Approved Seed Conditioner Requirements

Purpose
The following requirements and recommendations have been established by the Minnesota Crop Improvement Association as a basis for approving conditioning plants to condition seed eligible for the seed certification and/or the QA program(s). Approval is granted on an annual basis and may be granted for conditioning all crops, for conditioning specific crops, or for specified conditioning activities.

General Requirements

1. Facility and records must be made available for inspection upon request by MCIA.

2. Plant manager/owner must annually sign an Approved Seed Conditioners Agreement indicating the intention to comply with all requirements for approval.

3. Plant manager/owner must designate a person (or persons) to be responsible for drawing and submitting representative samples of all certified and QA lots to MCIA.

4. Operating procedures and equipment for sampling, labeling, and other seed conditioning activities must be in compliance with MCIA procedures.

5. The current versions of the state and federal seed laws and specified MCIA documents must be in the plant operator’s possession.

6. Facility's equipment, maintenance and operating procedures must be sufficient to ensure seed conditioning that consistently meets certification or QA standards.

7. Each bag of certified or QA seed must be identified with the plant’s identification number, except where certification or QA tags are sewn in.

Field Crop Seed Conditioning Machinery and Equipment Requirements

1. An air-screen cleaner equipped with mechanical screen cleaners. (See Appendix 1 for suggested screen sizes.)

2. Plants approved after September 15, 1981, are required to have available the following equipment:
   A. For small grain & flax: Disc or indent cylinder or other type of length separator. (See Appendix 2 for suggested disc and indent cylinder sizes.)
   B. For soybeans: spiral, aspirator or gravity machine.
   C. For all crops:
      1. Weighing, sampling, and testing equipment to meet plant needs.
      2. Bag-closing equipment, if bagged seed is handled.
      3. Compressed air or commercial vacuum cleaner to clean equipment and plant between lots.
3. Machinery and equipment recommendations:
   A. Gravity separator for flax and grasses. It is also useful for separating oats from barley and for removing cracked seed, shriveled seed, and oats from wheat and rye.
   B. Soybean ladders in plants handling soybeans.
   C. Debearder for plants handling small grains.
   D. In-line vacuum and electrical outlet in headhouse.

Pits
   1. Elevator pits must be cleanable; metal lining is preferred.
   2. Pits must have a securely fitted cover.
   3. The valley angle in the pit should be at least 45 degrees.

Seed Storage Facilities
   1. All storage facilities must be tightly constructed and easily cleaned.
   2. Bin hopper bottoms must be made of metal or be lined.
   3. All bins must be identified.

Seed Conveyance Equipment
   1. All conveyance equipment must be self-cleaning or be accessible and easily cleaned.
   2. Separate conveyance equipment must be available to deliver seed to and to carry seed from each piece of seed conditioning equipment.
   3. Elevator boots should be raised above the floor so they may be opened readily for cleaning.
   4. The distributor must be accessible and have inspection doors large enough so the distributor can be cleaned easily.
   5. Spouting should be constructed of heavy-gauge material and angled steeply. No rivets or bolts may protrude into spouts.
   6. Flex spouting is not acceptable unless the interior is smooth and self-cleaning.
Record Requirements

The following records must be maintained to be in compliance with the Federal Seed Act, Minnesota State Seed Law, AOSCA Standards, and MCIA Standards.

1. Each applicant must keep accurate records of:
   a. The amount of seed harvested from each field (not necessarily actual weights, but number of truck loads, bins, bags, etc.)
   b. Where the seed is stored or taken for conditioning.

