Qualification Title: New Zealand Certificate in Dairy Processing (Level 4) with strands in Cheese Making, Cream Products, Milk Powder, Milk Protein, Milk Treatment, and Milk Collection

Qualification number: 2563

Date of review: 11 September 2017

Final decision on consistency of the qualification: National Consistency is Confirmed

Threshold:
The threshold to determine sufficiency with the graduate profile was determined as evidence that under limited supervision the graduate will be able to:

- Carry out specific milk product process operations
- Monitor the implementation of health and safety quality food safety reports and environmental practices
- Plan and manage work priorities in a dairy processing operation
- Analyse and convey workplace information in a dairy processing operation

The optional strand in this qualification recognises the skills and knowledge required to be able to operate the automated clean in place system and heat treatment process in a dairy products processing plant.

For those taking the strand Milk Collection graduates will be able to complete all the above and:

- Collect and deliver milk, applying hygiene requirements

Tertiary Education Organisations with sufficient evidence

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<tr>
<th>Tertiary Education Organisation</th>
<th>Final rating</th>
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<td>Primary ITO</td>
<td>Sufficient</td>
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Introduction
The purpose of this qualification is to provide the dairy processing sector with competent employees who have the skills and knowledge to work as operators in a cheese making, cream products, milk powder, milk protein or milk treatment department, or as milk tanker operators.

Here there will be graduates of strands in Cheese making, Cream products, Milk Powder, Milk protein, they will be able to carry out processing operations of the types of function noted in the differing strands.

Graduates of the automated cleaning and heat treatment optional strand will also be able to carry out automated clean in place and heat treatment processing operations.
This qualification may build on New Zealand Certificate in Dairy Processing (Level 3) with an optional strand in Automated Cleaning and Heat Treatment [Ref: 2562] and on to the New Zealand Certificate in Dairy Processing.

Evidence
The TEO provided a range of evidence to demonstrate that their 32 level 4 graduates met the graduate profile outcomes.

The criteria used to judge the evaluation question were:

- The nature, quality and integrity of the evidence presented by the education organisation
- How well the organisation has analysed, interpreted and validated the evidence, and used the understanding gained to achieve actual or improved consistency
- The extent to which the education organisation can reasonably justify and validate claims and statements relating to the consistency of graduate outcomes, including in relation to other providers of programmes leading to the qualification

Evidence provided included:

Industry context:
The level 4 qualification Industry Training Programme and the context programmes leading to its award was developed by The Primary ITO together with the Dairy Processing Industry. Skills and knowledge are attained through the DAIRYCRAFT training initiative which is the Fonterra DAIRYCRAFT Training model where all 2016 graduates completed their training; the wider industry model that is yet to be tested by industry.

Programme mapping, related evidence and quality assurance:
The programme is delivered and assessed in one workplace (Fonterra). DAIRYCRAFT key learning outcomes have been mapped to unit standard outcomes which in turn reflect graduate outcomes. As a result of review the Industry Training Programme for the Level 4 qualification was changed in mid-2016. This change related to the Milk Powder strand, after feedback from Fonterra Darfield that this strand was largely unachievable in the previous format. This change enabled graduates to comply with industry practices and achieve the programme. Early graduates were part of the pilot Dairy Apprenticeship and Skills Recognition (DASR) programme. An end of pilot evaluation was conducted by Fonterra which provided the reviewer with evidence around graduate outcomes from the programme.

Internal and External Moderation:
Assessment against the qualification modules only occurs after full competency has been achieved. An ‘e’ learning platform is used for learning and assessment. The competencies align with company operating procedures or task instructions and assessment materials for the Level 4 qualification outcomes are pre-assessment moderated prior to use and met the required learning outcomes. Fonterra oversee the training and assessment process and internal moderation is planned and occurs regularly at the Fonterra plants. External moderation is undertaken by the ITO

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1 DAIRYCRAFT – A joint venture between the Primary ITO and Fonterra. An integrated approach whereby trainees are encouraged to develop core skills such as problem solving and critical thinking, and apply them to their roles. It was designed to ensure the company has workers with the necessary knowledge and skills in a highly regulated compliance driven industry.

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quality team in the form of a site visit and through an on-line portal. Improvement around a matrix allowing assessor and moderator to align was highlighted.

**Graduate destination related evidence:**
Fonterra are the only company with graduates. Responses to surveys show evidence that graduates of the level 4 programme are experienced operators and their skills meet the graduate profile outcomes. They are employed on a full time basis in the company in roles that are consistent with the graduate outcomes.

Following the successful conclusion of the Pilot Programme, the model has been rolled out to all Fonterra plants. Survey results from Coaches and Graduates, which have been mapped closely to both qualifications clearly show graduates are meeting qualification graduate outcomes.

**Stakeholder feedback and mapping:**
A matrix was developed by the Primary ITO to map workplace training and assessment evidence to unit standard outcomes that go to make up qualification requirements. DAIRCRAFT key learning outcomes were mapped to unit standard outcomes which in turn go towards the qualification. Evidence was provided of the mapping of the graduate feedback to the graduate outcomes. The DASR (Dairy Apprenticeship and Skills Recognition Programme) – End of Pilot Evaluation has been mapped directly to the qualification graduate profile outcomes. The provider was able to connect evaluation outcomes to qualification outcomes.

Company representatives feedback to the ITO gave evidence that there was value in the graduates knowing the theory and skills to meet the qualification outcomes of the level 4 programme.

Four employer representatives felt that graduates are able to carry out their roles in milk processing with better understanding. Company representatives agreed they had seen improvements in food handling and operations as a direct result of having graduates.

Evidence from a survey of Graduates:
The survey asked for both qualitative and quantitative answers to questions have been mapped to, and relate to the qualification purposes and graduate outcomes. Answers to questions alongside those of the Coaches provide the ITO with confidence that graduates are meeting the graduate outcomes of the qualifications. Graduates apply their knowledge in a real-world situation.

The level 4 graduates that responded and the employer feedback provided evidence that the graduates are better able to perform their job as a result of completing the qualification through a better understanding of the job role and product knowledge and greater confidence in their roles.

**How well does the evidence provided by the education organisation demonstrate that its graduates match the graduate outcomes at the appropriate threshold?**
The education organisation effectively demonstrated that their graduates matched the graduate profile outcomes at the appropriate threshold. The consistency review evidence provided came from four common sources: Industry context, programme related evidence and quality assurance, evidence of graduate destinations, as well as feedback from all key stakeholders. Overall this evidence either directly showed that the graduate profile outcomes
were being achieved and/or indirectly showed that by confirming there were a range of sound underlying processes in place to make this a convincing case for this evidence to demonstrate that its graduates match the graduate outcomes at the appropriate threshold.

**Aspects around specifications in the qualification**

During the Consistency Review meeting the Evaluator requested clarification of the specification regarding the following, and how the ITO meets it.

“TEOs arranging training or delivering programmes towards this qualification must ensure that the training arranged and programmes of learning are kept up-to-date with regard to amendments to, and replacements of, Overseas Market Access Requirements (OMARs) and General Requirements for Export (GREXs) outlined by the Ministry for Primary Industries.”

**Up to date Overseas Market Access Requirements (OMARs) and General Requirements for Export (GREXs):** The Primary ITO maintains regular contact with MPI to ensure regulatory changes such as changes to Overseas Market Access Requirements (OMARs) are understood and taken into account when reviewing qualifications and programmes. In addition, through the ITOs Industry Partnership Groups, the ITO is able to keep up to date with these changes from a strategic industry perspective.

**Recommendations to Qualification Developer**

No recommendations