



REFERENCE

Plant exports guide—prescribed grain and plant products inspection techniques

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Purpose of this document



This document has been written for authorised officers (AOs) as a reference guide on techniques to use when inspecting prescribed grain and plant products for export.




Inspection environment



The following table illustrates and describes common elements of the inspection environment.




What does this look like	Description
	Bulk vessel loading establishment Silos and flowpath at a bulk vessel loading establishment.
	Container loading inverter Container loading area capable of lifting and inverting containers in order to load grain directly into the container.

What does this look like	Description
	<p>Access to silos</p> <p>Enclosed ladder staircase allowing access to silos.</p>
	<p>Silos</p> <p>Silos holding bulk grain in a bulk grain loading establishment.</p>

What does this look like	Description
 <p>A photograph of an automatic sampler sieve machine. The machine is white and industrial, with a hopper at the top for grain. A sieve is positioned below the hopper, and a collection tray is at the bottom. A control panel with a blue dial and a red emergency stop button is visible on the right side. The machine is labeled 'E5'.</p>	<p>Automatic sampler sieve</p> <p>Automatic sampler sieve to shake and separate grain at bulk loading establishments. The sieve will deliver samples onto an automatic sampler belt for inspection, showing both the grain and the fines.</p>
 <p>A photograph of an automatic sampler belt machine. The machine is white and industrial, with a hopper at the top. A conveyor belt is visible, and a control panel with multiple buttons and a red emergency stop button is on the right. The machine is labeled 'E5'.</p>	<p>Automatic sampler belt</p> <p>Automatic sampler belt where samples are delivered for inspection after they have been automatically sieved. The sampler will deliver the grain and the fines in an automatic flow.</p> <p>Automatic sampling is used at bulk loading establishments.</p>

What does this look like	Description
	<p>Sample storage</p> <p>Grain samples taken during inspection may be stored onsite at the request of the exporter or registered establishment operator. Samples may be stored to complete composite sampling to determine levels within the grain, or to re-access if a pest or disease is detected.</p>
	<p>Pallet storage</p> <p>Pallets of bagged grain will generally be stored in a warehouse in specified lots. The pallets are stacked safely and to allow an AO adequate access to all pallets.</p>
	<p>Bulk grain packages</p> <p>Bulk grain may be stored in large bulk bags. As with pallets, these will be kept in a warehouse in lots and allow safe access to all bags for inspection by the AO.</p>

What does this look like	Description
	<p>Bagging facilities</p> <p>Grain is packed into bags using bulk grain delivery to processing machinery. The grain is loaded into the bag up to the weight required, sewn or sealed shut, and transported to a pallet.</p> <p>AOs should be aware of the WHS risks when working close to the bagging machinery.</p>
	<p>Registered establishments (RE)</p> <p>All prescribed grain and plant products are inspected at a registered establishment.</p> <p>Registered establishments for prescribed grain and plant products may be warehouses, bulk loading container yards or bulk loading silo establishments.</p>


What does this look like	Description
	<p>Inspection benches</p> <p>Registered establishments provide an inspection bench for AOs to conduct the inspection on.</p> <p>Inspection benches have a smooth, flat surface that is easy to clean. They may have a section of rollers at the back for easy movement of boxes.</p> <p>Benches should be white and as such may be covered with white paper, plastic or have a white tray on top.</p> <p>They should be fit for purpose, that is, big enough to allow the AO to inspect the commodity required.</p>
	<p>Lighting</p> <p>The inspection bench should be adequately lit so that pests and visible signs of diseases can be easily seen.</p> <p>Lighting can be natural or artificial.</p>
	<p>Bench-stand lights</p> <p>If there is insufficient ambient lighting or ceiling lighting, bench-stand lights may be available that can be directed over the inspection bench. These can usefully include a magnifying glass (for example, a maggylamp).</p>

Inspecting bulk grain and plant products

Drawing samples



The following table illustrates and describes various methods of taking samples of grain and plant products for inspection.




What does this look like	Description
	Sampling from small packages The AO selects sample packets at random.
	Sampling from bags Large packages are speared with a trier to gain access to the grain. Tipping the trier allows the sample grain to flow into a measuring jug or sieve. After drawing the sample, the flat end of the trier is rubbed against the bag to seal the hole and prevent any further spillage.
	Sampling from bulk bags A trier of suitable length is used to draw a representative sample from within a bulk bag.
	Automatic sample delivery Most bulk grain establishments will deliver a sample for inspection using automatic sampling equipment. The AO checks that the automatic sampler has been calibrated and is providing the correct rate of sample prior to conducting their inspection.

What does this look like	Description
	<p>Manual bulk sampling</p> <p>Some bulk establishments have access points along the grain flow where the AO can take manual samples.</p> <p>If taking samples this way, the AO should ensure they are using safe measures to collect grain for inspection.</p>

Goods with a particle size greater than a sieve hole

The following table illustrates and describes inspection techniques for goods with a particle size greater than a sieve hole.

