

Process and package seed and handle agrichemicals used to treat seeds

Level 4

Credits 35

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

People credited with this unit standard are able to: select and set up machinery, and decontaminate machinery and equipment; process seedlots; visually assess samples of seed against quality standards; package seed; and handle agrichemicals, and treat seed.

Subfield Agriculture

Domain Seed Dressing

Status Registered

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Entry information Recommended: Unit 15608, *Demonstrate knowledge of the seed processing industry and seed processing machines*; Unit 15600, *Draw a seed sample, and test and identify samples of seed*; and Unit 15603, *Operate machinery and equipment in a seed processing store*, 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 Definition
Waste – crop seed in offal.

- 2 Quality standards may be standards required by any one, or a combination, of the following – seed processing company; buyer; or exporter; country seed is to be exported to – owner of the seed; purity standards listed in 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 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 seed processing and packaging, and comply with the Health and Safety in Employment Act 1992.
- 5 Standards include but are not limited to NZS 8409:2004 Management of agrichemicals, available from <http://www.standards.co.nz>.
- 6 When processing seedlots, a change of screens or cylinders must be included in the set-up of the machines.
- 7 When processing clover or vegetable seeds a gravity table must be used.

Elements and performance criteria

Element 1

Select machinery and processes to dress a seedlot.

Performance criteria

- 1.1 Machinery is selected in accordance with seed type and any contaminants present.

Range clipper, clover polisher, spiral separator.
- 1.2 Processes are selected to meet quality standards.
- 1.3 Processes are selected to minimise the amount of rework during processing.
- 1.4 Processes are selected to be consistent with the contaminants to be removed from the seed lot.
- 1.5 Processes are selected to minimise waste.

Element 2

Select and set up machinery, and decontaminate machinery and equipment.

Range clipper, clover polisher, spiral separator.

Performance criteria

- 2.1 Machinery is set up in accordance with manufacturer's instructions.
- 2.2 Machinery and equipment are decontaminated before use in accordance with the Manual and company procedures.

Element 3

Process seedlots.

Range pre-clean, fine clean, finish;
one of each – brassica, pulse, cereal, vegetable or grass;
any one of – de-awning, blending, mixing, spiralling, gravity mixing, gravity separation.

Performance criteria

- 3.1 Seed is processed in accordance with the Manual and company procedures.
- 3.2 Waste is minimised during processing.
- 3.3 Processed seed meets quality standards for seedlot and is free of damage.

Element 4

Visually assess samples of seed against quality standards.

Range samples taken from the seedlot and from offal during the processing of a seedlot;
samples must include at least – one grain crop, one pulse crop, and two small seed crops.

Performance criteria

- 4.1 Visual assessment of the sample determines estimate of component percentage.

Range crop seed, other seed, inert material, damage.
- 4.2 Visual assessment determines the amount of other seed present in the sample in terms of meeting quality standards.
- 4.3 Visual assessment determines the amount of inert material present in the sample in terms of meeting quality standards.

- 4.4 Visual assessment is verified by weighing sample.
- 4.5 Visual assessment is within one percent of quality standards in accordance with weighed sample.

Element 5

Package seed.

Performance criteria

- 5.1 Reference number, contents, and weight on label match identification printed on container in accordance with the Manual and company procedures.
- 5.2 Bulk storage of machine processed seed complies with the Manual and company procedures.
- 5.3 Seedlot sizes comply with the Manual and company procedures.
- 5.4 The processing return balances with inward weight in terms of company requirements.

Element 6

Handle agrichemicals, and treat seed.

Range evidence is required for at least two agrichemicals.

Performance criteria

- 6.1 Agrichemicals are described in terms of manufacturer's recommendations and company procedures.

Range storage, use, safety precautions, disposal.
- 6.2 Agrichemicals are handled in accordance with manufacturer's recommendations and company procedures.

Range storage, mixing, safety precautions, disposal, equipment calibration.
- 6.3 First aid procedures in an agrichemical hazard incident are demonstrated in accordance with manufacturer's recommendations and company procedures.

Range fungicide in eyes, inhaled, ingested, on skin.
- 6.4 Seed treatment using agrichemicals matches agrichemical manufacturer's recommended levels and follows manufacturer's and company's safety requirements.

Range evidence is required for at least one seed type.

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.