



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# SUG02 Sugar Milling Training Package

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## Modification History

Not applicable.

## Introduction

### Introduction

#### What is a Training Package?

Training Packages are a key feature of vocational education and training in Australia. They are part of the National Training Framework that aims to make training and regulatory arrangements simple, flexible and relevant to the needs of industry.

- Training Packages are developed by industry for industry  
The Australian National Training Authority funds National Industry Training Advisory Bodies (ITABs) to develop Training Packages. Extensive consultation occurs during development to ensure that the Training Package is relevant and useable. And before the completed Training Package is endorsed for use, the ITAB must validate it and show that it has broad industry support.
- Training Packages encourage training at work  
Training may occur at the workplace, off the job, at a training organisation, during regular work, or through work experience, work placement or work simulation. Usually it involves a combination of these methods, depending on what suits the learner and the type of learning and particular vocational outcome.
- Training Packages provide many pathways to competency  
Australians can achieve vocational competency in many ways. Training Packages acknowledge this by emphasising what the learner can do, not how or where they learned to do it. For example, some experienced workers might be able to demonstrate competency against the standards and gain a qualification without completing a formal training course.

#### Training Package Components

A Training Package comprises two components; *endorsed material* and *support materials*. The Australian National Training Authority's National Training Quality Council oversees the endorsed component.

##### Endorsed Materials

Endorsed components of a Training Package consist of three parts: Competency Standards, National Qualifications, and Assessment Guidelines. Each of these components is outlined below.

- **Competency Standards** provide an industry benchmark for training and assessment. They specify the scope of knowledge and skills to be covered in the Training Package. They enable enterprises to accurately define particular roles within industry, and are a useful guide when designing job classifications, workplace appraisal, and skill development. They are the basis for designing vocational education and training courses and assessment approaches for delivery both on and off the job, by registered training providers.

### Key Features

- Each Unit of Competency identifies a discrete workplace requirement. Often units need to be combined to achieve a work outcome. For example the relevant OHS unit should always support an operational unit. Guidance on the relationships between units is provided within each competency standard.
- Units incorporate the knowledge and skills that underpin competency. They encompass relevant observable outcomes, knowledge, values and attitudes, language, literacy and numeracy, and occupational health and safety requirements.
- Key Competencies are identified at the qualification level.
- Units are flexible in how they can be applied, but they are sufficiently detailed to guide registered training organisations (RTOs) and assessors, and to provide consistent outcomes.
- **National Qualifications** within the Australian Qualifications Framework (AQF) are awarded when a learner (who is typically an employee) has been assessed as achieving a combination of Units of Competency that provide a meaningful outcome at an industry or enterprise level. Each qualification consists of a number of core, specialist and/or Elective units of Competency that industry representatives consider workers require to perform a particular job. Where an individual achieves one or more Units of Competency without completing a qualification, a Statement of Attainment is issued that recognises their achievement.

### Key Features

- Each qualification (comprising specified Units of Competency) is aligned directly against the AQF.
- The qualifications covered within a Training Package may range from Certificate I to Advanced Diploma, and will include the national title for each qualification.
- The Qualification will list the individual units of competency attained to make up a qualification.
- New Apprenticeship pathways will be identified within the Training Package.
- The Qualification will display the Nationally Recognised Training logo.
- **3. A Statement of Attainment** is issued to individuals who have been assessed and deemed competent against a Unit of Competency. Statements of Attainment issued by one RTO must be recognised by other RTOs. Accrual of specified Statements of Attainment can eventually lead to a learner meeting all the requirements of a qualification.

### Key Features

- Statements of Attainment will identify the Units of Competency for which the individual has been assessed and is deemed competent by the RTO.
- They will display the Nationally Recognised Training logo.
- They will identify the RTO.

- **Assessment Guidelines** provide a framework for accurate, reliable and valid assessment of the applicable Competency Standards. They ensure that all assessments are thorough, consistent and valid. They provide important quality assurance in the issuing of qualifications.

Endorsed components of a Training Package may be complemented and supported by the development of optional learning strategies, assessment tools and professional development materials.

### Support materials

Support materials to be used in conjunction with a Training Package can be produced by RTOs, private and commercial developers, DETYA, State Training Authorities or through ANTA. They can consist of:

**learning strategies** that assist training providers to design specific training programs that will help trainees attain the required competencies;

**assessment materials** that can be used by assessors to gather sufficient evidence of competency to make reliable judgements about whether a person has met the required Competency Standard;

**professional development materials** that provide information, hints and resources for trainers and assessors that will help them successfully deliver the outcomes of the Training Package.

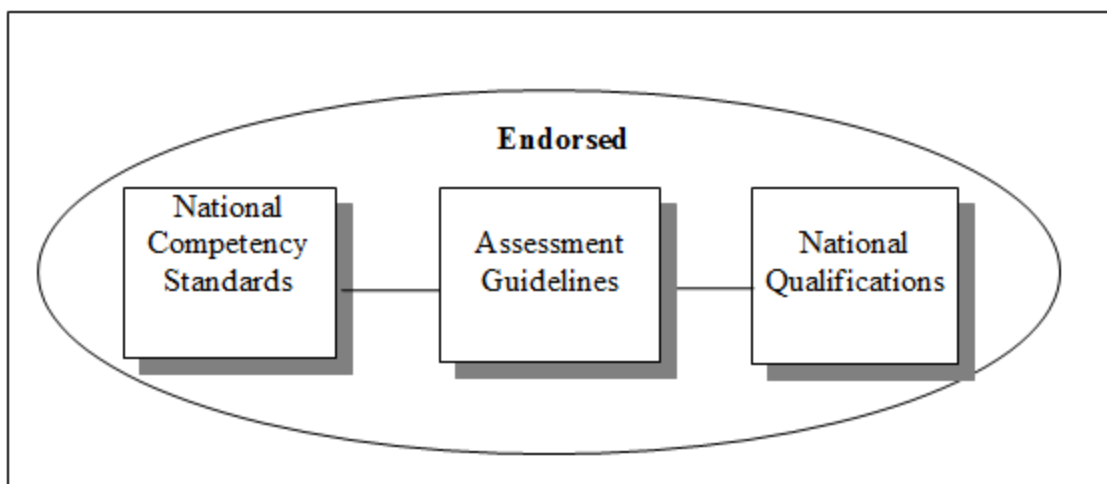
RTOs will usually develop their own supporting resources. They can also draw upon any other resources developed specifically to support the Training Package. Support materials that have passed successfully through ANTA's official "Noting" process can use the official logo to indicate that they meet specified quality criteria. The logo is depicted here.



Noted support materials are listed on the National Training Information Service (NTIS), together with a detailed description and information on their availability and the type of product. NTIS can be located on <http://www.ntis.gov.au>

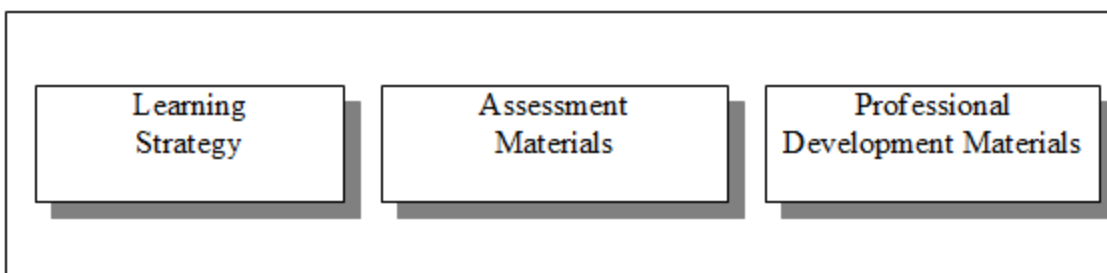
Although the noting process has been adopted as a guide to quality-assured supporting resources, it is not compulsory for RTOs to submit their support resources to ANTA. They are at liberty to use whatever resources are available to them to meet the requirements of a qualification or a Unit of Competency.

The components of an endorsed Training Package are illustrated in the following diagram:



Supporting resources are generally produced to directly relate to a single or multiple units of competency, industry sector, qualification or the total Training Package. They tend to fall into one or more of the categories illustrated below.

### Supporting Resources



### Version Control

ANTA has a system for tracking changes across subsequent editions of Training Packages and their constituent components. Anyone using a Training Package should follow ANTA's recommended procedure for determining the currency of the information in their edition.

### Training Package Codes

Each Training Package has been assigned a unique five-character code, for example SUG02. The final two characters (the version identifier) represent the year the Training Package was initially endorsed. Units of Competency and qualifications originating in that Training Package will have their own longer codes, which will commence with the first three letters of the Training Package code (SUG in this example).

## Units of Competency Codes

Whereas the first three characters of the code assigned signify the Training Package, the last character will always be a letter representing the version identifier. The code for a Unit of Competency is assigned when the initial Training Package is endorsed, or when new sectors or new units are added to an existing endorsed Training Package. A typical code consists of up to 12 characters. These characters normally consist of a mixture of capital letters and numbers. A typical style of code may be SUGSOE2A. The first three characters are always letters and are the same letters used to code the original Training Package of which the unit was part. In the example, the code for the original Training Package commenced with SUG. The last letter (A) in the Unit of Competency code is the letter used for the version control. The "A" indicates that this is the original unit.

If one lot of changes has been incorporated since the unit was first endorsed, but without any change to the unit outcomes, the version identifier will be a "B". The different version identifier usually means that minor changes have been incorporated without affecting the overall unit outcome. Typically this would mean that wording has changed in the Range Statement or the Evidence Guide, providing clearer intent. The next batch of minor changes would result in a "C", and so on throughout the life of the unit.

Any letters or numbers (this can be up to eight characters) between the first three characters and the version control letter are assigned by the developer of the unit and may relate to an industry sector, function or skill area.

Where changes are incorporated that alter the unit outcome, a new code is assigned and changes are made to the unit title.

Differences in the version identifier of Units of Competency on Statements of Attainment issued by RTOs are not significant, as outcomes of the unit have not changed significantly.

## Qualifications Codes

All qualifications are assigned a unique eight-character code. The last two characters (version identifier) are always numbers and represent the year in which the qualification was endorsed. In all instances, qualifications included and endorsed in the original Training Package have an identical version identifier to those of the originating Training Package. In cases where qualifications are added after the initial endorsement of the Training Package, they are assigned a version identifier denoting the year they were endorsed.

## Review Date

On the title page and in the footer of each Training Package page there is reference to a review date. This date is determined at the time of endorsement of the Training Package and indicates when the Training Package is to be reviewed in the light of changing technologies, job content, circumstances, industrial relations etc. The review date is not to be regarded as an expiry date as the Training Package and its components remain current until they are reviewed or replaced.

## Qualifications Framework

### Qualifications Framework

#### What is the Australian Qualifications Framework?

The Australian Qualifications Framework (AQF) is a national framework for all education and training qualifications in Australia. There are twelve qualifications in the AQF. Six of these are relevant to the Vocational Education and Training (VET) sector. The twelve qualifications are listed in the following table.

Schools sector	VET sector	Higher Education sector
Senior secondary certificate of education	Advanced diploma Diploma Certificate IV Certificate III Certificate II Certificate I	Doctoral degree Masters degree Graduate diploma Graduate certificate Bachelor degree Advanced diploma Diploma

This categorisation of qualifications into these three sectors is in some ways misleading. In practice it is not unusual for the Schools sector to be delivering Certificates 1 or higher, for the VET sector to deliver Graduate certificates, and for the Higher Education sector to be involved in delivery of Certificate IV.

The adoption of the AQF for all vocational education and training ensures national consistency for all trainees, students, employers and providers in the VET sector. It permits national recognition of competency based on endorsed Competency Standards. Competency is assessed in accordance with the endorsed Assessment Guidelines.

