

ENGINEERING DIRECTIVES AND STANDARDS

Volume	Chapter	Section	Directive Number	Effective Date
III	5	1	3	1/4/2001

SUBJECT: MATERIAL MEASUREMENT BASED ON TRUCK BED MEASUREMENTS

- 1. PURPOSE.** The purpose of this directive is to establish a uniform policy for measuring and payment of material based on truck measurement for all DOTD projects.
- 2. POLICY.** It will be the policy of the Department to measure materials by weight or volume when truck bed measurement is specified in the contract. At the contractor's request, the project personnel may allow measurement by weight and using established weight-volume conversion factors, maintained by the Materials Section converting the weighed quantity to volume.

In any event, the measured quantity will be as follows:

- A. Weight Measurement** - The project personnel will calculate the weight required to give the legal payload (EDSM III.1.1.12) to the closest 0.1 cubic yard. This weight will be used to issue tickets, and both the weight and volume will be shown on haul tickets.
- B. Volumetric Measurements** - The Materials Administrator and the District Lab Engineers will jointly maintain a statewide database listing all trucks and their incremental volumes in increments of 0.1 cubic yard in accordance with EDSM III.1.1.12. This listing will also contain the legal payloads for each certified truck.

The certified trucks will not require re-measurement but will be checked on a random basis to insure that the beds have not been modified. In case trucks that have not been certified are to be used, the procedure given in EDSM III.1.1.12 will be followed after the truck beds are measured to determine the volume.

The practice of increasing the original capacity of a truck by use of several narrow wooden strips will not be permitted. Any increase over the original capacity must be accomplished by use of a single increment, securely fastened to the bed by means of bolts or welded metal plates. Nailing will not be acceptable.

It will be the responsibility of the Project Engineer to see that all trucks are measured by competent personnel. Receipt of materials will be made at the point of delivery, and the contractor will strike off and level the load.

It is the intent of this policy to require corroboration of all quantities. When materials are purchased from producers, a sales ticket from the producer showing the number of cubic yards loaded, the vehicle number and the project number must be secured from the driver before the Department's haul ticket is handed over. These sales tickets along with the duplicates of the Department's tickets must be stored at the Project Engineers Office for a period of three years after "Final Acceptance" of the project. In cases where contractor's or vendor's invoices are used instead of haul tickets and sales tickets, they must also be stored at the Project Engineer's Office as above.

Trucks will be measured to an accuracy of 0.1 cubic yard. Tickets will be issued to the nearest 0.1 cubic yard below the actual measurement. As an example, if a truck measures 4.36 cubic yards, a ticket for 4.3 cubic yards will be issued.

The truck measurements and tickets should be properly prepared in conformance with these instructions and the Construction Manual.

- 3. ENFORCEMENT OF LEGAL WEIGHT REQUIREMENTS:** The legal payloads and acceptance of materials in excess of these loads will be in accordance with EDSM III.1.1.12.

4. **PRIOR ISSUANCES.** This memorandum supersedes EDSM No. III.5.1.3., dated 02/13/81.
5. **EFFECTIVE DATE.** This directive will be effective immediately upon receipt.

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CHIEF ENGINEER