

OVERWEIGHT POLICY

5-591.380

CONTRACT ADMINISTRATION MANUAL

General

- This policy will apply to all routes, including 9 and 10-ton routes.
- The allowable legal gross weight is defined as the vehicle(s) licensed gross weight plus the tolerance provided in Minnesota Statutes § [168.013](#) or the gross vehicle weight provided by Minnesota Statutes §[169.824](#), whichever is less.
- In no case will the allowable legal gross weight exceed 80,000 lbs.
- No payment will be made for any material in excess of the allowable legal gross weight. Any deduction from payment may be made during the life of the contract.
- When discovered at the point of loading, any loads in excess of the allowable legal gross weight shall have material removed to bring the actual gross weight down to the allowable legal gross weight. No scale ticket will be issued or released until this is done.
- The Project Engineer will check to see that the contractor has complied with the provisions of Specification 1513 as it relates to completing a Weight Information Card for each truck hauling. These cards will be spot Group checked by randomly selecting cards and checking all the information on the card for accuracy. Once the accuracy of the information has been established, the engineer will compute the allowable legal gross weight for each truck using the method in part B of this section. If the information supplied on these cards (including the gross weights) is determined to be correct, the information on the remaining cards will be assumed to be correct. However, the Project Engineer may, at any time during the project, randomly select trucks to verify the information supplied on the Weight Information Card.

Method of Determining Allowable Legal Gross Weight (GVW)

The allowable legal gross vehicle weights shall be the least GVW obtained by applying each of the different methods shown below.

- The gross vehicle weight obtained from the Minnesota Gross Weight Table. Consideration must be given as to the legal axle limits of the highway involved. Spring posting restrictions require another chart that may be obtained through the Resident Office.
- The amount of current vehicle licensed gross weight plus 4% or 1000 pounds, whichever is greater.
- The Gross-Vehicle Weight obtained by combining the totals of groups of axles utilizing the weight chart and the portion of that law requires a maximum of 600

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lbs. per inch of tire width on the steer axle (2 axles maximum) and a maximum of 500 lbs. Per inch of tire width on all other axles.

Examples that you may encounter:

1) The vehicle is a tandem axle truck with a spacing of 19 feet from center of the first axle to the center of the last axle, the tandem axle group has dual 10.00 x 20 tires and the front axle has single 11.00 x 20 tires (10:00 series = 10 inch wide & 11:00 series = 11 inch wide).

- Gross vehicle weight from the weight chart (3 axles with 19' spacing) = 50,500 lbs.
- The vehicle is licensed for 61,000 lb., 4% of 61,000 lbs. = 2,440lbs. Therefore: 61,000 + 2,440 = 63,440 lbs.
- Gross Vehicle Weight from the total of axle groups as shown below: 47,200 lbs.

Front Axle 13,200 lbs. Obtained by multiplying 600 lbs. x 22 inches total front axle tire width. Tandem axle group maximum is 34,000 lbs. obtained by using the weight chart column for 2 axles Even though the tandem axle group has a total of 80 inches of tire width (80 x 500 = 40,000lbs). It exceeds the 34,000 lbs. shown in the weight chart; therefore, the 34,000 lbs. must be used.

Keep in mind; the lowest number is always the limiting factor. Therefore, the allowable legal gross vehicle weight for this unit is 47,200 lbs. (13,200 + 34,000.)

2) The vehicle is a 5-axle flow-boy with an overall spacing of 43 feet from center of the first axle to the center of the fifth (last) axle and spacing of 30 feet from the center of the second axle (lead axle of the tractor tandems) to the center of the fifth (last) axle with all 10.00 x 20 tires on a ten ton route. (GVW is 73,280 lbs. On 9-ton axle limit route)

- Gross vehicle weight from the weight chart. (5 axles with total of 43 feet spacing) 75,000 lbs.
- The vehicle is licensed for 83,000 lbs., 4% of 83,000 lbs. = 3,320 lbs. Therefore, 83,000 + 3,320 = 86,320 lbs.
- Gross vehicle weight from the total axle groups as shown below: 74,000 lbs.

Front Axle 12,000 lbs. Obtained by multiplying 600 lbs/inch x 20 inches total front axle tire width.