#### Statement of Attainment

Where competence has been achieved in accordance with the endorsed standards, but does not meet the requirements of a qualification, a Statement of Attainment can be issued for the competencies successfully achieved. These can be combined with any additional competencies achieved later. Together they will build towards the awarding of a qualification. RTOs must recognise the achievement of competencies recorded on a Statement of Attainment issued by another RTO.



## AQF Level Descriptors

The following level descriptors provide a broad outline of the characteristics of functions typically performed at a given Certificate level. For more detailed advice on linking competency standards to work outcomes, refer to the section on the Sugar Milling Industry.

### Certificate I

The worker will normally be engaged in a workplace in which they:

- demonstrate knowledge by recall in a narrow range of areas;
- demonstrate basic practical skills, such as the use of relevant tools;
- perform a sequence of routine tasks under clear direction;
- receive and pass on messages or information.

### Certificate II

The worker will normally be engaged in a workplace in which they:

- demonstrate basic operational knowledge in a moderate range of areas;
- apply a defined range of skills;
- apply known solutions to a limited range of predictable problems;
- perform a range of tasks where choice between a limited range of options is required;
- assess and record information from varied sources;
- take limited responsibility for their own outputs in work and learning.

### Certificate III

The worker will normally be engaged in a workplace in which they:

- demonstrate some relevant theoretical knowledge;
- apply a range of well-developed skills;
- apply known solutions to a variety of predictable problems;
- perform processes that require a range of well-developed skills where some discretion and judgement is required
- interpret available information using discretion and judgement;
- take responsibility for their own outputs in work and learning;
- take limited responsibility for the output of others.

### Certificate IV

The worker will normally be engaged in a workplace in which they:

- demonstrate understanding of a broad knowledge base incorporating some theoretical concepts;
- apply solutions to a defined range of unpredictable problems;
- identify and apply skill and knowledge areas to a wide variety of contexts, in some cases in depth;
- identify, analyse and evaluate information from a variety of sources;
- take responsibility for their own outputs in relation to specified quality standards;
- take limited responsibility for the quantity and quality of the output of others.

### Diploma

The worker will normally be engaged in a workplace in which they:

- demonstrate understanding of a broad knowledge base incorporating theoretical concepts, in some cases in substantial depth;
- analyse and plan approaches to technical problems or management requirements;
- transfer and apply theoretical concepts and/or technical or creative skills to a range of situations;
- evaluate information, using it in forecasting for planning or research purposes;
- take responsibility for their own outputs in relation to broad quantity and quality parameters;
- take some responsibility for the achievement of group outcomes.

### **Advanced Diploma**

The worker will normally be engaged in a workplace in which they:

- demonstrate understanding of specialised knowledge with depth in some areas;
- analyse, diagnose, design and execute judgments across a broad range of technical or management functions;
- generate ideas through the analysis of information and concepts at an abstract level;
- demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills;
- demonstrate accountability for personal outputs within broad parameters;
- demonstrate accountability for personal and group outcomes within broad parameters.

### **New Apprenticeship Arrangements**

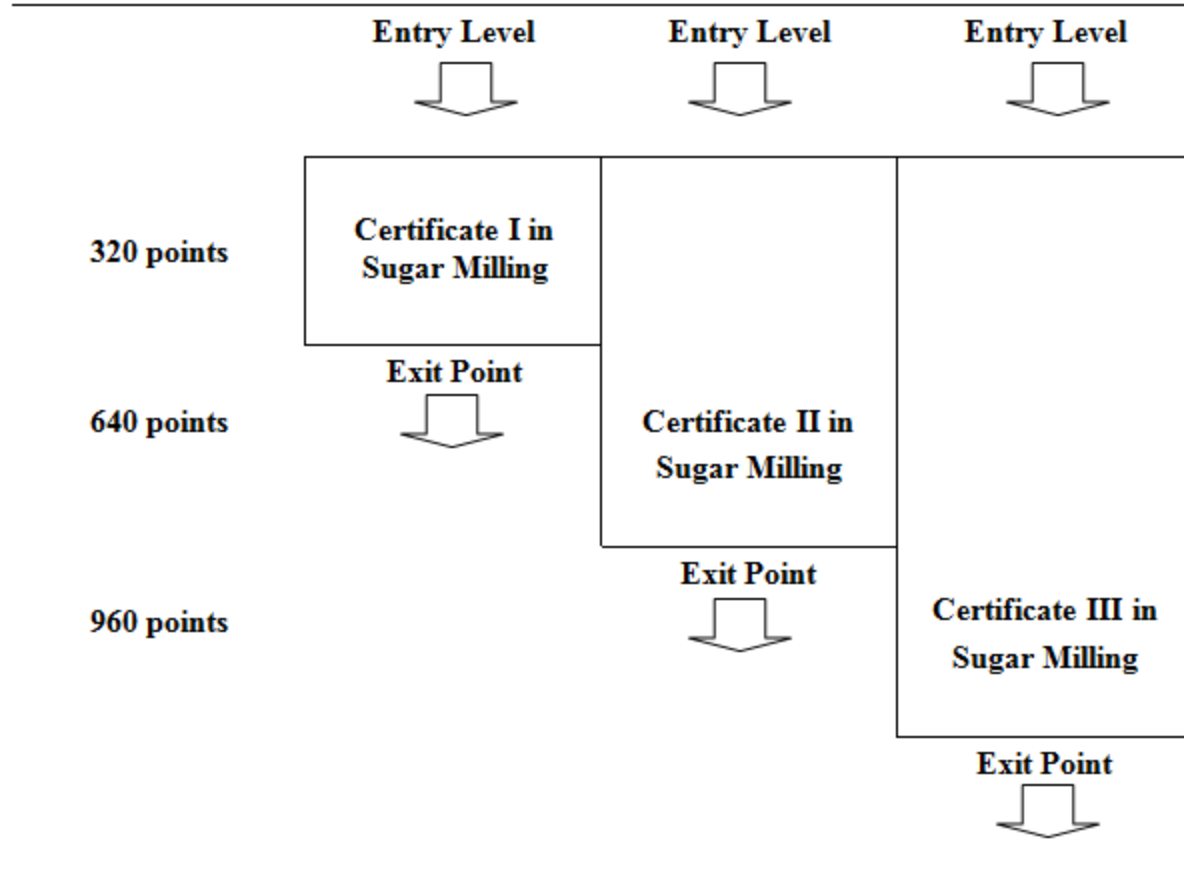
All qualifications within the Package are open to New Apprenticeship pathways. Any decision on establishing New Apprenticeship arrangements will need to be carefully considered by the industry parties.

### **VET in Schools Delivery**

The Certificates in Sugar Milling have the potential to be used as a VET in schools program. This is conditional on local parties collaborating to agree on delivery, assessment and infrastructure arrangements. Models for these arrangements are established in the food processing industry. For information contact the National Food Industry Training Council.

**Pathways**

An employee/person may enter directly into a Certificate I, II or III in Sugar Milling. Credit for units completed in a lower level qualification can be counted towards a higher level qualification. Refer to diagram below.



Assessment Guidelines

**Assessment Guidelines**

**What are assessment guidelines?**

These Assessment Guidelines provide the endorsed framework for assessment of the Units of Competency in this Training Package.

They are designed to ensure that assessment activities are consistent with the *Australian Quality Training Framework Standards for Registered Training Organisations* and that the assessment processes and outcomes are valid, reliable, flexible and fair.

Assessments against the Competency Standards in this Training Package *must* be carried out in accordance with these endorsed guidelines.

The Assessment Guidelines comprise five key sections:

- assessment system overview;
- assessor requirements;
- designing assessment resources;
- conducting assessment;
- further sources.

## Assessment System Overview

### Benchmarks for Assessment

The Competency Standards in this Training Package are benchmarks for assessment and are the basis of the nationally recognised Australian Qualifications Framework (AQF), qualifications, and Statements of Attainment issued by Registered Training Organisations (RTOs).

Assessment within the National Training Framework is defined as the process of collecting evidence and making judgements about whether competency has been achieved. The purpose of assessment is to confirm whether an individual can perform to the standards expected in the workplace, as expressed in the Competency Standards in the Training Package.

When conducting assessments, assessors must ensure that they are familiar with the full text of the Unit(s) of Competency being assessed. In particular, they must ensure that the assessment arrangements:

- cover all elements of the Unit of Competency being assessed. This includes all items in the Evidence Guide;
- address the four dimensions of competency: task skills, task management skills, contingency management skills and job/role environment skills. These dimensions have been taken into account in the design of the competency standard;
- are consistent with the Evidence Guide for each relevant Unit of Competency, as this specifies the context of assessment, the critical aspects of competency, the required underpinning knowledge and skills. Reference to having access to real workplace conditions and infrastructure or required conditions for simulation are also specified.

### Australian Quality Training Framework Assessment Requirements for RTOs

Assessment for national recognition purposes must meet the requirements of the Australian Quality Training Framework (AQTF). Assessment must be conducted under the auspices of an RTO formally registered under *Australian Quality Training Framework Standards for Registered Training Organisations* with the specific Competency Standards or Training Package within its scope of registration. The RTO must meet the requirements of the relevant assessment standards in the *Australian Quality Training Framework Standards for Registered Training Organisations* as set out below.

The RTO's assessments for national recognition, regardless of whether this is through a training and assessment pathway or an assessment-only pathway must:

- comply with the Assessment Guidelines included in nationally endorsed Training Packages;
- lead to the issuing of a Statement of Attainment or qualification under the AQF when a person is assessed as competent against nationally endorsed Unit(s) of Competency;
- be underpinned by an assessment process that complies with the principles of validity, reliability, fairness and flexibility;
- provide for applicants to be informed of the context and purpose of the assessment and the assessment process;
- focus on the application of knowledge and skill to the standard of performance required in the workplace and cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job/role environment skills;
- involve the evaluation of sufficient evidence to enable professional judgments to be made about whether competency has been attained;
- provide for feedback to the applicant about the outcomes of the assessment process and guidance on future options;
- provide for reassessment on appeal, and
- be equitable for all groups or persons, taking account of cultural and linguistic needs.

Reasonable adjustments are to be made to ensure equity in assessment for people with disabilities. This means that wherever possible, 'reasonable' adjustments are to be made to meet the individual needs of a person with a disability. Adjustments are considered 'reasonable' if they do not impose an unjustifiable hardship on a training provider or employer. When assessing people with disabilities, assessors are encouraged to apply good practice assessment methods with sensitivity and flexibility.

- Where a person enrolls in training the RTO must make Recognition of Prior Learning (RPL) available. The RPL process must:
- be designed to avoid unnecessary duplication of learning;
- be structured to minimise the time and cost to applicants;
- provide adequate information and support to enable applicants to gather reliable evidence to support their claim for recognition of prior learning, regardless of how, when or where the learning occurred.

The RTO must ensure that, in developing, adapting or delivering training and assessment products and services:

- methods used to identify learning needs, and methods for designing training and assessment materials are documented;
- language, literacy and numeracy requirements are consistent with the essential requirements for workplace performance specified in the relevant Units of Competency and that they develop the learning capacity of the individual. This means that the level of communication skills required to participate in training and/or assessment should be no higher than the communication competencies required by the work process;
- the requirements of the Training Package are met;
- core, specialist and Elective units, as appropriate, are identified; and
- customisation meets the requirements specified in the Training Package.

