evidence of the ability to complete tasks outlined in the elements and performance criteria of this unit and manage tasks and contingencies in the context of the role of a Building Biology Consultant. There must be demonstrated evidence that the learner has completed the following tasks:</p> <ul style="list-style-type: none"> • Consult with a client to clarify objectives, scope and budget for a drinking water assessment • Determine the client’s primary source of drinking water and water supplier • Inspect and evaluate the water supply infrastructure unique to the site, identifying potential sources of pollutants (established and emerging) • Research health effects associated with drinking water pollutants relevant to the client’s water source (tap, tank, bore/well, bottled) • Review water reports with the exposure limits in the Australian Drinking Water Guidelines • Research and compare water filtration systems, including their benefits and limitations • Select appropriate water filtration options that address identified pollutants and meet the client’s needs and budget • Documented findings and recommendations in a professional report 		
KNOWLEDGE EVIDENCE	The learner must be able to demonstrate essential knowledge required to effectively do the task outlined in elements and performance criteria of this		

	<p>unit, and manage the task and contingencies expected of a Building Biologist. This includes knowledge of:</p> <ul style="list-style-type: none"> • Sources of drinking water available to consumers including tap, tank, bore/well and bottled water • Australian Drinking Water Guidelines and water distributors • Pollutants that impact drinking water quality including organic and inorganic contaminants, microorganisms and disinfectants and their by-products used in water treatment processes • Emerging contaminants include PFAS and hormone-disrupting chemicals • Water supply network, storage and fixtures • Tank water materials and roof catchment types
<p>ASSESSMENT CONDITIONS</p>	<p>Assessment must be conducted in an environment that reflects current industry practice and workplace conditions. Candidates must have access to:</p> <ul style="list-style-type: none"> • A residential building that replicates workplace conditions • Australian Drinking Water Guidelines <p>Assessor Requirements</p> <p>Assessors must satisfy the requirements outlined in the Standards for Registered Training Organisations (RTOs) 2025 or successor standards and demonstrate current industry skills and knowledge as a Building Biologist, with a minimum of three years' relevant industry experience.</p>