

UNIT CODE	NAT11429003
UNIT TITLE	Conduct a comprehensive mould and moisture assessment
APPLICATION	<p>This unit describes the performance outcomes, skills and knowledge required to assess water-damaged buildings.</p> <p>It requires knowledge of psychrometrics, moisture sources, condensation, dampness, water vapour management and the adverse health effects associated with water-damaged buildings. It requires knowledge of the Condition of microbial growth and Class and Category of water loss, in addition to risk management, personal protective equipment, exposure standards and interpretation of laboratory results. It requires the ability to take an exposure history, inspect the site for water damage, visible mould and damp odours, and conduct a moisture survey. It requires the skills to conduct sampling, calibrate and use technical equipment, and analyse laboratory results.</p> <p>This unit applies to indoor environmental practitioners such as building biologists, hygienists, mould testing technicians, restorers, mould remediators, builders, pest controllers, and other professionals who conduct assessments of water-damaged buildings.</p> <p>While there are currently no mandatory licensing or certification requirements for this work, the unit supports best practice across related professions to ensure health, safety, and compliance with Australian Standards and industry standards.</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 and prepare to conduct a mould assessment	<p>1.1 Consult the client to clarify objectives, scope and site-specific issues</p> <p>1.2 Create a structured questionnaire and checklist to conduct the assessment covering health, building and content history, water events, housekeeping and maintenance</p> <p>1.3 Investigate likely moisture sources impacting the built environment</p> <p>1.4 Research health impacts associated with water-damaged buildings</p> <p>1.5 Document mould exposure standards</p> <p>1.6 Select accredited laboratories for sample analyses</p> <p>1.7 Apply workplace health and safety procedures to plan and manage potential risk environments</p>
2. Select and prepare equipment	<p>2.1 Select equipment and personal protective equipment to conduct the assessment</p> <p>2.2 Verify and adjust flow rate of the biopump in accordance with manufacturer instructions</p>

	2.3 Prepare and calibrate moisture meters
3. Perform a mould and moisture assessment	<p>3.1 Research historical and current weather patterns unique to the area</p> <p>3.2 Measure and record air quality indicators</p> <p>3.3 Conduct a visual inspection of the site for evidence of moisture ingress, condensation and visible mould</p> <p>3.4 Assess for damp, musty odours, recording location and intensity</p> <p>3.5 Locate and quantify moisture-laden materials and record findings on moisture maps</p> <p>3.6 Collect air and surface samples for fungal particulate matter</p> <p>3.7 Complete chain of custody documentation for all samples</p> <p>3.8 Record observations using a structured checklist</p>
4. Analyse results and interpret findings	<p>4.1 Interpret laboratory results and compare with recognised exposure standards</p> <p>4.2 Assess risk to clients, including consideration of susceptible groups</p> <p>4.3 Analyse inspection data, moisture mapping and laboratory results to establish the Condition of each room</p> <p>4.4 Document findings and illustrate affected areas on the floorplan</p>
5. Make recommendations to reduce exposure	<p>5.1 Provide recommendations to dry moisture-laden materials</p> <p>5.2 Make recommendations to remediate mould-affected materials</p> <p>5.3 Determine and advise if site or area containment is required</p> <p>5.4 Document strategies to reduce water vapour</p>
6. Report findings	<p>6.1 Prepare a comprehensive, professional report summarising findings, data analysis, methodologies and recommendations</p> <p>6.2 Specify key personnel needed for implementation of recommendations</p> <p>6.3 Reference standards, guidelines, and scientific literature supporting conclusions and recommendations</p> <p>6.4 Present recommendations and findings in clear, accessible language suitable for clients</p>

FOUNDATION SKILLS

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below including a brief description of how the skill is applied.