The RTO must document its plans for training delivery and assessment of each Training Package qualification and accredited course within its scope of registration. These plans must ensure that:

- the delivery modes and training materials meet the needs of a diverse range of clients. Where a workplace is the RTO, delivery modes must be matched to the needs and learning styles of its employees;
- assessment plans, including proposed validation processes, are developed in consultation with relevant client/workplace personnel and are documented at the point of registration and on application for extension of scope;
- where assessment or training is conducted in the workplace, the RTO negotiates the delivery and assessment plan in consultation with relevant workplace personnel who include managers, learners, trainers and assessors. Where the RTO is external to the workplace, they need to agree on how to effectively deliver job-based training and assessment, and schedule workplace visits to monitor/review the training and assessment;
- where a New Apprenticeship Training Contract is in place or being negotiated, individual Training plans encompassing both off-the-job training and structured on-the-job training are developed, documented, implemented and monitored for each apprentice or trainee.

The RTO must validate its assessment plans by:

- reviewing, comparing and evaluating the assessment processes, tools and evidence contributing to judgements made by a range of assessors against the same standards<sup>1</sup>, at least annually; and
- documenting any action taken to improve the quality and consistency of assessment.

<sup>1</sup> These may be internal processes with stakeholder involvement or external validations with other providers and/or stakeholders.

The RTO must have access to the staff, facilities, equipment, training and assessment materials necessary to provide the training and/or assessment within its scope of registration, and to accommodate client numbers and client needs (including off-campus and on-line delivery and assessment requirements).

RTOs may operate in partnership with other organisations (see below) but, in doing this, are still responsible for the quality of their services and service outcomes.

In order to deliver and/or assess Units of Competency or qualifications and issue nationally recognised qualifications under the AQF, RTOs must have those Units of Competency and/or qualifications within their scope of registration.

### **Partnership Arrangements**

Under the Australian Quality Training Framework (AQTF), RTOs may enter into partnerships with non-registered organisations, such as schools, industry organisations and enterprises, for delivery and assessment within the RTO's scope of registration.

Where this is done, the RTO must have a formal agreement with the organisation that provides the training and/or assessment under its name. The agreement must specify how all parties will discharge their responsibilities for ensuring the quality of the training and/or assessment conducted on its behalf, including the qualification requirements for delivery and assessment.

The RTO has full responsibility for the quality and outcomes of any training or assessment conducted on its behalf, and it must maintain a register of all such agreements.

### **Recording Assessment Outcomes**

The RTO that issues the AQF Qualification or Statement of Attainment is responsible for recording, storing, retrieval and accessibility of the assessment outcomes specified in *Australian Quality Training Framework Standards for Registered Training Organisations*.

### **Reporting Assessment Outcomes**

Statements of Attainment and qualifications issued under the AQF must comply with the relevant provisions in the current *Australian Qualifications Framework Implementation Handbook*.

AQF qualifications must be issued once the full requirements for a qualification, as specified in the Qualifications Framework of the Training Package, have been met. A Statement of Attainment is to be issued where the individual achieves a qualification or is assessed as competent against fewer Units of Competency than are required for a qualification and the individual has completed their study or assessment process. Qualifications and Statements of Attainment issued must comply with the format specified in the current *AQF Implementation Handbook*.

### **Quality Assurance Mechanisms**

Under the provisions of the AQTF, RTOs involved in the assessment of the Units of Competency and qualifications within this Training Package are required to establish and use quality assurance mechanisms in line with their registration requirements.

It is *recommended* that RTOs include the following procedures within a quality assurance framework:

- establishment of a standard procedure for the selection of assessors;
- conduct of regular professional development for assessors;
- ongoing recording, monitoring and review of the assessment process, including the assessment plan, assessment outcomes and participant feedback;
- development of a comprehensive bank of resources for participants and assessors including:
  - information about the assessment process;
  - assessment instruments, where appropriate;
  - standardised reporting and recording forms for participants, assessors, trainers and employers;
  - guidelines for assessors on the preparation of the assessment plan, and conduct and review of the assessment process.

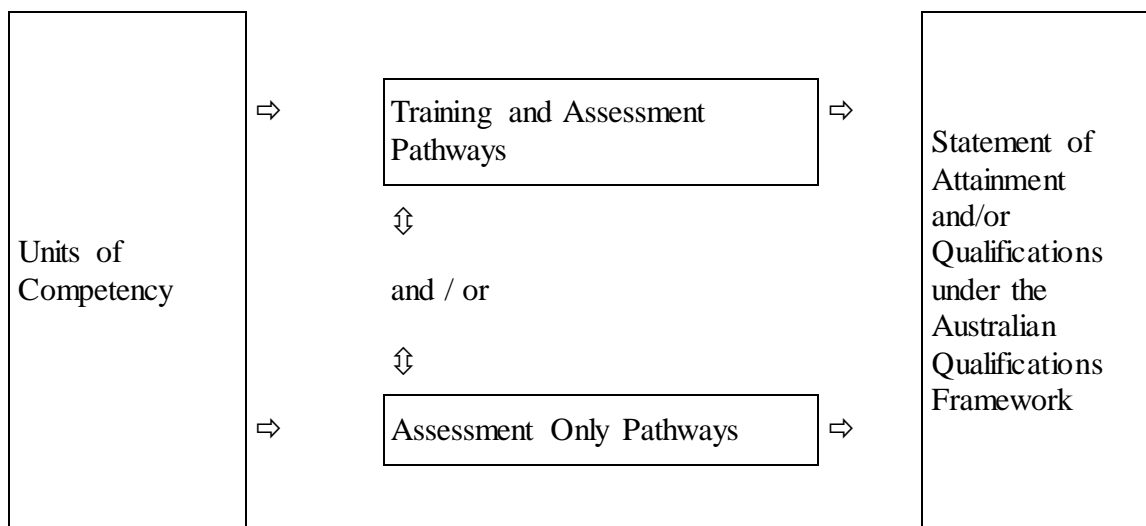
Such procedures need to be flexible to meet the assessment requirements of a given workplace at the same time as assuring the quality of the assessment process.

### **Licensing/Registration Requirements**

Individuals conducting assessments of units that cover statutory licensing and industry registration arrangements must comply with training, experience and registration requirements additional to the minimum requirements identified in this Training Package. For information on licensing arrangements in the Sugar Milling industry, refer to the Sugar Milling Industry section.

## Assessment Pathways

This Training Package incorporates a number of assessment pathways that lead to the recognition of competencies and the issuing of a Qualification or Statement of Attainment. These pathways are illustrated in the following diagram.



As indicated above, assessment under this Training Package leading to an AQF qualification or Statement of Attainment may follow a training and assessment pathway, an assessment only pathway, or a combination of the two. All assessments, by any pathway, *must* comply with the AQTF assessment requirements for RTOs (see above). Each of these assessment pathways leads to full recognition under the AQF – the critical concern is that the candidate is competent, not how the competency was acquired. Each of the above pathways is detailed below.

### Training and Assessment pathways

For most candidates assessment and training are integrated, with assessment evidence being collected progressively and feedback being provided to the candidate. The candidate may undertake a structured program of training and assessment while on the job, while off the job, or in a combination of on-the-job and off-the-job environments.

This pathway is particularly suited to New Apprenticeships, as trainees can be provided with a mix of formal training, structured workplace experience, and formative assessment activities. Through this combination of training and assessment the candidate can acquire and demonstrate the practical skills and knowledge identified in the relevant Competency Standards.

### Assessment Only Pathway

In some circumstances an assessment only (skills recognition) pathway will be warranted. The candidate provides current, quality evidence against the relevant Units of Competency, and the outcomes of the assessment process indicate that the candidate is competent and that structured training is not required.



This pathway can operate in both on-the-job and off-the-job environments. It is likely to be most appropriate for existing workers, for individuals with overseas qualifications, for recent migrants with established work histories, for people returning to the workplace, and for people with disabilities or injuries requiring a change in career.

Candidates wishing to take this pathway present evidence that they possess the skills and knowledge identified in the relevant Competency Standards, and then an assessor judges whether the candidate is competent. In reaching this judgment the assessor must make sure that all aspects of the unit/s of competence have been met and the context in which evidence was gathered is consistent with the assessment context described in the unit. Summative approaches to assessment may be directed by the candidate (such as in the compilation of portfolios), or by the assessor (such as observation of workplace performance, requiring demonstrations of skills, and carrying out oral and written testing).

### **Combination of ‘Training and Assessment’ and ‘Assessment Only’ Pathways**

Where candidates have gained competencies through work and life experience and gaps in their competency are identified, or where they require training in new areas, a combination of approaches may be appropriate.

In such situations, the candidate may undertake an initial assessment to determine their current competence using an ‘assessment only pathway’. Once current competence is identified, a structured training and assessment program may be established to ensure that the candidate acquires the required additional competencies. These would be achieved through a ‘training and assessment pathway’.

It is important to note that each of these assessment pathways leads to full recognition under the Australian Qualifications Framework. An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment beyond the requirements specified in this Training Package.

### **Recognition of Prior Learning and Current Competency**

The competencies in this Training Package may be attained in a number of ways:

- formal or informal training and education;
- work experience;
- general life experience, and/or;
- any combination of the above.

All assessment pathways must provide for the recognition of competencies previously attained. Competencies achieved and currently held by individuals can be formally assessed against the Units of Competency and qualifications in this Training Package, and should be recognised regardless of how, when or where they were achieved.

In assessing the competency of individual candidates, assessors must ensure that assessment processes take into account the skills and knowledge that candidates already possess. This can be done by conducting a pre-assessment where the candidate provides evidence of prior learning. In order for prior learning to be recognised, the assessor must be confident that the evidence indicates that the candidate is currently competent against the endorsed industry or enterprise competency standards. This evidence may take a variety of forms and might include certification, references from past employers, testimonials from clients, and work samples.

The onus is on candidates to provide sufficient evidence to satisfy assessors that they currently hold the relevant competencies. In determining whether a candidate has presented sufficient evidence, the assessor must ensure that the evidence of prior learning is:

- authentic (the candidate's own work);
- valid (directly related to the current version of the relevant endorsed Competency Standards);
- reliable (shows that the candidate consistently meets the Competency Standards);
- current (reflects the candidate's current capacity to perform the aspect of the work covered by the standards)
- sufficient (covers the full range of elements in the relevant Unit of Competency and addresses the four dimensions of competency, namely task skills, task management skills, contingency management skills, and job/role environment skills).

### **Review and Maintenance of the Assessment System**

The proponent of this Training Package is responsible for the ongoing monitoring and review of these Assessment Guidelines. This process will be incorporated in the general review and maintenance of this Training Package. Any review will ensure that these Assessment Guidelines:

- continue to meet the requirements of the industry;
- are consistent with the *Australian Quality Training Framework Standards for Registered Training Organisations*;
- promote confidence in the system and the assessment outcomes on the part of industry, employers, enterprises, unions, employees, trainees, assessors and trainers;
- ensure assessment processes and outcomes are valid, reliable, fair and flexible;
- support RTOs in effectively carrying out their responsibilities.

### **Assessor Requirements**

The guidelines identify the mandatory minimum qualifications for those conducting assessments. They also clarify how more than one person may contribute to the assessment process where all the required competencies are not held by one person.

#### **Assessor Qualifications**

There are *mandatory* requirements that must be met by individual assessors or collectively by the members of an assessment team or panel conducting assessments against this Training Package. Collectively the assessment team *must* have the following assessment Units of Competency from the Training Package for Assessment and Workplace Training, or must have demonstrated equivalent competencies:

- BSZ401A Plan Assessment;
- BSZ402A Conduct Assessment;
- BSZ403A Review Assessment;
- The competencies being assessed, at least to the level being assessed.

In addition to the above, assessors in the Sugar Milling Industry are required to have comprehensive current knowledge of the industry and the job or role against which performance is being assessed. They must also have appropriate interpersonal and communication skills and knowledge of language, literacy and numeracy issues in the context of assessment.