Combined drive tandem axle group plus trailer tandem axle group is limited to 62,000 lbs., that is obtained by referring to the 4 axle column of the weight chart for 30 feet

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spacing. (Note that each tandem by itself theoretically could carry 34,000 lbs. for a total of 68,000 lbs., however the weight chart specifically does not allow a total of 68,000 lbs. on these axles unless the overall spacing of this 4 axle group is 36 feet or greater.) The allowable legal gross vehicle weight for this unit is 74,000 lbs. Based on 12,000 on steer plus 62,000 on the 4 load-carrying axles with neither tandem exceeding 34,000.

ADDITIONAL REQUIREMENTS

MN § 169.822 subd. 6 defines tire width as the manufacturer's width as shown on the tire or the width at the widest part of the tire excluding protective side ribs, bars and decorations. The Manufacturer's tire width can be obtained from a tire spec book or by noting the first 2 to 4 digits of the full tire marking, i.e., 11:00 series tire is deemed to be 11 inches wide. In addition, the manufacturer's tire weight rating must never be exceeded.

The maximum of any axle is 18,000 lbs. on a 9-ton road and 20,000 on a ten-ton road, regardless of tire width.

For a tri-axle to be legal, the pressure varying mechanism for the tri-axle must be outside the cab. The raising and lowering device may be inside the cab.

Additional Policies/Procedures

1. Net Weight automatic scaling/Print out Operation

The tare weights supplied by the contractor on the Weight Information Cards are to be used in computing the actual gross vehicle weights from the net weight scale tickets. These tare weights shall be verified by random checks, during the duration of the project, at a certified scale of the contractor's choice.

2. For loads that are measured for payment by loose volume, the following shall be the Mn/DOT policy.

- a. Tare Weight: Same as 1 above.
- b. The difference between the tare weight and allowable legal gross weight will be the net weight to be used in determining the pay quantity.
- c. The weight per cubic foot of the material to be hauled must be determined. This may be done by the following method:
 - Load tared truck with the material to be hauled and weigh on an acceptable scale.
 - Determine volume of the truck box that the settled loose material is occupying.

- Divide the net weight of material by the determined volume to obtain the weight per cubic foot of material.
 - Alternate methods of determining the weight per cubic foot of material considered acceptable by the Project Engineer may be used.
- d. The net weight divided by the determined material weight will be the maximum volume to be used for pay quantity.
 - e. A marker shall be placed on the side of the box to correspond to that volume or a lesser volume.
 - f. The measurements that correspond to the marked volume being used will be recorded on the Computation of Truck Box Capacity form and the contractor will be notified of that volume to be used for pay purposes.
 - g. The above procedure will be followed for each type of material (granular borrow, topsoil borrow, etc.) to be measured by loose volume measurement. If this procedure is followed, it is not necessary to process a Change Order for a change in method of measurement. The fact that this procedure was followed in determining the allowable box capacity shall be noted on the Computation of Truck Box Capacity form. This only applies to loose volume determinations. Spot checks of the loads, to ensure conformance with the above-determined volumes, will be conducted as directed by the Engineer as provided for in Mn/DOT Specification 1901.5C.
3. For loads that are not measured for payment by weight, and the net weight of the load is known, such as concrete ready-mix trucks, concrete batch trucks, bituminous distributor, or other similar vehicles, the following shall be Mn/DOT policy.
 - a. Tare Weight: same as 1 above.
 - b. The difference between the tare weight and allowable legal gross weight will be the net weight allowed to be hauled.
 - c. Tickets or invoices certifying the material will not be issued for any loads known to exceed the allowable legal gross weight.
 4. For loads that are not measured for payment by weight and the net weight of the load is not directly known, the following shall be Mn/DOT policy.
 - a. Loads will be randomly selected at the Project Engineer's discretion to check if loads are within legal weight requirements.

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- b. Loads shall be weighed on an approved scale at the Contractor's expense or weights may be checked by procedures outlined for L.B. measurements.
- c. Should the contractor persist in hauling overweight loads the State Patrol or appropriate law enforcement agency may be contacted to determine action to be taken. [Minnesota Statute 169.85](#)

Gross Weight Table – [Minnesota Statute 169.824. Subd. 1](#)