Skill	Description
Reading skills to:	Interpret laboratory reports, technical equipment manuals and regulatory texts on mould and moisture
Numeracy skills to:	Use psychrometric charts, calculate moisture levels, interpret air quality and laboratory results
Problem-solving skills to:	Identify unique moisture sources, review multiple forms of data to test a hypothesis, evaluate complex contamination scenarios
Technology skills to:	Calibrate the biopump and use moisture meters, thermal imaging camera and sampling equipment

UNIT MAPPING INFORMATION	Code and Title Current Version	Code and Title Previous Version	Comments
	NAT11429003 Conduct a comprehensive mould and moisture assessment	NAT10913005 Conduct an assessment of a water-damaged home	Equivalent unit Minor amendments to terminology Change title to 'Conduct a comprehensive mould and moisture assessment'
TITLE	Assessment Requirements for NAT11429003 Conduct a comprehensive mould and moisture 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, manage tasks and contingencies in the context of their role as a Building Biologist or Indoor Environmental Professional. There must be evidence that the learner has conducted an assessment of a water-damaged home in the presence of a trainer in accordance with current industry standards and workplace procedures.</p> <p>There must be demonstrated evidence that the learner has completed the following tasks:</p> <ul style="list-style-type: none"> • Design a structured questionnaire to obtain information about the site, and history of water damage • Complete a comprehensive checklist capturing site information 		

	<ul style="list-style-type: none"> • Demonstrate tasks over multiple, realistic occasions (multiple rooms in the house) to ensure competency and consistency • Record air quality readings for temperature, relative humidity, humidity ratio and dew point • Investigate the site for visible mould, condensation and damp, musty odours • Identify sources of moisture unique to the site • Quantify moisture-laded materials • Calibrate and use the biopump and moisture meters • Perform air and surface sampling in accordance with documented protocols and chain of custody requirements • Analyse laboratory results against relevant exposure standards • Produce a professional report summarising findings and recommendations
KNOWLEDGE EVIDENCE	<p>The learner must be able to demonstrate knowledge required to effectively do the tasks outlined in the elements and performance criteria of this unit, manage the tasks and contingencies in the context of the work role. This includes knowledge of:</p> <ul style="list-style-type: none"> • Psychrometric principles and their application in building investigation including understanding the conditions that give rise to condensation, dampness, and water vapour issues • Categories and classes of water related to an escape of liquid • Mould exposure standards (Australasian Society of Building Biologists, Australian Mould Guidelines) • Adverse health impact arising from exposure to water-damaged buildings • The NIOSH tool to quantify visible mould and signs of moisture • Principles and standards of mould remediation (Australian Standard, IICRC S520) • Annotated photo Apps to map moisture • Workplace health and safety protocols to identify potential risky environments and use of and appropriate personal protective equipment • Sampling and measurement equipment (indoor air quality meter, thermal imaging camera, moisture meters, biopump, tape lift, biotapes and ATP meter) • Chain of Custody documentation for samples • Roles and responsibilities of key remediation personnel (restorers, HVAC specialists, hydrologists, plumbers)
ASSESSMENT CONDITIONS	<p>Assessment must be conducted in an environment that reflects current industry practice and workplace conditions. Assessment must allow demonstration of tasks over multiple, realistic occasions (multiple rooms in the house) to ensure competency and consistency. Candidates must have access to:</p>

	<ul style="list-style-type: none">• A water-damaged residential building that replicates workplace conditions• A floorplan of the building• Current industry standards and guidelines relevant to mould and water-damage assessment (ASBB Mould Exposure Guidelines, IICRC S520:2024, AS-IICRC S520:2025)• Pre-recording or live interaction representing a client interview• All necessary equipment and materials for conducting a mould and moisture assessment:<ul style="list-style-type: none">○ Moisture meters for various substrates○ Thermal imaging camera○ Biopump and tripod○ Air sampling cassettes and biotapes○ Torch○ Digital camera/phone○ Carpet pick○ Personal protective equipment (disposable gloves and respirator)○ ATP meter and swabs○ Sample documentation including checklist, chain of custody forms and report templates○ Interaction with the trainer and other learners to simulate workplace communication and consultation○ Laboratory to analyse the results <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>
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