These skills, knowledge and attributes may be developed and demonstrated through:

- participation in professional development;
- relevant work experience;
- participation in professional/industry networks;
- recent planning and review of assessment activities;
- participation in assessment validation processes;
- recent assessment and/or workplace training activities.

All assessors who are engaged in assessing against this Training Package must be:

- employed by an RTO, or

acting under the registration of an RTO (for example, an assessor working in an enterprise that has a partnership arrangement with the RTO).

This Training Package provides a range of options for meeting these assessor requirements. Assessments can be undertaken in a variety of workplace and institutional contexts by individual assessors, partnerships involving assessors and technical experts, and teams of assessors.

The options listed below show how the requirement to use qualified assessors can be met.

<b>OPTIONS</b>	<b>ASSESSORS, TECHNICAL EXPERTS AND WORKPLACE SUPERVISORS</b> (Includes mandated requirements and recommended attributes)
<p><b>Single assessor</b></p> <p>An individual assessor conducts the assessment</p>	<p>An assessor is required to:</p> <p>hold formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training;</p> <p>be deemed competent and, where possible, hold formal recognition of competence in the specific Units of Competency in this Training Package, at least to the level being assessed.</p> <p>demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed;</p> <p>demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts,;</p> <p>demonstrate the necessary interpersonal and communication skills required in the assessment process.</p>
<p><b>Partnership arrangement</b></p> <ul style="list-style-type: none"> <li>• An assessor works with a technical expert to conduct the assessment</li> </ul>	<p><b>Assessor is required to:</b></p> <p>hold formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training.</p> <p>demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts;</p> <p>demonstrate the interpersonal and communication skills required in the assessment process.</p>

<ul style="list-style-type: none"> <li>An <b>assessor</b> works with <b>workplace supervisor</b> in collecting evidence for valid assessment</li> </ul>	<p><b>A technical expert</b> is required to:</p> <ul style="list-style-type: none"> <li>be deemed competent and, where possible, hold formal recognition of competence in the specific Units of Competency from this Training Package, at least to the level being assessed</li> <li>demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed;</li> <li>communicate and liaise with the assessor throughout the assessment process.</li> </ul> <p>An <b>assessor</b> is required to:</p> <ul style="list-style-type: none"> <li>hold formal recognition of competence in the relevant units in the Assessment and Workplace Training, Training Package;</li> <li>make the assessment decision.</li> </ul> <p>In addition, it is <i>recommended</i> that the assessor is able to:</p> <ul style="list-style-type: none"> <li>demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts;</li> <li>demonstrate the interpersonal and communication skills required in the assessment process;</li> <li>communicate and liaise, where appropriate, with the workplace supervisor throughout the assessment process.</li> </ul> <p>A <b>workplace supervisor</b> is required to be deemed competent and, where possible, is to hold formal recognition of competence in the specific Units of Competency from this Training Package, at least to the level being assessed.</p> <p>In addition, it is <i>recommended</i> that the Workplace supervisor is able to:</p> <ul style="list-style-type: none"> <li>demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed;</li> <li>communicate and liaise, where appropriate, with the assessor throughout the assessment process;</li> <li>use agreed practices to gather and record evidence for the assessor to use in making a valid judgement on competency.</li> </ul>
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<p><b>Assessment team/panel</b></p> <p>A team working together to conduct the assessment</p>	<p>Members of an <b>assessment team or panel</b> that comprises assessment and industry experience and expertise works together in the collection of evidence and in making judgements about competency. The members of the team <i>must</i> include at least one person who:</p> <ul style="list-style-type: none"> <li>holds formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training;</li> <li>is deemed competent and, where possible, holds formal recognition of</li> </ul>
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	<p>competence in the specific Units of Competency from this Training Package, at least to the level being assessed.</p> <p>In addition, it is <i>recommended</i> that members of the team/panel involved in the assessment are able to:</p> <p>demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed;</p> <p>demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts;</p> <p>demonstrate the interpersonal and communication skills required in the assessment process and liaise with other team/panel members throughout the assessment process.</p>
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## Designing Assessment Resources

Assessment resources provide a means of collecting the evidence that assessors use in making judgements about whether candidates have achieved competency. In some cases, assessors may use prepared assessment materials, such as those specifically developed to support this Training Package. Alternatively they may develop their own assessment materials to meet the needs of their clients.

If using prepared assessment materials, assessors should ensure that the materials are benchmarked, or mapped, against the current version of the relevant Unit of Competency. This can be done by checking that the materials are listed on the National Training Information Service (<http://www.ntis.gov.au>). Materials on the list have been noted by the National Training Quality Council as meeting their quality criteria for Training Package support materials. Alternatively the assessor can confirm the alignment by obtaining the current version of the competency standard/s and mapping against the assessment tool. Assessment tools are often developed as industry models. Where this is the case the tools may need to be customised to reflect application to a specific workplace environment. When developing their own assessment materials, assessors must ensure that:

- the materials are benchmarked against the selected Unit(s) of Competency in this Training Package;
- the materials are appropriate to the assessment needs of the client/s;
- the materials are validated to ensure that assessors can gather sufficient valid and reliable information to make assessment decisions against the Competency Standards;
- the materials and processes meet the AQTF Assessment Requirements for RTOs in Section 1 of this document.

Where assessors develop their own assessment tools, they need to decide whether to base tools around individual units of competency or the requirements of a job role or task as the focus. Where the job is used to structure assessment the assessment tool/s covers multiple units. The option of multiple unit assessments is relevant where the tools are being developed for a given workplace. In this case it is possible to identify how competencies are combined and applied to work activities. These arrangements are often unique to a given workplace.

Key references for assessors engaged in developing assessment materials are the *Training Package for Assessment and Workplace Training* [BSZ98] and *Develop Assessment Tools* [BSZ507A]. There is no set format or process for the design, production or development of assessment materials.

### The Role of the Workplace Assessor

Workplaces engage in assessment and training activities because they recognise that there is a relationship between the competencies of their workforce and the performance of the business. The role of the workplace assessor is to support workplaces to explore this relationship and design assessment processes that promote this objective. The workplace assessor assists workplaces to define how competencies are applied in the workplace to achieve a given work outcome and to identify opportunities to improve current practice. Unless these issues are considered at the point of identifying relevant competency standards and designing the assessment processes, it is unlikely that the outcome will meet client expectations.

### Conducting Assessments

The following chart describes the industry-preferred process for conducting assessments against the Competency Standards in this Training Package. This process applies to all assessments conducted for the purposes of national recognition in both institutional and workplace contexts. As outlined earlier, the role of the assessor may be shared by an assessment team.

<p><b>Step 1</b> <b>Establish the assessment context</b></p>	<p>The assessor:</p> <ul style="list-style-type: none"> <li>• establishes the context and purpose of the assessment;</li> <li>• identifies the relevant Competency Standards, assessment guidelines and qualification framework in this Training Package;</li> <li>• identifies any NTQC noted support materials that have been developed to facilitate the assessment process;</li> </ul>
	<ul style="list-style-type: none"> <li>• analyses the competency standards and identifies the evidence requirements;</li> <li>• identifies potential evidence collection methods.</li> </ul>
<p><b>Step 2</b> <b>Prepare the candidate</b></p>	<p>The assessor meets with the candidate to:</p> <ul style="list-style-type: none"> <li>• explain the context and purpose of the assessment and the assessment process;</li> <li>• explain the competency standards to be assessed and the evidence to be collected;</li> <li>• advise on self-assessment, including processes and criteria;</li> <li>• outline the assessment procedure, the preparation the candidate should undertake, and answer any questions;</li> <li>• assess the needs of the candidate and, where applicable, negotiate reasonable adjustment for assessing people with</li> </ul>

	<p>disabilities without compromising the integrity of the competencies;</p> <ul style="list-style-type: none"> <li>• seek feedback regarding the candidate's understanding of the Competency Standards, evidence requirements and assessment process;</li> <li>• determine if the candidate is ready for assessment and, in consultation with the candidate, decide on the time and place of the assessment;</li> <li>• develop an assessment plan.</li> </ul>
<p><b>Step 3</b> <b>Plan and prepare the evidence gathering process</b></p>	<p>The assessor must:</p> <ul style="list-style-type: none"> <li>• establish a plan for gathering sufficient quality evidence about the candidate's performance in order to make the assessment decision (and involve industry representatives in the development of plans for the validation of assessment);</li> <li>• source or develop assessment materials to assist in the evidence gathering process;</li> <li>• organise equipment or resources required to support the evidence gathering process;</li> <li>• coordinate and brief other personnel involved in the evidence gathering process.</li> </ul>

<p><b>Step 4</b> <b>Collect the evidence and make the assessment decision</b></p>	<p>The assessor must:</p> <ul style="list-style-type: none"> <li>• establish and oversee the evidence gathering process to ensure its validity, reliability, fairness and flexibility;</li> <li>• collect appropriate evidence and assess this against the elements, Performance Criteria, Range Statement and all items listed in the Evidence Guide in the relevant Units of Competency;</li> <li>• evaluate evidence in terms of the four dimensions of competency – task skills, task management skills, contingency management skills, and job/role environment skills</li> <li>• incorporate allowable adjustments to the assessment procedure without compromising the integrity of the competencies;</li> <li>• evaluate the evidence in terms of validity, consistency, currency, equity, authenticity and sufficiency;</li> <li>• consult and work with other staff, assessment panel members or technical experts involved in the assessment process;</li> <li>• record details of evidence collected;</li> <li>• make a judgement about the candidate's competency based on the evidence and the relevant Unit(s) of Competency.</li> </ul>
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<p><b>Step 5</b> <b>Provide feedback on the assessment</b></p>	<p>The assessor must provide advice to the candidate about the outcomes of the assessment process. This includes providing the candidate with:</p> <ul style="list-style-type: none"> <li>• clear and constructive feedback on the assessment decision;</li> <li>• information on ways of overcoming any identified gaps in competency revealed by the assessment;</li> <li>• the opportunity to discuss the assessment process and outcome;</li> <li>• information on reassessment and the appeals process.</li> </ul>
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<p><b>Step 6</b> <b>Record and report the result</b></p>	<p>The assessor must:</p> <ul style="list-style-type: none"> <li>• record the assessment outcome according to the policies and procedures of the RTO;</li> <li>• maintain records of the assessment procedure, evidence collected and the outcome according to the policies and procedures of the RTO;</li> <li>• maintain the confidentiality of the assessment outcome;</li> <li>• organise the issuing of qualifications and/or Statements of Attainment according to the policies and procedures of the RTO.</li> </ul>
<p><b>Step 7</b> <b>Review the assessment process</b></p>	<p>On completion of the assessment process, the assessor must:</p> <ul style="list-style-type: none"> <li>• review the assessment process;</li> <li>• report on the positive and negative features of the assessment to those responsible for the assessment procedures;</li> <li>• if necessary, suggest to appropriate personnel in the RTO ways of improving the assessment procedures.</li> <li>•</li> </ul>
<p><b>Step 8</b> <b>Participate in the reassessment and appeals process</b></p>	<p>The assessor must:</p> <ul style="list-style-type: none"> <li>• provide feedback and counsel the candidate, if required, regarding the assessment outcome or process, including guidance on further options;</li> <li>• provide the candidate with information on the reassessment and appeals process;</li> <li>• report any disputed assessment decision to the appropriate personnel in the RTO;</li> <li>• participate in the reassessment or appeal according to the policies and procedures of the RTO.</li> </ul>



## Further Information

The following list of resources and organisations is provided to assist assessors in planning, designing, conducting and reviewing of assessments against this Training Package.

