# METHODS OF SAMPLING AND TESTING MT 403-21 SAMPLING AND INSPECTION OF SEEDING AND LANDSCAPING MATERIALS

#### 1 Scope

1.1 This procedure describes the inspection and sampling procedures for revegetation materials including seed, fertilizer, mulch, sod, and nursery stock.

### 2 Seed Supplier Inspection

- 2.1. Reclamation seed is required to come from seed suppliers on the Qualified Products List (QPL). Seed suppliers on the QPL will be randomly inspected.
- 2.1.1 Seed blend records and test results for MDT projects will be reviewed by the inspector to ensure the blends meets MDT seed blend requirements.
- 2.1.2 Seed blend samples, collected by the seed supplier for each seed blend used on MDT projects, will be taken back to the MDT Materials Laboratory (District or Headquarters) by the inspector. Seed blend samples will be maintained for one year for seed blend verification, if necessary.

## 3 Seed Sampling Procedure (Field)

- 3.1 Reclamation seed is accepted with a datasheet (seed bag tag) from suppliers listed on the QPL only. Landscaping seed is accepted with a datasheet (not required to come from a supplier on the QPL). However, MDT reserves the right to sample and verify any material.
- 3.2 Follow these steps to collect a representative seed sample.
- 3.2.1 When sampling seeds in bags, use a trier long enough to reach all areas in the bag. The trier must be designed so that it will remove an equal volume of seed from each part of the bag through which the trier travels. Unless the trier has partitions in the seed chamber, it must be inserted into the bags horizontally. A trier or probe is available from the Materials Bureau by request and must be returned immediately upon completion of sampling.
- 3.2.2 Sample non-free-flowing seeds that are difficult to sample with a trier by thrusting the hand into the seed and removing representative portions. When a sample is taken with the hand, insert the hand flat and with the fingers together. Keep the fingers together as the hand is closed and withdrawn. Because of possible segregation, hand samples should be taken from various locations in the bags.
- 3.2.3 Submit an 8 oz sample in a new, clean container or plastic zip closure storage bag.
- 3.2.4 Submit the sample to the Material Bureau Laboratory and include the following information: all pertinent project information, supplier's name and address, kind of seed, all of the information given on the purity and germination tag and the amount of seed the sample represents.

#### 4 Fertilizer

- 4.1 Fertilizer is accepted with a datasheet. However, MDT reserves the right to sample any material. If a sample is requested, sampling will be performed by field personnel at the project site. In the case of blended fertilizer, a sample of the blended material will be collected for analysis. Obtain sufficient material to fill a one quart (one liter) container from the top, center, and bottom of each fertilizer container to be sampled. Only one sample will be required from each lot.
- 4.2 Each sample submitted to the Materials Bureau will be labeled with the Project ID and accompanied by the certified chemical analysis tag, the supplier's name, the kind of fertilizer, the lot number, and the total pounds the sample represents.

#### 5 Mulch

Mulch is accepted with a datasheet and must be supplied from sources listed on the QPL <u>only</u>. If the mulch contains straw, a certificate of compliance indicating the straw is weed seed free must also be submitted. However, MDT reserves the right to sample and verify any material. If a sample is requested, follow the applicable sampling procedure below.

#### 5.2 Vegetative Mulch

5.2.1 Vegetative mulch is dried cereal grain or oilseed crop straw, cornfield residue, or grass hay with the majority of stems and leaves at least 4 inches (100 mm) in length. Vegetative mulch will be inspected in the field for conformance with the project specifications and Standard Specifications (Section 713.10.1). If a sample is requested, submit one pound to the Materials Bureau in a zip closure storage bag. Label the sample with the Project ID, date sampled, source, type, condition, purity, and moisture content of the mulch.

#### 5.3 Hydraulic Mulch

5.3.1 Hydraulic mulch includes wood fiber hydraulic mulch, straw fiber hydraulic mulch, and multi-fiber hydraulic mulch. Hydraulic mulch will be inspection in the field for conformance with the project specifications and Standard Specifications (Section 713.10.2). If a sample is requested, submit one pound to the Materials Bureau in a zip closure storage bag. Label the sample with the Project ID, date sampled, source, type, condition, purity, and moisture content of the mulch.

#### 6 Sod

6.1 Sod is accepted with a datasheet. However, MDT reserves the right to sample and verify any material. The material will be inspected on-site for signs of stress or lack of water. If a sample is requested, submit one square foot in a sample bag to the Materials Bureau along with the Project ID, date sampled, source, grass species, thickness of sod, and the total quantity of material represented by the sample.

#### 7 Nursery Stock (Plants, Trees, and Shrubs)

7.1 Nursery Stock is accepted with a datasheet. The inspection of nursery stock will be performed by the Project Manager for conformance with the specifications contained in the project proposal.

<u>DO NOT SUBMIT SAMPLES</u> of Nursery Stock. If there is a question about nursey stock consult the District Environmental Services Supervisor.