Qualification Title: New Zealand Certificate in Energy Chemical Operations (Boiler operation) (Level 3)

Qualification number: 2306

Date of review: 27 July 2016

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 of:

- Graduates operating within the Approved Code of Practice for Design, safe operation, maintenance and servicing of Boilers (MBIE).
- Competent operation of a specified boiler under limited supervision.

The threshold aligns to the qualification strategic purpose statement and the overarching graduate profile outcome.

Tertiary Education Organisations with sufficient evidence

<table>
<thead>
<tr>
<th>Tertiary Education Organisation</th>
<th>Final rating</th>
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<tbody>
<tr>
<td>Primary Industry Training Organisation</td>
<td>Sufficient</td>
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Introduction

This 50 credit qualification is intended to provide the energy and chemical plant industry with entry-level boiler attendants.

Evidence

The ITO provided a range of evidence to demonstrate that the graduates met the graduate profile outcomes.

The criteria used to judge the above evaluation question were (p10 NZQA consistency guidelines):

- The nature, quality and integrity of the evidence presented by TEO
- 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 TEO 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
Final consistency review report

**Employer feedback and surveys**

5 of 39 employers responded to an online survey. The respondents rated the skills, knowledge and behaviour of the graduates as good or very good in terms of the three graduate profile outcomes.

Employers (10) were phone interviewed. All of their trainees were still employed in the Energy and Chemical Plant sector following graduation, and the employers were generally positive with the improvement of relevant skills, knowledge and behaviours as a result of completing the qualification.

**Graduate feedback, surveys and destination**

Course evaluations at the end of the training (76 responses of 76 students) provided evidence of the extent of application of skills to the job (all trainees were in employment in the sector), with an average rating of 6.0 out of 7.0 (range 4.0 to 7.0). Note the 7 point scale was inverted for the purposes of summarising, from the original survey, so that a score of 7 was outstanding; 1 was very poor.

Graduates were surveyed approximately 6 months after graduation. 11 of the 12 graduates responding to the graduate survey (of the cohort of 76 students) were employed in the Energy and Chemical Plant sector and responsible for boilers.

Seven graduates were phone interviewed. 6 of the 7 graduates phone interviewed were similarly employed (it is not known how much overlap there is between these two groups). They found the training useful for their job.

**Moderation of evidence portfolios by the ITO**

Training and assessment are delivered by one independent provider. Post-assessment moderation of (final) student portfolios from 10 employers was undertaken by the Primary Industry Training Organisation (PITO) Quality Advisor. Overall, evidence was provided of meeting the graduate profile outcomes. It is noted that final portfolio sign off includes verification from workplace supervisors.

**How well does the evidence provided by the education organisation demonstrate that its graduates match the graduate outcomes at the appropriate threshold?**

Strong evidence of graduates meeting the graduate profile outcomes was provided through employer surveys where graduates were rated on each of the three graduate profile outcomes, and were all rated good or very good. This was backed up by phone interviews with 10 employers.

The second strand of strong evidence comes from graduates. Surveys of graduates (at the end of their course and 6 months after graduation) by PITO provided strong evidence that graduates found their training useful for their job, applied the learned skills to their job, and found the training valuable. This was backed up by graduate responses (7) in phone interviews.

Strong evidence was provided of graduate employment as boiler attendants in the Energy and Chemical Plant sector, from the 10 interviewed employers. This was backed up by
survey evidence from graduates (11 of 12 respondents still employed in the Energy and Chemical Plant sector).

Post-moderation of evidence portfolios by PITO provided further evidence towards graduates meeting the graduate profile outcomes, and of this being done consistently across different employers (all trainees are employed).

The combination of evidence from employers and graduates that they meet the graduate profile, alongside the evidence from graduates that they apply the skills gained, found the training valuable and were still employed by the companies, provides convincing evidence of graduates meeting the graduate outcomes at the appropriate threshold.

**Special Focus**

No special focus

**Examples of good practice**

Graduate and employer surveys to gain breadth of information as well as phone interviews of a sample of employers and graduates to provide greater depth of information.

**Issues and concerns**

Low survey response rates from both employers and graduates. The ITO identified strategies to increase the response rates, which would strengthen the evidence for future reviews.

**Recommendations to Qualification Developer**

None