### General Resources

The key resource Training Package for Assessment and Workplace Training *is available from:*

Business Services Training Australia  
Suite 11c – Level 3  
Como Centre  
299 Toorak Road  
SOUTH YARRA, VIC 3141

Telephone: (03) 9824 0866  
Fax: (03) 9824 0877

Website: <http://www.nawtb.com.au>  
E-mail: [assessors@nawtb.com.au](mailto:assessors@nawtb.com.au)

Australian Training products Ltd  
Level 25  
150 Lonsdale Street  
MELBOURNE, VIC 3000

PO Box 5347BB  
MEBOURNE VIC 3001

Telephone: (03) 9655 0600  
Fax: (03) 9639 4684

Website: <http://www.atpl.net.au>  
E mail: [sales@atpl.net.au](mailto:sales@atpl.net.au)

### Specific Assessment Resources

#### Assessment instrument design

Hagar, p., Athanasou, J. and Gonczi, A., 1994, *Assessment Technical Manual*, Australian Government publishing Service, Canberra.

VETASSESS and Western Australian Department of Training and Employment, 2000, *Designing Tests – Guidelines for designing knowledge based tests for Training Packages*.

Vocational Education and Assessment Centre, 1997, *Designing Workplace Assessment Tools, A self-directed learning program*, NSW TAFE.

Manufacturing Learning Australia, 2000, *Assessment solutions*, Australian Training products, Melbourne.

#### Assessor training

Green, M., Moritz, R., Moyle, K. and Vale, K., 1997, *Key competencies professional development Package*, Department for Education and Children's Services, South Australia.

Australian Committee on Training Curriculum (ACTRAC), 1994, *Assessor training program – learning materials*, Australian Training products, Melbourne.

Australian Training Products Ltd, *Assessment and Workplace Training, Training Package – Toolbox*.

Victorian TAFE Association, 2000, *The professional development CD: A learning tool*, VTA, Melbourne.

Australian National Training Authority, *A Guide for Professional Development*.

Australian National Training Authority, *Facilitator Packs for Certificate IV in Assessment and Workplace Training*.

Australian National Training Authority, *Facilitator's Pack for Train Small Groups and Assessment*.

Australian National Training Authority, *Facilitator's Pack for Certificate IV (BSZ405A – BSZ408A)*.

Australian National Training Authority, *Learners Packs for Certificate IV in Assessment and Workplace Training*.

Australian National Training Authority, *Learner's Pack for Assessment (BSZ401A – BSZ403A)*.

Australian National Training Authority, *Learner's Pack for Certificate IV (BSZ401A – BSZ408A)*.

Australian National Training Authority, *Learner's Pack for Assessment with Assessment Competency Standards*.

Australian National Training Authority, *Learner's Pack for Certificate IV with Certificate IV Competency Standards*.

Australian National Training Authority and also the National Assessors and Workplace Trainers Body.

#### Conducting assessments

Bloch, B. and Thomson, P., 1994, *Working towards best practice in assessment: A case study approach to some issues concerning competency-based assessment in the vocational education and training sector*, NCVET, Adelaide.

Docking, R., 1991, *An A–Z of assessment myths and assessment in the workplace*, Competence assessment briefing series, No. 4, Employment Department, Perth, Western Australia.

Hawke, Geof, 1996, *Integrating assessment of learning outcomes*, Assessment Centre for Vocational Education, Sydney.

Hawke, Geof, 1995, *Work-based learning: advice from literature*, Assessment Centre for Vocational Education, Sydney.

National Assessors and Workplace Trainers Body, *Putting it into practice [Training Package implementation Guide]*.

Parsloe, E., 1992, *Coaching, mentoring and assessing: A practical guide to developing competence*, Kogan Page, London.

Rumsey, David, 1993, "Practical issues in workplace assessment" in *National Assessment Research Forum: A forum for research into competency-based assessment*. [VEETAC Competency Based Training Working party Assessment Steering Group], NSW TAFE Commission, Sydney.

Rumsey, David, 1994, *Assessment practical guide*, Australian Government Publishing Service, Canberra.

#### Evidence gathering methods

Australian National Training Authority, 1998, *A new assessment tool*, ANTA, Melbourne.

Goncz, A. (ed.), 1992, *Developing a competent workforce: adult learning strategies for vocational education and training*, TAFE National Centre for Research and Development, Adelaide.

Kearney, Paul, 1992, *Collaborative assessment techniques*, Artemis, Tasmania.

National Assessors and Workplace Trainers Body, *The evidence resource kit – containing language, literacy and numeracy video and CD ROM –*

National Assessors and Workplace Trainers Body, *The evidence workbooks*

### Assessment system design

National Centre for Vocational Education and Research, 1996, *Integrating assessment: removing the on the job/off the job gap*, Conference papers from 4-6 June, Western Australian Department of Training.

OTFE, 1998, *Demonstrating best practice in VET project – assessment systems and processes*, Victoria.

Toop, L., Gibb, J and Worsnop, P., *Assessment system designs*, Australian Government Publishing Service, Canberra.

Wilson, P., 1993, *Integrating workplace and training system assessments*, Testing Times Conference, NCVET, Sydney.

### Managing assessment systems

Western Australia Department of Training and VETASSESS, 1998, *Kit for Skills Recognition Organisations*, WADTE, Perth.

Field, I., 1995, *Managing organisational learning*, Longman, Melbourne.

### Recognition of Current Competency/ Recognition of Prior Learning

Recognition and Assessment Centre, 1994, *New place: Same Skills. A guide for people from non-English speaking backgrounds*, Office of Multicultural Affairs, DEET.

Recognition and Assessment Centre, *A Flexible Approach to Recognition Practices: RPL as a Framework*, Melbourne.

Recognition and Assessment Centre, PO Box 299, Somerton, Vic 3062, Telephone (03) 9254 3000.

## Customisation/Contextualisation Guidelines

### Customisation/Contextualisation Guidelines

#### How can the Training Package be Customised/Contextualised?

Training Packages are intended to be customised to meet the requirements of the workplace while still retaining the intent of the original outcomes. For specific information on customising the Sugar Milling Industry Training Package, refer to the Sugar Milling section of this Training Package. The following describes the three levels at which Training Packages can be contextualised or customised.

#### Unit Contextualisation

Refers to the extent to which individual Units of Competency can be changed or contextualised to meet the needs of an enterprise, industry or sector while still retaining the intent of the original outcomes. Addition of extra Elements or changes to Performance Criteria is not recommended. This would generally change the unit outcome, and would effectively constitute a new unit.

#### Qualification Customisation within the Training Package

There is potential to incorporate units from other industry Training Packages as additional or substituted units. Advice to this effect is provided in the section on Sugar Milling industry qualifications.

## Competency Standards

### Competency Standards

#### What are competency standards?

The broad concept of competency is related to realistic work practices expressed as an outcome that can be understood by all people in the workplace as well as by trainers and assessors. It is important that the meaning of competency is interpreted and understood in the same way by different users, and in different situations.

Competency comprises specified knowledge and skills relevant to an industry, and the application of that knowledge and skills to the standard of performance required in the workplace.

ANTA's definition of competency encompasses several features: *"The concept of competency focuses on what is expected of an employee in the workplace rather than the learning process, and embodies the ability to transfer and apply skills and knowledge to new situations and environments"*.

Each Unit of Competency has a Title, Unit Descriptor, Elements, Performance Criteria, Range Statement and Evidence Guide.

#### Unit Title

The Unit Title is a succinct statement of the broad area of competency covered by the unit and is expressed in terms of the outcome.

#### Unit Descriptor

The Unit Descriptor expands, as necessary, on the title of the unit to accurately and clearly reflect the complete purpose and intent of the unit.

#### Elements of Competency

Elements of Competency are the basic building blocks of the unit. They describe, in terms of outcome, the significant functions and tasks that a person in a particular area of work is able to perform.

#### Performance Criteria

The Performance Criteria specify all the relevant tasks, roles, skills, and applied knowledge and understanding that demonstrate competent performance. This is expressed in terms of observable outcomes.

#### Range Statement

The Range Statement links the required knowledge and organisational and technical requirements to a context. It describes any contextual variables that will be used or encountered when applying the competency in work situations.

## Evidence Guide

The Evidence Guide specifies the evidence required to demonstrate competency. It addresses the specific skills and knowledge required to achieve the performance standard identified by the elements and performance criteria. The actual assessment should be conducted in the workplace and/or training environment that provides the resources required for assessment as stated in each unit of competence.

The Evidence Guide includes the following advice:

- A detailed description of the evidence that must be collected by the assessment process. To assist assessors evidence is divided into skills which can typically be observed, and knowledge which would typically involve asking questions to confirm understanding. All items in the evidence guide must be covered by the assessment process.
- Advice on the relationship with other competency standards. Units of Competency that must or should be jointly assessed are indicated. Units that are essential to underpin or support competence are listed as pre-requisite units. These must be assessed prior to or concurrent with the unit. Other related units typically depend on work and process organization. Where a number of units are required to be exercised collectively to achieve a work outcome it is recommended that these be jointly assessed.
- The Evidence Guide details the resources that must be available to demonstrate competence such as whether assessment must occur under particular workplace or simulated workplace conditions, equipment, material, infrastructure and other conditions required. This information is found under the sub-heading 'Resources required for assessment'.

## Key Competencies

Key Competencies must be identified in the Competency Standard within each Unit of Competency, or at the qualification level. The Mayer Committee has defined seven Key Competencies underpinning successful activity in life and work. These are:

- collecting, analysing and organising information;
- communicating ideas and information;
- planning and organising activities;
- working with others in teams;
- solving problems;
- using mathematical ideas and techniques;
- using technology.

They have three levels of performance that should be specified when identifying where they apply in industry competencies.

## Integration of the Key Competencies within Training Packages

The Key Competencies are general capabilities prepared by the Mayer Committee in *Putting Education to Work: The Key Competencies report* (Mayer 1992). They were described in the Mayer report as being fundamental to the transfer and application of learning and were defined as a set of capabilities that enable people to transfer to the workplace knowledge and skills developed in classrooms and other learning situations.

ANTA has recognised the critical role of the Key Competencies in ensuring that the Australian work force is equipped with the skills necessary to effectively participate in current and emerging forms of work organisation. ANTA specifies that all Training Packages "require the effective integration of key competencies".

The seven Key Competencies identified in the Mayer (1992) report are described below.

**1. Collecting, analysing and organising information**

The capacity to locate, sift and sort information in order to select what is required and to present it in a useful way, and evaluate both the information itself and the sources and methods used to collect it.

**2. Communicating ideas and information**

The capacity to communicate effectively with others using the range of spoken, written, graphic and other non-verbal means of expression.

**3. Planning and organising activities**

The capacity to plan and organise one's own work activities, including making good use of time and resources, sorting out priorities and monitoring one's performance.

**4. Working with others and in teams**

The capacity to interact effectively with other people both on a one-to-one basis and in groups, including understanding and responding to the needs of a client and working effectively as a member of a team to achieve a shared goal.

**5. Solving problems**

The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the solution are clearly evident and in situations requiring creative thinking and a creative approach to achieve a desired outcome.

**6. Using mathematical ideas and techniques**

The capacity to use mathematical ideas, such as number and space, and techniques such as estimation and approximation, for practical purposes.

**7. Using technology**

The capacity to apply technology, combining the physical and sensory skills needed to operate equipment with the understanding of scientific and technological principles needed to explore and adapt systems.

Key Competencies are essential for effective participation in the emerging patterns of work and work organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations. Key Competencies are generic, in that they apply to work generally rather than to work in particular occupations or industries<sup>1</sup>

<sup>1</sup> Mayer 1992, p. 5

## The Sugar Milling Industry Training Package

### The Sugar Milling Industry Training Package

#### The Industry

The Sugar Milling industry takes sugar cane and processes it to produce raw sugar. This is the feedstock for the refining process. There are two main by-products of milling – molasses and fibre. Molasses is used in cattle feed and fermentation processes. Fibre is used for power generation. This includes meeting site energy requirements through the use of bagasse to fire boilers. While its primary output is raw sugar, the industry's future could be increasingly shaped by its potential as a renewable energy resource supplier through its production of molasses that could be distilled into fuels and fibre that is primarily used to generate electricity.

