**SAMPLING METHOD MB10**

# SAMPLING OF TREATED PAVEMENT LAYERS TO DETERMINE CONTENT AND DISTRIBUTION OF THE STABILIZER

## 1 SCOPE

This method describes the takingof samples from a road pavement layer during the compaction of the layer after the stabilizer and water have been added and mixed, for determining the stabilizer content and distribution.

## 2 APPARATUS

2.1 A suitable tape measure approximately 3m long.
2.2 A spade with a rectangular blade.
2.3 A pick.
2.4 A suitable canvas sheet approximately 1m x 0,5m.
2.5 A hand brush or 100mm paint-brush.
2.6 A small garden spade with a sawn-off point.
2.7 Suitable sample containers such as strong plastic bags or air-tight plastic or metal containers. (See note 6.1)

## 3. SAMPLE SIZES

Each sample should weigh approximately 6kg. (See note 6.2.)

## 4. METHOD

### 4.1 Preparation of the sampling hole

During the compaction of the layer to the sampled, immediately after the first leveling cut of the road-grader, a trench is dug at the pre-determined sampling point as follows:

Dig a trench with the spade and pick, approximately 0,5m long and at least the width of the spade to the full depth of the layer. Trim one wall of the trenched layer to make it smooth and vertical. Now cover the other sides and the bottom of the trench with the canvas sheet.

### 4.2 Sampling

Using the small garden spade make a rectangular groove straight down the wall of the trench at the sampling point; the groove should be large enough to supply a sample of the desired size. Trim the sides of the groove neatly. Ensure that the full depth of the layer is sampled without getting any of the underlying material mixed into the sample.

If the layer is to be sampled to various depths to determine the vertical distribution of the stabilizer, carefully measure the depth to which sampling must be carried out and proceed as described above by making and trimming the groove to that depth.

Using the small spade, place each sample thus taken in a suitable container and carefully shake the fine material on the canvas sheet into the container. Use the hand brush or paint-brush to sweep all the fine material from the canvas sheet into the container. Cover the sample in an air-tight manner. Shake the canvas sheet well before taking the next sample.

Label each sample properly and note the sampling point and time at which hthe sample was taken, as well as the time at which the mixing of stabilizer and soil and the admixing of water commenced. (See notes 6.3 and 6.4.)

## 5 REPORTING

The samples must be sent to the laboratory under cover of a report containing the following information:

Name of the project.
Date of sampling.
Name of sampler.
Position of the sampling point.
Sample number or mark.
Description of the layer, material and stabilizer.
Time at which addition and mixing of the stabilizer and water commenced.
Method at which addition and mixing of the stabilizer and water commenced.
Method of addition and mixing used (e.g. disc harrow and grader).
Manner in which the sample was sent to the laboratory.

## 6 NOTES

6.1 The notes of canvas bags for these types of sample is not recommended as samples may become contaminated and are normally wet.

6.2 The sample size may be reduced if the material is very fine. It is preferable to reduce the size of the sample by means of further division, rather than to take smaller samples.

6.3 For some test methods the exact times at which the stabilizer and water were added and mixed need to be known, as well as when the sample was taken. The sampler must thus ascertain whether the sampling method to be used requires this information. If not, it is unnecessary to record the various times.

6.4 If the samples can only be taken after compaction has been completed, the interval between the adding and mixing of the stabilizer and water, and the taking of the sample, must be clearly brought to the attention of the laboratory if a test method which requires this information is used.