2. The initial labeler of seed must keep for three years the following information as part of the complete record for each seed lot sold:
   a. Lot number or other lot identification
   b. A copy of the genuine grower’s declaration or tree seed collector’s declaration or similar documents containing the same information;
   c. Copies of invoices showing the sale of each seed lot including:
      1. Name of the person the seed is sold to
      2. Amount sold
      3. Date of sale
      4. Name of the kind or kind and variety/brand
      5. Lot number
   d. A copy of the label that was attached to or accompanied the seed lot;
   e. A copy of the field and final certification documents, if applicable;
   f. A copy of each report concerning the testing of the seed for labeling purposes; and
   g. Keep for one year after disposition of the lot a file sample. The official sample sizes are as follows:
      1. Two ounces of grass seed not otherwise mentioned, white or alsike clover, or seeds not larger than these;
      2. Five ounces of red or crimson clover, alfalfa, lespedeza, ryegrass, bromegrass, millet, flax, rape, or seeds of similar size;
      3. One pound of sudangrass, sorghum proso, or seeds of similar size
      4. Two pounds of cereals, vetch, or seeds of similar or larger size; and
      5. At least 400 vegetable seeds.
   h. The complete record for any lot consisting of or containing treated seed shall include records necessary to disclose the name of any substance or substances used in the treatment of such seed including a label or invoice or other document received from any person establishing the name of any substance or substances used in the treatment to be as stated, and a representative sample of the treated seed.
3. Seed Conditioners must keep the following records for each lot brought into their plants:
   a. Name and address of owner of seed.
   b. Number or other identification of field(s).
   c. Amount of uncleaned seed
   d. Date received
   e. Assigned bin number
   f. Condition of seed (if high moisture, excess weeds, etc.)
   g. Weight and/or number of bags of cleaned seed.
   h. Date of conditioning
   i. Serial numbers of certification and QA tags attached to containers
   j. If cleaned lots are blended, approximate weight of each component blended.

4. In addition to the above required records, the following records must be maintained for certified or QA seed in bulk:
   a. Amount of seed grown and conditioned or purchased for bulk sale
   b. Amount of bulk seed sold by variety/brand name and lot number.
   c. A current inventory of seed available for sale for each variety/brand

MCIA has the right to examine all records of the applicant pertaining to seedlots eligible for the certification and QA programs.
### Appendix 1. Suggested screen sizes for air-screen cleaners.

<table>
<thead>
<tr>
<th>Crops</th>
<th>Round hole</th>
<th>Slotted</th>
<th>Triangle</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>64ths</td>
<td>Fraction</td>
<td>Inches</td>
</tr>
<tr>
<td>Oats</td>
<td>24</td>
<td>1/13 x 1/2</td>
<td>8/64 x 3/4</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>1/14 x 1/2</td>
<td>9/64 x 3/4</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>1/16 x 1/2</td>
<td>10/64 x 3/4</td>
</tr>
<tr>
<td>Rye &amp; wheat</td>
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<td>1/13 x 1/2</td>
<td>5/64 x 3/4</td>
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<tr>
<td>Barley</td>
<td>18</td>
<td>1/13 x 1/2</td>
<td>5/64 x 3/4</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>1/14 x 1/2</td>
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<td></td>
<td>24</td>
<td>1/14 x 1/2</td>
<td>8/64 x 3/4</td>
</tr>
<tr>
<td>Flax</td>
<td>6</td>
<td>1/12</td>
<td>3/64 x 5/16</td>
</tr>
<tr>
<td>Soybeans</td>
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### Appendix 2. Suggested pocket sizes for separators.

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<th>&quot;R&quot;</th>
<th>&quot;V&quot;</th>
<th>Square</th>
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<tr>
<td>Oats, wheat and rye</td>
<td>R4</td>
<td>Vr</td>
<td>A</td>
<td>8-1/2</td>
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<tr>
<td>Barley, peas</td>
<td>R4-1/2</td>
<td>V4-1/2</td>
<td>MM</td>
<td>13</td>
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<td>V5</td>
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<td>--</td>
<td>K</td>
<td>24</td>
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<tr>
<td>--</td>
<td>--</td>
<td>L</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Flax</td>
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<td>V3-1/2</td>
<td>--</td>
<td>6-1/2</td>
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<td>V5</td>
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<tr>
<td>--</td>
<td>V6</td>
<td>--</td>
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<tr>
<td>--</td>
<td>V6-1/2</td>
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