Activities in the Sugar Milling industry can be categorised into three broad activity streams.

- Processing: covers milling operations from the extraction station or milling train through all processing stages to produce the milled product. This grouping includes boiler, turbines and powerhouse operation and laboratory sampling and testing.
- Transport: includes all forms of transport – most commonly rail and road. It also includes traffic control, operation of weighbridge stations, yard control and cane receipt activities.
- Services: relates primarily to rail construction and maintenance. It includes rigging, dogging, scaffolding, crane operation, warehousing and horticulture activities.

The industry is highly seasonal in nature. The milling season typically occupies up to half the year. For the remainder of the year, work is undertaken to prepare, plan, construct and maintain rail, plant and equipment. This work pattern creates a unique requirement for a hybrid qualification capable of reflecting the flexible combinations of competencies needed.

#### The Training Package

The Certificates in Sugar Milling in this Training Package are available at AQF levels 1, 2 and 3. The qualification structure provides the flexibility required to address seasonal variation in job content. This Training Package covers but is not limited to employees who work in an individual or any combination of process, services, maintenance and or transport roles.

#### Development Process

This Training Package has been developed under the auspice of the National Food Industry Training Council. The NFITC has managed a multi-level consultation process to engage industry in the development and validation of the Package.

- An industry steering committee was convened, with members representing a range of sugar mills, the Australian Sugar Milling Council, industry unions and the Queensland State Training Authority. A TAFE representative was nominated by industry to participate in the process.
- Expert panels were convened in Bundaberg, Mackay and Townsville. This was followed up with more intensive work groups formed to address specific competency areas.
- An industry-wide, national validation process was conducted involving the Australian Workers Union (Qld, NSW and National offices), Australian Sugar Milling Council, Sugar Mills in Queensland, New South Wales and Western Australia, and relevant Registered Training Organisations and State Training Authorities.

## Sugar Milling Industry Qualifications

### Sugar Milling Industry Qualifications

The qualifications developed for the Sugar Milling industry are for AQF levels 1, 2 and 3. Table 1 below lists the qualifications that apply in the Sugar Milling Industry and are covered by this Training Package.

**Table 1: Sugar Milling Industry Qualifications**

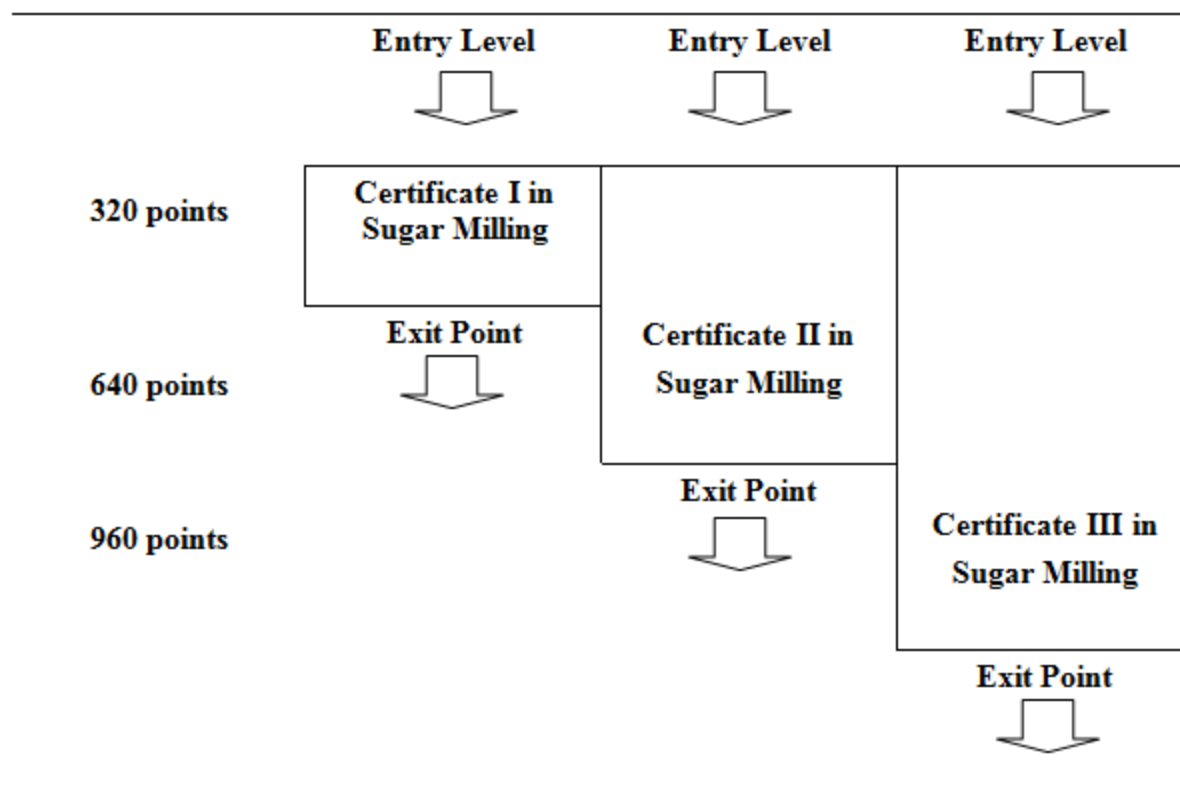
<b>AQF Level</b>	<b>Certificate</b>	<b>Code</b>
3	Certificate III in Sugar Milling	SUG302SUG30102
2	Certificate II in Sugar Milling	SUG202SUG20102
1	Certificate I in Sugar Milling	SUG102SUG10102

The structure of these qualifications is outlined below.

### Pathways

An employee/person may enter directly into a Certificate I, II or III in Sugar Milling. Credit for units completed in a lower level qualification can be counted towards a higher level qualification within the Packaging Rules.





## Structure of the Sugar Milling Industry Qualifications

Different types of units make up these qualifications. They are coreCore, specialist Specialist and Elective units.

### Core units

Core units describe skills that are an integral part of all Sugar Milling qualifications. Different Core units may apply depending on the work activities performed. Employees must have attained competence in the relevant Core units before, or concurrent with, achieving competence in any specialist or elective unit/s. . Core units are a compulsory component of each Sugar Milling qualification.

### Specialist units

These are units of competency that are directly associated with the main activities undertaken in the Sugar Milling industry: to assist in organizing and locating relevant units, the standards are presented under three broad stream headings.

- Processing
- Transport
- Services

Specialist units include those developed for the Sugar Milling industry and those **imported** from external Training Packages covering civil and general construction, transport and distribution, laboratory and horticulture. Imported units retain their own codes such as **BCC, BCG, MEM, RUH, TDT or PML** and are listed in Table 5.

### **Elective units**

These are units that may be used as appropriate to meet work requirements. They are broadly grouped under the headings of:

- General including Trainer and Assessor Units; and
- Maintenance

### **Additional Units**

The units listed in this Training Package are designed to meet typical Sugar Milling industry requirements. If these units cannot meet any specific enterprise requirements, then units from any other registered Training Package may be imported. These additional imported units will need to be referred to the Sugar Industry Steering Committee (auspiced by the National Food Industry Training Council) for point allocation, Band alignment and consideration of duplication/overlap issues.

### **Point Value of Units**

The units in this Training Package have been allocated a point value to establish relativity between units of competency. Achievement of a Certificate in Sugar Milling requires competence in the appropriate number and type of units to make up the required point value. In assigning points to each unit of competence, account was taken of:

- The amount of training needed to gain the skill required.
- The complexity of the skill and knowledge level required.
- The context in which skills and knowledge is applied in the Sugar Milling industry.
- Values previously allocated by the industry.
- Points/nominal hours allocated to units sourced from other registered Training Packages and their application to a Sugar Milling context.

In addition to the Band from which a unit is selected, the allocation of a point value to each unit guides the selection of units to form a qualification.

An individual unit of competency in isolation is not designed nor intended to be used to determine job or occupational classifications. The aggregate point value of units can only be used to determine job or classification outcomes where there is an industrial instrument in place to do so.

The allocation of points to individual units has been used in an attempt to obtain parity across units of competency for the purpose of qualification outcomes and may need to be refined over time. Any such changes will need to be agreed to by the Sugar Industry Steering Committee.

### **Banding of Units**

Alignment of units to bands A, B and C reflect differences in the nature and complexity of skills and knowledge used within this industry. Band C units in general require a greater depth of knowledge and skill than Band B. However Elective units can be aligned to more than one band. This includes maintenance units which can apply equally to Bands A, B or C and general Elective units which can apply to Bands B and C. This is in keeping with the Metals and Engineering Industry principle that states that individual competency units should not be attached exclusively to a particular occupation or classification level. The maintenance units selected for use within the Sugar Milling Certificates, are limited to NMETB Band A units.

Whilst individual units are allocated to a Band this does not mean that an individual unit is aligned to a particular AQF level, rather it is the package of units within a qualification that determines the AQF level outcome.

## Packaging Rules for Certificate I, II and III in Sugar Milling

Tables 5 – 7 outline the type of units and points required to achieve a qualification at AQF levels 1-3.

Table 8 shows how units have been aligned to Bands and lists the point values applied to each unit.

- Core units are compulsory for all qualifications.
- Points have been allocated to each unit. Each qualification requires the completion of a fixed number of points. (ie Certificate I – 320 points, Certificate II – 640 points, and Certificate III – 960 points).
- Credit from a completed Certificate automatically contributes to the higher Certificate.
- All qualifications must contain a minimum number of points derived from Specialist units.
- Qualifications may or may not contain units from the Elective area. Where Elective units are selected, a maximum point value has been applied for each qualification.
- There is no prescribed order of unit completion except to ensure pre-requisite requirements are met.
- Pre-requisites are an integral component of each Sugar Milling qualification.
- The outcomes of some units may overlap. Table 10 identifies how points have been allocated in the case of overlapping units.
- Additional units imported from external Training Packages must be referred to the Sugar Milling Steering Committee for point allocation and Band alignment.
- Specialist units are aligned within Bands A, B or C. To provide additional flexibility within each qualification, units may be selected from a higher or lower Band according to the limits indicated for each qualification in the Tables 5 – 7.

Specialist units have been drawn from external Training Packages covering civil and general construction, transport and distribution, laboratory, and horticulture and from the National Occupational Health and Safety Commission (guideline units). No more than 70 percent of the total point value of a qualification can be drawn from any one of these external Training Packages. This ratio also applies to any additional imported Specialist units. This does not apply to Elective units, which are covered by Rule 12 below or to TDT units that are covered by Rule 11 below.

- No more than 5 TDT units from within a Band can be counted towards a qualification. For example within a Certificate II qualification no more than 5 TDT units can be selected from within Band A and no more than 5 TDT units can be selected from Band B.
- Elective units fall into two categories - General and Maintenance.

**Elective Maintenance** units are not aligned to Bands and may be counted towards any qualification.

**Elective General** units are aligned to Bands B and/or C.

No more than 49 percent of the total point value of a qualification can be drawn from any one Elective category. This ratio also applies to any additional imported Elective units.

**Table 2: Certificate I in Sugar Milling**

Sugar Industry Units		Elective units	Total Points required for Certificate I in Sugar Milling
Core units*	Specialist units		
90 points (if operating in only one specialist area/stream)  Or: 100 points** (if operating in more than one specialist area/stream)	<b>A maximum of 40 points may be taken from Band B aligned units</b>		
	Minimum of 40 points from Band A Specialist units.	Maximum of 150 points from any one category of Elective units	<b>320 points</b>

\*Core units are not aligned to a Band

\*\*If work functions span Transport and Services streams, the same Core units apply and the total value of Core units is 90 points. If moving between processing and Transport or Services streams, completion of an additional core unit is required. Where this is the case, the total value of Core units is 100 points.