What does this look like	Description
	<p>Placing product in sieve</p> <p>Samples drawn from a consignment are placed into an appropriately sized sieve. The AO is careful to not over-fill the sieve and only places enough grain into the sieve to allow it to freely move across the mesh.</p>
	<p>Shaking product in sieve</p> <p>The sieve is shaken long enough for the grain to move freely across the mesh and dislodge any potential pests or contaminants, allowing them to fall through to the pan.</p>
	<p>Inspecting product above mesh</p> <p>The sieved grain remaining above the mesh is inspected for signs of pests, diseases, weed seeds or other contaminants.</p>

What does this look like	Description
	<p>Inspecting residue in pan</p> <p>The residues that have fallen through to the pan during shaking are inspected for any signs of pests, diseases, weed seeds or other contaminants.</p> <p>The residue is returned to the source or disposed of as per exporter instructions upon completion of the inspection.</p>
	<p>Product running across automatic sieve</p> <p>An automatic sieve will receive a sample and automatically sieve it. It will deliver finer particles that have fallen through the mesh to a pan in front; and deliver grain and larger contaminants to a belt or caught on a tray.</p> <p>All of the sample from above and below the mesh is inspected for signs of pests, diseases, weed seeds or other contaminants.</p>
	<p>Inspecting product below automatic sieve</p> <p>The fine particles that have fallen through to the pan during shaking are inspected for any signs of pests, diseases, weed seeds or other contaminants.</p> <p>The residue is returned to the source or disposed of as per exporter instructions upon completion of the inspection.</p>




Goods with a particle size less than a sieve hole



The following table illustrates and describes inspection techniques for goods with a particle size less than a sieve hole.

What does this look like	Description
	<p>Placing product directly into pan</p> <p>The contents are poured directly into the pan or tray. If any lumps are present, the AO can sieve the sample to remove or break down the lumps.</p>
	<p>Inspecting product in the pan</p> <p>The contents are spread across the pan into a thin layer and inspected for any sign of pests, disease, weed seeds or other contaminants.</p> <p>If a closer inspection is necessary, the sample can be examined with a torch and hand lens.</p> <p>The product is returned to the source or disposed of as per exporter instructions upon completion of the inspection.</p>

Goods in packages



The following table illustrates and describes inspection techniques for goods in packages.

What does this look like	Description
	<p>Inspect packaging</p> <p>The outside of the packaging and pallets is inspected for any signs of pests, disease, weed seeds or other contaminants.</p>
	<p>Product inspected in package</p> <p>If the product is presented in transparent packaging and can be spread in a single layer, the AO may inspect the sample through the packaging.</p> <p>The sample is viewed on a white surface for pests, diseases, weed seeds and other contaminants. A hand lens and torch can be used if necessary.</p>
	<p>Placing product in a pan</p> <p>Product in very small packaging that is not transparent or cannot be spread out in a single layer, is poured into a white pan for inspection.</p>


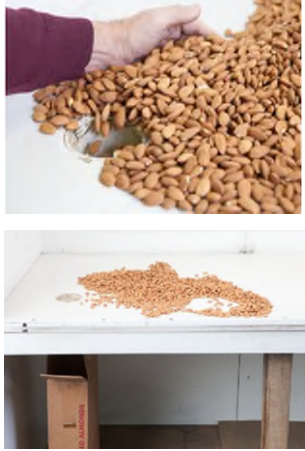
What does this look like	Description
	<p>Spreading the product evenly</p> <p>The contents of the pan are spread out thinly and evenly so that pests or contaminants can be seen easily.</p>
	<p>Inspecting product in the pan</p> <p>The product is inspected for pests, diseases, weed seeds and other contaminants. A hand lens and torch can be used if necessary.</p> <p>The product is returned to the packaging upon completion of the inspection.</p>

Nuts

The following table illustrates and describes inspection techniques for nuts.

What does this look like	Description
	<p>Placing product on bench</p> <p>The product is poured from the packaging onto the inspection bench.</p>
	<p>Inspect packaging</p> <p>The empty packaging is inspected for any signs of pests, disease, weed seeds or other contaminants. A torch is used to inspect any dark areas.</p>

What does this look like	Description
	<p>Placing product in sieve</p> <p>A sample is selected and placed into an appropriately sized sieve. The AO is careful to not over-fill the sieve and only places enough product into the sieve to allow it to freely move across the mesh.</p>
	<p>Shaking product in sieve</p> <p>The sieve is shaken long enough for the nuts to move freely across the mesh and dislodge any potential pests or contaminants, allowing them to fall through to the pan.</p>
	<p>Inspecting product above sieve</p> <p>The sieved product left above the mesh are inspected for signs of pests, diseases, weed seeds or other contaminants.</p>
	<p>Inspecting product in pan</p> <p>The residues that have fallen through to the pan during shaking are inspected for any signs of pests, diseases, weed seeds or other contaminants.</p>

What does this look like	Description
	<p>Examining suspect product closely</p> <p>Any product the AO suspects may be infested is examined closely using a hand lens. Pests can be uncovered with equipment such as a small paintbrush or tweezers.</p>
	<p>Returning product to package</p> <p>The product is returned to the source or disposed of as per exporter instructions upon completion of the inspection.</p>

Related material

- *Export Control Act 2020*
- Export Control (Plants and Plant Products) Rules 2021
- [Manual of Importing Country Requirement \(Micor – Plants\)](#)
- [Plant exports operations manual \(PEOM\)](#):
 - Guideline: *Inspection of prescribed grain and plant products for export*
 - Work Instruction: *Inspecting prescribed grain and plant products for export*
 - Reference: *Plant exports guide – equipment*
 - Reference: *Plant exports guide – specimen collection*

Contact information

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Document information

The following table contains administrative metadata.

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Version history

The following table details the published date and amendment details for this document.

Version	Date	Amendment details
1	11/03/2020	First publication of this reference.
2	3/06/2020	Document re-published from IML Archive with no changes.
3	16/11/2021	Amendments for the <i>Export Control Act 2020</i> and associated Plant Rules.