United States Department of Agriculture
Agricultural Marketing Service
Federal Grain Inspection Service

Directive

9180.68 November 27, 2006

CROSS UTILIZATION OF EQUIPMENT

Contents

1. PURPOSE

This directive outlines procedures for cross utilizing inspection and weighing equipment. Specifically, it addresses:

a. Government-owned official inspection and weighing equipment;

b. Official agency (OA)-owned equipment used for determining official inspection factors, weighing results, and specific criteria (e.g., aflatoxin, falling number, etc.) in grain, rice, pulses, and processed commodities;

c. Industry-owned equipment or supplied material used for determining official inspection factors, weighing results, and specific criteria (e.g., aflatoxin, falling number, etc.) in grain rice, pulses, and processed commodities; and

d. Commercial equipment approved or allowed by State or local jurisdictions as “Legal for Trade” and used for Official Commercial Inspection Services.

2. REPLACEMENT HIGHLIGHTS

This directive replaces FGIS Program Directive 9180.68, Cross Utilization of Equipment, dated July 18, 2000. It is updated to reflect changes to the cross utilization of official agency or elevator-owned dockage tester sieves and hand sieves. Previous rules prohibited the sharing of sieves. This establishes guidelines to consider so that the sieves may be shared, if they are protected from misuse or unauthorized replacement.

3. BACKGROUND

Due to the prohibitive cost, maintenance, and stationary design of some inspection weighing equipment, the Federal Grain Inspection Service (FGIS) has relied on the grain industry to supply certain equipment (e.g., diverter-type sampling systems) to official personnel for use in sampling and weighing of grain, rice, pulses, and processed commodities. FGIS has further allowed the use of industry-owned equipment or materials (e.g., moisture meters, dockage testers, mycotoxin test kits) provided they are cost-effective and meet certain criteria established by the agency.

FGIS requires that equipment supplied by industry and used in the performance of inspection or weighing activities under the United States Grain Standards Act or the Agricultural Marketing Act of 1946 must be approved by FGIS. Additionally, the equipment must meet all pertinent safety standards and be installed, aligned, and calibrated according to manufacturer’s recommendations; maintained in good repair; protected from unauthorized adjustments; and, if applicable, tested at periodic intervals and found to be within acceptance tolerances.

4. POLICY

Using guidelines provided by FGIS, Agency Managers have the responsibility to determine the most appropriate type of equipment and procedures needed to perform inspection and weighing activities in accordance with written directives, handbooks, etc.

a. Government-owned inspection and weighing equipment can only be used by government agencies. FGIS has the following guidelines in place for loaned equipment to OAs:

(1) Loaned equipment should be considered a temporary situation during legitimate emergencies for short time periods;

(2) All temporary loan provisions must be documented; and

(3) No open-ended loans are to be approved.

b. OA-owned equipment may be used by company representatives at the facility where the inspection and weighing equipment is located if the guidelines listed below are in effect:

(1) The Agency Manager should review each situation, especially the methods that will be used to protect the equipment from misuse or unauthorized adjustments;

(2) Company representatives must use their own test weight kettles. OA owned test weight kettles must be secured and used only by OA personnel;

(3) Any hand sieves and dockage tester sieves may be shared, but if they are precision (tested) sieves, they must have a secure I.D. or Approval Sticker that positively identifies the individual item and prevents intentional or unintentional replacement and substitution. Non-precision sieves do not require special identification except a locally assigned I.D. Official personnel should visually inspect sieves for evidence of damage or abuse, such as bowing of hand sieves or uneven flow across dockage tester sieves.

(4) Vulnerable equipment controls or devices, such as moisture meters, the dockage tester air-baffles, and laboratory balances shall be secured with locks or seals.

When a moisture meter has been out of official agency control, it must be checked per the instructions in Section 3.2 of the Moisture Handbook before being returned to official use.

(5) The Field Office Manager (FOM) should be kept informed of procedures and should review them with the OA on a periodic basis. Procedures determined not adequate by the FOM shall not be used.

c. Industry-owned equipment may be used by FGIS and OAs for official purposes provided the FOM approves the use of the equipment. The FOM must consider the equipment guidelines as listed below in the approval process:

(1) FGIS approved model and type;

(2) Tested or examined prior to official use;

(3) Maintained in good working condition;

(4) Controlled by official personnel through the use of security seals, lead/wire seals, physical custody, or other means appropriate to maintain accuracy and adjustments;

(5) Reviewed by the FOM and Agency Manager for each situation, especially the methods that will be used to protect the equipment from misuse or unauthorized adjustments;

(6) FGIS and OA's must use their own test weight kettles. They may not utilize industry-owned test weight kettles;

(7) Any hand sieves and dockage tester sieves may be shared, but if they are precision (tested) sieves, they must have a secure I.D. or Approval Sticker that positively identifies the individual item and prevents intentional or unintentional replacement and substitution. Non-precision sieves do not require special identification except a locally assigned I.D.