**Table 3: Certificate II in Sugar Milling**

Sugar Industry Units		Elective units	Total Points required for Certificate II in Sugar Milling
Core units	Specialist units		
90 points (if operating in only one specialist area/stream)  Or: 100 points (if operating in more than one specialist area/stream)	Minimum of 90 points from Band B Specialist units.	Maximum of 310 points from any one category of Elective units	<b>640 points</b>
	Minimum of 40 points and a maximum of 230 points from Band A Specialist units.		

**Table 4: Certificate III in Sugar Milling**

Sugar Industry Units		Total Points

Core units	Specialist units	Elective units	required for Certificate III in Sugar Milling
90 points (if operating in only one specialist area/stream)	Minimum of 60 points and a maximum of 320 points from Band C Specialist units.	Maximum of 470 points from any one category of Elective units	<b>960 points</b>
<b>Or:</b> 100 points (if operating in more than one specialist area/stream)	Minimum of 90 points from Band B Specialist units.		
	Minimum of 40 points and a maximum of 230 points from Band A Specialist units.		

Table 5 provides a list of the units grouped by stream / activity area and point value.

## SUG02 Units

**Table 5: Sugar Milling Qualification Units Listed by Band and Point Value**

### Core units

BAND	PROCESSING	TRANSPORT	SERVICES
Non-Aligned	<b>Core – Process/Boiler/Turbine Operation</b> *SUGCCPA1A Collect, present and apply workplace information * SUGCOHS1A Follow safe work procedures *SUGCLIP1A Locate industry and company processes (Sugar) *SUGCMCH1A Manually clean and maintain housekeeping standards  <b>Core – Laboratory</b>	<b>Core –General</b> *SUGCCPA1A Collect, present and apply workplace information * SUGCOHS1A Follow safe work procedures *SUGCLCT1A Locate cane transport system and functions  <b>Core – Road Transport</b> *SUGCCPA1A	<b>Core</b> *SUGCCPA1A Collect, present and apply workplace information * SUGCOHS1A Follow safe work procedures *SUGCLCT101A Locate cane transport system and functions

	<p>*SUGCCPA1A Collect, present and apply workplace information</p> <p>*SUGCLIP1A Locate industry and company processes (Sugar)</p> <p>*SUGCMC1A Manually clean and maintain housekeeping standards</p> <p>*PMLOHS300A Work safely in accordance with defined policies &amp; procedures</p>	40	<p>Collect, present and apply workplace information</p> <p>* SUGCOHS1A Follow safe work procedures</p> <p>*SUGCLCT1A Locate cane transport system and functions</p>		
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### Specialist units

BAND	PROCESSING		TRANSPORT		SERVICES	
A	<p><b>Laboratory</b></p> <p>SUGPCPS1A Collect and prepare samples</p>	30	<p>TDTC197B Drive vehicles</p> <p>SUGTAEM1A Assess extraneous matter in cane</p> <p>SUGTCYM1A Control yard movements</p> <p>SUGTPST1A Prepare for shunting operations</p>	<p>30</p> <p>20</p> <p>30</p> <p>20</p>	<p><b>Construction</b></p> <p>SUGSPPB1A Prepare pre-ballast</p> <p>BCG1010A Carry out concreting to simple forms</p> <p>BCC2000A Read and interpret plans</p> <p>BCC1012A Spread and compact materials manually</p> <p>*BCC1005A Use hand and power tools</p> <p>BCG1008A Use simple levelling devices</p> <p>BCC1006A Use small plant and equipment</p> <p><b>Other</b></p> <p>RUHHRT113A Operate ride-on vehicles</p> <p>RUHCORE3A Use</p>	<p>10</p> <p>40</p> <p>20</p> <p>10</p> <p>40</p> <p>10</p> <p>15</p> <p>10</p> <p>10</p> <p>15</p> <p>15</p>

				hazardous substances safely	
				TDTD197B Shift materials safely using manual methods	
				TDTD297B Shift a load using manually-operated equipment	
<b>BAND</b>	<b>PROCESSING</b>		<b>TRANSPORT</b>	<b>SERVICES</b>	
<b>B</b>	<b>Processing</b>		<b>Rail</b>	<b>Construction</b>	
	SUGPCCE2A Chemically clean equipment	30	SUGTDCL2A Drive a cane locomotive	50 SUGSCT2A Construct turnouts	20
	SUGPCSP2A Operate a crystalliser station process	40	*MEM7.1A Operational maintenance of machines/equipment	20 *SUGSLRT2A Lay rails	20
	SUGPOEP2A Operate an evaporation process	60		40 *SUGSLST2A Lay skeleton tracks	20
	SUGPOES2A Operate an extraction station	40		30 *SUGSLSP2A Lay sleepers	10
	SUGPHGF2A Operate a high grade fugal station	40	<b>Cane Receival</b>	20 BCC2003A Assist with excavation and support installation	20
	SUGPJCP2A Operate a juice clarification process	30	SUGTCW2A Conduct cane weighbridge operations	40 BCC2001A Carry out basic site survey	40
	SUGPLGF2A Operate a low grade fugal station	80	SUGTOTE2A Operate tamping equipment	40 *BCG1004A Carry out measurements and calculations	40
	SUGPMFP2A Operate a mud filtration process	30	SUGTOTS2A Operate a tipping station	BCC3005A Conduct front end loader operations	40
	SUGPOPS2A Operate a pans station	60		40 BCC3008A Conduct skid steer loader operations	60
	SUGZPC2A Operate a process control interface	40	<b>Road</b>	BCC2004A Lay pipes	20
	<b>Laboratory</b>		TDTC297B Drive light rigid vehicles	RUHHRT207A Operate equipment and machinery	20
	SUGPPST2A Perform standard tests	60	TDTC397B Drive medium rigid vehicles		20
	PMLDATA501A Use laboratory application software	40			20
		60			20





					operations RUHHRT212A Apply chemicals and biological agents	
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BAND	PROCESSING		TRANSPORT		SERVICES	
C	<b>Processing</b> SUGPOSS3A Operate a system (sugar) 60  <b>Boiler/Powerhouse/Services</b> SUGPMPH3A Monitor a powerhouse 40 SUGPOSS3A Operate a system (sugar) 60 SUGPOBI3A Operate a boiler - intermediate 80 SUGPOBA3A Operate a boiler - advanced 100  <b>Laboratory</b> SUGPFCT3A Perform factory control tests 80		<b>Rail</b> SUGTDMS3A Drive a master-slave locomotive 20 TDTC2001A Operate on-track self-propelled equipment (tamper) 40  <b>Road</b> TDTC597C Drive heavy combination vehicles 60 TDTC497C Drive heavy rigid vehicles 80  <b>Traffic Control</b> SUGTASD3A Adjust schedule(s) to meet daily workplace requirements 80 SUGTCCT3A Control cane traffic movements		<b>Construction</b> BCC3050A Construct substructures – bridges and wharves 60 BCC3051A Install deck 40 BCC3052A Maintain structures – bridges and marine work 40  <b>Other</b> TDTA1897B Organise despatch operations 30 TDTA1997B Organise receipt operations TDTA1697B Use inventory systems to organise stock control	

BAND	ELECTIVE UNITS: GENERAL		BAND	ELECTIVE UNITS: MAINTENANCE	
B/C	SUGEIEP2A Implement environmental procedures	30	Non-Aligned	<b>Maintenance</b> *MEM2.5C11A Measure with	

<b>BAND</b>	<b>ELECTIVE UNITS: GENERAL</b>		<b>BAND</b>	<b>ELECTIVE UNITS: MAINTENANCE</b>	
	SUGEACW3A Analyse and convey workplace information	40		graduated devices	20
		40		MEM5.5AA Carry out mechanical cutting	20
	SUGEFTW3A Facilitate teams	40		MEM5.7AB Manual heating, thermal cutting and gouging	20
	SUGEEMP3A Monitor the implementation of the environmental management program	40		MEM5.8AB Advanced manual heating, thermal cutting, gouging and shaping	20
		15		MEM5.9AB Automated thermal cutting	40
	SUGEOHS3A Monitor the implementation of occupational health and safety	15		MEM5.12AB Perform routine manual arc welding	20
		5		MEM5.13AA Perform manual production welding	60
	BSZ401A Plan Assessment	30		MEM5.15AB Weld using manual metal arc welding process	60
	BSZ402A Conduct Assessment			MEM5.17AB Weld using gas metal arc welding process	20
	BSZ403A Review Assessment			*MEM7.1AA Operational maintenance of machines/equipment	40
	BSZ404A Train Small Groups			MEM9.1AA Draw and interpret sketch	20
				MEM9.2AA Interpret technical drawing	20
				*MEM18.1AB Use hand tools	40
				*MEM18.2 AA Use power tools/hand held operations	30
				MEM18.3AB Use tools for precision work	
				MEM18.55AA Dismantle, replace and assemble engineering components	

Note: \* Indicates units that overlap with other listed units. When selecting these units, refer to Table 7 for advice on point values.

Some core and general Elective units are either FDF (Food Processing Industry) units or are based on FDF units. This relationship is indicated in the Unit descriptor. The FDF Training Package is currently under review. Once finalized the Sugar Milling industry may replace these units with the revised FDF units.

### Pre-requisite units

Pre-requisite units are identified within the individual units of competency. Where pre-requisite unit/s are specified, attainment of competence must be assessed prior to, or concurrent with, attaining competence in the relevant specialist or elective unit. Pre-requisites are essential components of Sugar Milling qualifications. Table 6 provides advice on pre-requisite units.

**Table 6: Pre-requisite Units by Stream**

#### Process Stream

##### Band B

Unit	Pre-requisites
SUGZPC2A Operate a process control interface	Relevant equipment unit
SUGPOES2A Operate an extraction station	SUGPOTB2A Operate a turbine

##### Band C

SUGPOSS3A Operate a system (sugar)	Relevant equipment units that make up the system
SUGPFCT3A Perform factory control tests	SUGPPST2A Perform standard tests
SUGPMPH3A Monitor a powerhouse	SUGPOTB2A Operate a turbine

#### Transport Stream

##### Band B

Unit	Pre-requisites
TDTC297B Drive light rigid vehicles	TDTC197B Drive vehicles
TDTC397B Drive medium rigid vehicles	TDTC197B Drive vehicles

##### Band C

SUGTDMS3A Drive a master-slave locomotive	SUGTDCL2A Drive a cane locomotive
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TDTC497C Drive heavy rigid vehicles	TDTC197B Drive vehicles
TDTC597C Drive heavy combination vehicles	TDTC197B Drive vehicles

## Services Stream

### Band B

Unit	Pre-requisites
SUGSCT2A Construct turnouts	SUGSLRT2A Lay rails
SUGSFBS2A Undertake forming, bending and shaping	BCG1004A Carry out measurements and calculations BCC1005A Use hand and power tools
SUGSPGD2A Perform general drilling operations	BCG1004A Carry out measurements and calculations BCC1005A Use hand and power tools
SUGSPGL2A Perform general lathe operations	BCG1004A Carry out measurements and calculations BCC1005A Use hand and power tools
SUGSPGM2A Perform general milling operations	BCG1004A Carry out measurements and calculations BCC1005A Use hand and power tools
SUGSPPS2A Perform general planing and shaping operations	BCG1004A Carry out measurements and calculations BCC1005A Use hand and power tools
SUGSUSF2A Undertake simple fabrication	BCG1004A Carry out measurements and calculations BCC1005A Use hand and power tools
BCG3042A Undertake rigging	BCG3041A Undertake dogging

### Band C

BCC3052A Maintain structures – bridges and marine work	BCC3050A Construct substructures – bridges and wharves
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	BCC3051A Install deck
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### Elective units

SUGECW3A Analyse and convey workplace information	SUGCCPA1A Collect, present and apply workplace information
SUGEOHS3A Monitor the implementation of occupational health and safety	SUGCOHS1A Follow safe work procedures; or PMLOHS300A Work safely in accordance with defined policies & procedures

### Maintenance (MEM) Non-aligned

MEM5.5AA Carry out mechanical cutting	MEM18.1AB Use hand tools
MEM5.8AB Advanced manual heating, thermal cutting, gouging and shaping	MEM5.7AB Manual heating, thermal cutting and gouging
MEM7.1AA Operational maintenance of machines/equipment	MEM18.1AB Use hand tools
MEM18.3AB Use tools for precision work	MEM18.1AB Use hand tools
MEM18.55AA Dismantle, replace and assemble engineering components	MEM2.5C11A Measure with graduated devices MEM18.1AB Use hand tools MEM18.2AA Use power tools/ hand-held operations MEM9.1AA Draw and interpret sketch, or MEM9.2AA Interpret technical drawing

### Overlapping Units

A number of units duplicate some aspects of other units. Where only one unit is required the point allocation remains as given in the Table 5. Where more than one unit is required, advice on the combined value is provided in the Table 7.

