

Receive, store, and dispatch seed, and complete calculations

Level 3

Credits 12

Purpose This unit standard is for people working in the seed processing industry.

People credited with this unit standard are able to: receive a seedlot into a store; demonstrate knowledge of seed storage; select storage for seedlots; store containers of seed; dispatch seed; complete data entry and data management for receiving storing and despatching seedlots; and complete calculations relevant to seed processing.

Subfield Agriculture

Domain Seed Dressing

Status Registered

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Entry information Recommended: Unit 15600, *Draw a seed sample, and test and identify samples of seed*; Unit 15603, *Operate machinery and equipment in a seed processing store*; and Unit 10851, *Operate a powered industrial lift truck fitted with forks (forklift)*, or demonstrate equivalent knowledge and skills.

Accreditation Evaluation of documentation and visit by NZQA, industry and teaching professional in the same field from another provider.

Standard setting body (SSB) Primary Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0052

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 Definitions
Seeds – brassicas, pulses, cereals, and vegetables or grasses.
Contaminants – other crop seeds and inert material.

- 2 Quality standards may be standards required by any one, or a combination, of the following – seed processing company; buyer; exporter; country seed is to be exported to; owner of the seed; purity standards listed in the NZ Seed Quality Management Authority, *Seed Store Operating Manual* (AgriQuality Ltd, 2006), available from AgriQuality Ltd, freephone 0508 001122.
- 3 Where seed is to be certified, performance criteria referring to *the Manual* must meet the requirements of company procedures and the NZ Seed Quality Management Authority, *Seed Store Operating Manual* (AgriQuality Ltd, 2006), available from AgriQuality Ltd, freephone 0508 001122.
- 4 *Company procedures* refer to the documented procedures for receiving, storing, and dispatching seed, and must comply with the Health and Safety in Employment Act 1992.

Elements and performance criteria

Element 1

Receive a seedlot into a store.

Performance criteria

- 1.1 Seedlot entering the store is labelled or identified in accordance with the Manual and company procedures.
- 1.2 Bins or storage areas where seedlot is placed are labelled in accordance with the Manual and company procedures.
- 1.3 Records of seedlot coming into store are kept in accordance with the Manual and company procedures.
- 1.4 Sample of seedlot, which is representative of seedlot, is taken in accordance with the company procedures.
- 1.5 Potential problems with seedlot entering the store are identified, recorded, and supervisor notified in accordance with company procedures.

Range potential problems may include but are not limited to – type of contaminants, amount of contaminants, moisture levels.

Element 2

Demonstrate knowledge of seed storage.

Performance criteria

- 2.1 Storage hygiene and pest control practices are described in accordance with the Manual and company procedures.
- 2.2 Moisture levels for long and short term storage for different storage methods and different seeds are described in accordance with company requirements.

Ranges: storage methods – shed, silo, pit, drums, boxes, wrapped, bagged;
seeds – two grain crops, two pulse crops, four small seed crops.

- 2.3 Temperature variation of stored seed is described in terms of its affect on seed quality.
- 2.4 Temperature monitoring procedures are described in terms of company requirements.

Element 3

Select storage for seedlots.

Range examples of storage include but are not limited to – shed, silo, pit, drums, boxes, wrapped, bagged;
seedlots – two grain crops, two pulse crops, four small seed crops;
seedlots – before processing, after processing.

Performance criteria

- 3.1 Storage selected is consistent with seed's storage requirements, seedlot volume, and processing plan.
- 3.2 Storage selected is free from vermin and is weather proof.
- 3.3 Storage selected allows seedlot to be sampled in accordance with the Manual and company procedures.
- 3.4 Storage selected maximises storage space.
- 3.5 Storage selected allows separation of different varieties and grades in accordance with the Manual and company requirements.
- 3.6 Storage selected maintains quality of seed.

Element 4

Store containers of seed.

Range containers – bags, boxes, pallets of bags, silos.

Performance criteria

- 4.1 Seed is stored in accordance with the Manual and company procedures.
- 4.2 Seed is stored to avoid deterioration over the planned storage time.

Range deterioration due to – temperature, temperature variation, moisture, contamination by vermin and pests.

4.3 Seed is monitored during storage, and steps are taken to maintain crop quality in accordance with company procedures.

Range storage – short term, long term, before processing, after processing.

4.4 Containers are stored safely and securely in accordance with company procedures and the requirements of the Health and Safety in Employment Act 1992.

4.5 Seed is not damaged or unnecessarily wasted during handling.

Range damage – bruised, cracked.

Element 5

Dispatch seed.

Performance criteria

5.1 Seed is dispatched in accordance with the Manual and company procedures.

5.2 Seed dispatched matches order.

5.3 Dispatch documents are included with consignment in accordance with company procedures.

5.4 Dispatch is recorded in accordance with company procedures.

Element 6

Complete data entry and data management for receiving storing and despatching seedlots.

Performance criteria

6.1 Text and data relevant to the seedlot operation are entered into company software in accordance with company procedures.

Range database, spreadsheet.

6.2 Text and data are saved to file in accordance with company procedures.

6.3 Text and data are accessed from a saved file, and printed in accordance with software and company procedures.

Element 7

Complete calculations relevant to seed processing.

Performance criteria

- 7.1 Proportions of blends of seeds are calculated to achieve required percentage in end product.
- 7.2 Seed mixes are calculated based on sowing rates.
- 7.3 Batch quantities are calculated for dispatch orders.
- 7.4 Dressing loss is calculated between inward weight and finished product rate.

Please note

Providers must be accredited by the Qualifications Authority, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.