Official personnel should visually inspect sieves for evidence of damage or abuse, such as bowing of hand sieves or uneven flow across dockage tester sieves.

(8) Security sealed moisture meters, dockage tester air-baffles, laboratory balances, etc;

(9) Approved arrangements must follow procedures; and

(10) Meet the requirements for NIRT instruments outlined in Attachment. Optional approved procedures or approved equipment may be requested by a facility; for example, sampling with an Ellis cup instead of a pelican. If managers determine that requests are based on sound reason and are in the best interest of official personnel, equipment that is owned by a grain elevator, flour mill, or rice mill may be used by official inspection and weighing personnel.

However, if the changes are made for the convenience of the facility, any materials, supplies, and specialized training required by official personnel to operate the equipment must be supplied by the facility at no expense to FGIS or the OA providing the service.

d. Commercial approved equipment includes devices that are approved or allowed by local or State weights and measures jurisdictions as “Legal for Trade”. Commercial equipment used for Official Commercial Inspection Services may be cross utilized.

5. QUESTIONS

Direct any questions to the Policies and Procedures Branch at (202) 720-0252.

/s/ John C. Giler

John C. Giler, Acting Director
Field Management Division

Attachment

PREREQUISITES FOR CROSS UTILIZING ELEVATOR OWNED-NIRT INSTRUMENTS FOR OFFICIAL INSPECTIONS

1. The instrument must be an Infratec Model 1225, 1226, 1227, 1229, or 1241.

2. Located in a dust-free, vibration free, and stable environment.

3. Protected from drafts, heating and cooling vents, and windows.

4. Temperature maintained between 60 °F and 80 °F. **Official certificates cannot be issued on samples run outside of this temperature range.**

5. Hygrometer (± 3 percent Relative Humidity) and thermometer (± 1 °F) located near the instrument.

6. Dedicated 120 ± 10 VAC/15-20 amp circuit with a maximum of two electronic instruments (e.g., NIRT, NMR or Hardness tester) plus their associated printers and/or computers on the same circuit. The Tripp-lite line protector supplied with the Infratec 1241 should be used when a dedicated circuit is available.

7. If a dedicated circuit cannot be provided, a standby uninterruptable power supply (UPS) is an acceptable alternative. The UPS should be rated as shown in the NIRT Handbook.

Additional Requirements:

8. Applicant for calibration service agrees to assume the financial responsibility for the requested calibration service at the applicable rate (see code G240 Table 3 – Miscellaneous Services of the GIPSA fee schedule).

9. Elevator owner agrees not to alter any adjustments made in standardizing the instrument and to notify the official agency and/or field office prior to any repair or replacement of any portion of the instrument.

10. Official Agency has personnel licensed for NIRT.

11. Standard Reference Samples (SRS) and Check samples (for corn) are available for official use from Quality Systems and Services Unit, TSD. These items are to be kept in the possession of the licensed personnel, either under lock and key, on-site, or transported by the licensed personnel:

    1. SRS.

    2. SRS worksheets and bias logs.

    3. Official calibration disk

    Note: If the SRS are being transported, they must be allowed to equilibrate to the instrument room temperature (± 5 °F).

Operator Checkout Prior to Analysis for Official Certification

1. Temperature within 60 °F and 80 °F.

2. Instrument is clean and meets the environmental location requirements.

3. Transported SRS are within ± 5 °F of room temperature.

4. Official calibrations are:

   (a) Available on disk (disk drive units); or

   (b) Stored on the hard drive for units with an Audit Trail log or count, which is reviewed prior to use; or

   (c) Loaded onto the instrument and deleted before the operator leaves.

5. Verify that correct O- and P-Constants are being used.

6. Verify slope and intercept values agree with SRS records.

7. Verify that the sample cell used during standardization is available and installed correctly (flush with the mounting bracket).

8. Verify that none of the following have occurred: repair/replace the monochromator, replace the lamp, or replace the sample cell.

If the operator is able to answer yes to all of the above, he/she may proceed to run the SRS, make any necessary bias adjustments, and begin certifying market samples.

On an annual basis, the pathlength for both the 18 millimeter (wheat) and 30-millimeter (corn and soybean) sample cells will need to be checked (remeasured).