### Table 7: Overlapping units

Overlapping Units				Combined Value
<b>Core – Process</b> SUGCLIP1A Locate industry and company processes (Sugar) SUGCCPA1A Collect, present and apply workplace information SUGCMCH1A Manually clean and maintain housekeeping standards SUGCOHS1A Follow safe work procedures	20 20 10 40	<b>Core – Transport/Services</b> SUGCLCT1A Locate cane transport system and functions SUGCCPA1A Collect, present and apply workplace information SUGCOHS1A Follow safe work procedures	30 20 40	If work functions span Transport and Services streams, the same Core units apply and the total value of Core units remains at 90 points. If moving between processing and Transport or Services streams, completion of an additional core unit is required. Where this is the case, the total value of Core units is 100 points.
SUGCOHS1A Follow safe work procedures	40	PMLOHS300A Work safely in accordance with defined policies & procedures	40	For the purposes of this Training Package these units are equivalent. A maximum of 40 points can be counted for achieving competence in either or both of these units.
SUGPFSB2A Operate a fuel supply system – bagasse	60	SUGPFSC2A Operate a fuel supply system – coal	60	If already competent in one unit, an additional 20 points can be allocated to attain competence in the second unit.
SUGSLRT2A Lay rails SUGSLSP2A Lay sleepers	20 20	SUGSLST2A Lay skeleton tracks	20	When all three units are required, the total value cannot exceed 40 points.
SUGPOB2A Operate a boiler	60	SUGPOBB2A Operate a boiler - basic	60	The relevant unit should be selected according to licensing requirements. Only one set of points can be counted for operating a basic boiler.
MEM18.1AB Use hand tools MEM18.2AA Use power tools/	20 20	BCC1005A Use hand and power tools	40	For the purposes of this Training Package these units are equivalent. A maximum of 40 points can be counted for achieving competence in these

hand-held operations				units.
MEM2.5C11A Measure with graduated devices	20	BCG1004A Carry out measurements and calculations	20	For the purposes of this Training Package these units are equivalent. A maximum of 20 points can be counted for achieving competence in either or both of these units.

## Coding of Competency Standards

Each Training Package is assigned a unique five character code. For the Sugar Milling Training Package it is SUG02. Each unit of competence is also assigned a code of up to 12 characters, consisting of capital letters and numbers.

The first three letters of the code are taken from the Training Package code SUG. The next letter indicates the unit type:

- C indicates that the unit is a core competency standard.
- P indicates that the unit typically applies to processing activities.
- T indicates that the unit typically applies to transport activities.
- S indicates that the unit typically applies to services activities.
- Z indicates that the unit applies to more than one activity stream.
- 

The following three letters represent the title of the unit. The first number indicates the AQF level where the unit typically aligns. The final letter indicates the unit version.

For example, a unit code SUGPMFP2A can be broken down as follows. The first three letters indicate that it is part of the Sugar Milling competency standards. The 'P' indicates that it is part of the process stream. MFP relates to the unit title. In this case the unit title is Operate a mud filtration process. This unit typically aligns to AQF 2. The letter A shows that this unit is the first version.

## Licensing Arrangements

Some of the activities covered by this Training Package are also covered by National Occupational Health and Safety Commission standards for operators of industrial equipment [NOHSC:1006 (2001)]. These include activities in:

- Rigging, dogging, scaffolding,
- Crane operation (still to be added)
- Turbine and boiler operation
- Forklift operation {NOHSC:7019 (1992)}

At this stage NOHSC Standards are not in a format suitable for inclusion into Training Packages. So in the interim, units have been imported from General Construction Training Package BCG98 to cover the areas of Rigging, Dogging and Scaffolding and are based on the relevant NOHSC standards. New SUG coded units have been created to cover boiler and turbine operation. Once again these have been based on the relevant NOHSC standards for basic, intermediate and advanced boiler operation. Some types of boilers are not automatically covered by the National Occupational Health and Safety Commission standards. For this reason a unit has been included to cover boiler operation where this activity is not a certificated occupation.

For further information on licensing requirements refer to the National Occupational Health and Safety Commission Standard: National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment [NOHSC:1006 (2001) and [NOHSC:7019 (1992)] and the National Occupational Health and Safety Commission website at [www.nohsc.gov.au](http://www.nohsc.gov.au).

When assessing an area covered by a license, the assessment must be conducted according to the requirements of the managing authority. In the case of certificated occupations managed by National Occupational Health and Safety Commission, assessment must be carried out by a certificated assessor in accordance with NOHSC guidelines. Interpretation and implementation of these guidelines is the responsibility of the relevant state or territory health and safety authority.

The other certificated activity undertaken in this industry is the application of pesticides. Units from the Horticulture Training Package have been included in this Training Package. At the time of development this Training Package was under review. RTOs incorporating these units into a qualification should check with the Rural Training Council of Australia for current advice on licensing arrangements relating to these standards.

## **Customising/contextualising the Sugar Milling Training Package**

Training Packages are intended to be customised to meet the requirements of the workplace while still retaining the intent of the original outcomes. This Training Package provides qualifications that allow for a combination of units from both within the Sugar Milling industry and across a range of external Training Packages. There are two options for customising units. Unit contextualisation refers to customising the content of units and qualification customisation refers to customising the choice of units available within a qualification.



## Unit Contextualisation

The purpose of unit contextualisation is to directly relate the unit content to the workplace context. The first part of a unit that may need to be contextualised is the range statement. The range statement explains the context in which the skills and knowledge in the unit are applied. The range statement identifies conditions that must be met and others that may apply. The use of the term ‘may include’ indicates the typical expectations or conditions that apply. These conditions may be contextualised to suit workplace requirements and conditions. For example the range statement often includes information about the types of processes and equipment that may be used. This can be altered to suit workplace requirements.

The elements, performance criteria and evidence guide outline the skills and knowledge that must be covered to achieve competence. This information is expressed at a level of detail appropriate across industry. When using standards in a workplace contextualisation involves describing how each item applies in the given context. For example, all operators are required to recognize and control OHS hazards in the workplace. Contextualisation would involve identifying the specific hazards and control methods used. This allows the workplace to directly link the outcomes to their requirements and express this in familiar language. The essential rule when contextualising a unit/s is to make sure that the whole evidence guide is covered and the intent of the unit is retained.

In addition to describing evidence to be collected by the assessment process, the evidence guide describes the context in which assessment must occur and any conditions that apply to assessment. This information can be contextualised for a workplace by determining how these conditions apply. For example, which operating procedures or other workplace information is relevant, which equipment must be used? Where a workplace has a number of versions of the same type of equipment, is demonstration of skills on one type sufficient or must skills be demonstrated using more than one?

## Qualification Customisation within the Training Package

No two Sugar Milling qualifications will be the same. Each qualification will be a unique combination of units selected to support the diverse skill needs of workers within the industry. In a sense every qualification completed presents a customised outcome.

Potential also exists for further customisation at the qualification level by the inclusion of units not specified within Table 5 – referred to as Additional Units, imported from other existing Training Packages.

## Mayer Key Competencies

The Mayer Key Competencies are embedded within each Unit of Competence. The level of performance for Key competencies is aligned to the whole AQF level rather than to each individual unit. Tables 8 – 10 show this alignment by Key Competency level.

**Table 8: Key competencies performance level at AQF level 1**

<b>Collect, analyse &amp; organise information</b>	<b>Communicate ideas &amp; information</b>	<b>Plan &amp; organise activities</b>	<b>Work with others &amp; in teams</b>	<b>Use mathematical ideas &amp; techniques</b>	<b>Solve problems</b>	<b>Use technology</b>

1	1	1	1	1	1	1
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**Table 9: Key competencies performance levels at AQF level 2**

Collect, analyse & organise information	Communicate ideas & information	Plan & organise activities	Work with others & in teams	Use mathematical ideas & techniques	Solve problems	Use technology
2	2	2	2	2	2	2

**Table 10: Key competencies performance levels at AQF level 3**

Collect, analyse & organise information	Communicate ideas & information	Plan & organise activities	Work with others & in teams	Use mathematical ideas & techniques	Solve problems	Use technology
3	3	2	3	2	3	3

## Sugar Industry Competency Standards

Table 5 outlines the range of Core, Specialist and Elective units that form the basis of the Sugar Milling qualifications. Some of these units have been developed specifically for the Sugar Industry and carry a SUG code. Others have been imported from existing Training Packages and carry differing codes such as BCC, BCG, MEM, TDT, RUH or PML.

The Imported Units listed in Table 5 have been replicated in this Training Package. Units are reviewed from time to time and new versions of imported units can be sourced from the National ITABs listed below:

Skill Area	National ITAB	Contact Details	
Civil and general construction	Construction Training Australia	Tel: 03 9654 1333 Fax: 03 9654 1933 ray@nbcitc.com.au	PO Box 576 CARLTON SOUTH VIC 3053

Transport & Warehousing	Transport & Distribution Training Australia	Tel: 03 9320 4242 0418 802 064 Fax: 03 9320 4243 gerard@tdtaustralia.com.au	Level 3, 33 Walsh Street WEST MELBOURNE VIC 3003
Laboratory	Manufacturing Learning Australia	Tel: 02 9264 9822 Fax: 02 9264 9938 mlaust@ozemail.com.au	Suite 304 370 Pitt Street SYDNEY NSW 2000
Trainer & assessor	Business Services Training Australia	Tel: 03 9645 7555 Fax: 03 9645 7556 admin@bsitab.org	Level 7, 163 Eastern Road, South Melbourne VIC 3205
Food units/general	National Food Industry Training Council	Tel: 07 3236 1919 Fax: 07 3236 1999 nfitc@nfitc.com.au	PO Box 13025 George Street, BRISBANE QLD 4003
National Occupational Health and Safety Commission		www.nohsc.gov.au.	

Or alternatively order from ATP: [www.atpl.net.au](http://www.atpl.net.au)

Or download from the NTIS web site – [www.ntis.gov.au](http://www.ntis.gov.au)

The content of units developed specifically for the Sugar Milling industry and carrying an SUG code is listed below. This is broken down into the sections listed below for ease of reference. Within each of these sections units are listed alphabetically by unit title.

- Core units
- Band A units
- Band B units
- Band C units
- Elective units
- Imported units
-