

CHAPTER 1

GENERAL INFORMATION

1.1 PURPOSE

This handbook sets forth the policies and procedures regarding the equipment requirements, installation, authorization, examination, and testing of mechanical sampling systems.

1.2 POLICY

Mechanical sampling systems used for official purposes must be examined, tested, approved, and authorized in accordance with the procedures stated in this handbook.

Mechanical sampling systems are composed of one or more automatic sampling devices powered either pneumatically, electrically, or hydraulically. These systems can draw representative samples of commodities in a variety of applications. To ensure the accuracy and integrity of official inspections, mechanical sampling systems used for official sampling purposes, including obtaining warehouseman's sample-lot inspection samples, shall meet the following criteria:

- a. The major components of the system must be of a model and type approved by FGIS.
- b. Installation of the official sampling system must be authorized by FGIS.
- c. The system must be maintained and, if necessary, repaired or altered in accordance with established procedures.
- d. At the prescribed intervals and after any alterations, the system must be tested and examined in the correct manner and found within established tolerances.
- e. The system must be operated according to the instructions when in use for obtaining official samples.

1.3 AUTHORITIES

This handbook is issued pursuant to Section 16(a) of the United States Grain Standards Act, as amended; and the Agricultural Marketing Act of 1946, as amended.

1.4 DEFINITIONS

- a. Alteration-Modifications, or any changes from when the sampling system was last tested and authorized. These include changes to the sampler position, parts, speed, wiring, dust collection, etc. It also includes changes to the grain handling system that affect the sampler, such as: increase in grain flow, change in belt speed, use of new shipping bins, etc.
- b. Authorization-The FGIS field office manager authorizes use of the mechanical sampler by signing a Form FGIS-980, "Authorization to Use Mechanical Sampler for Sampling." Without this authorization, the sampler may not be used officially.
- c. Cancellation-The current authorization is permanently withdrawn (revoked). If the facility wishes to obtain a new authorization, they must start all over, as if it were a new installation, by submitting a letter and drawings. An examination and test with five lots of grain will be required.
- d. Commodities-As used throughout this handbook, means grain, rice, beans, peas, lentils, and processed grain products.
- e. Controls.
 - (1) Auxiliary Controls-Any device that either duplicates or bypasses the operating controls. Also an override, a delay switch, dump counter, or a programmable controller that may interrupt your exclusive use of the sampling device.
 - (2) Operating Controls-Used by the sampling attendant for normal operation of the sampling system. The control panel includes an on/off switch, timer, indicator lights, and other switches controlling excess sample return, pneumatic sample delivery, etc.
 - (3) Lockout Controls-A lockout switch is a device that will disconnect the main power supply and bring the D/T sampler to a zero energy state. The lockout switch is the only override both required and allowed.
- f. Examination-An examination of the sampler is done by official personnel using the Form FGIS-936, "Sampler Condition Report," as a checklist and record.

It is a visual check that requires opening the inspection plate and examining the sampler condition and operation.

- (1) Initial-The first examination, before the sampler can be used officially.
 - (2) Periodic-On a regular schedule, such as every 6 months.
 - (3) Supplemental-Extra examinations required after repairs or anytime there are accuracy questions.
- g. Monthly Sampler Checks-These checks are done at export port locations by official personnel. Results are kept in a log book-a Form FGIS-936 is not required.
- h. Primary Sampler-The main sampler, normally a diverter-type sampler.
- i. Secondary Sampler-A powered divider to reduce or split the sample obtained by the primary sampler, while maintaining its representativeness. Sometimes a Boerner cargo divider may be used.
- j. Suspension-A letter from the field office to temporarily withdraw the authorization. Records are kept on file, so the sampler can be easily reauthorized if requested. Suspension of the authorization can also be the first step in permanent cancellation of the authorization. A formal suspension is not always required if the sampler problems can be corrected immediately or before the sampler is used officially.
- k. Test-A test or checktest is done by an inspector using either five lots or one lot of grain. Mechanical truck probes are tested using 20 trucks. Initial, Supplemental, and Periodic have the same meanings as in item f., when they are used to describe a test.

Reserved