

## POLICY ON TIRE LOADING

The legal tire loading on a power unit steering axle or axle group is 600 pounds/inch of tire tread width. The legal tire loading on all other axles is 550 pounds/inch of tire tread width. Tire loading is calculated by taking the number of tires on the axle or axle group and multiplying by the nominal tire tread width in inches. Metric tire sizes are converted to inches by taking the first number in the metric tire size and multiplying it by 0.0394.

High tire loading can cause excessive damage to paved roadway surfaces and bridge decks. Usually this damage begins at the bottom of the pavement structure (includes base and sub-base materials) and is not immediately apparent. In order to minimize this damage the following guideline is utilized for the maximum allowable distances that certain overweight loads with higher tire loading may be permitted to travel:

<u>Tire Loading (pounds/inch tire tread width)</u>	<u>Maximum Distance (miles)</u>
over 1000	5 **
over 900 and up to 1000	10 **
over 800 and up to 900	15 **
over 750 and up to 800	25 **
over 700 and up to 750	50 *

\* Reduce tire air pressure to 70 psi. For the most common truck tire size of 11" we will use 705 instead of 700 pounds/inch tread width. Max hwy speed is 35 MPH

\*\* Tire loadings greater than 750 will go into Sue. The psi for these will be determined individually for each move because the route will be a factor. \*\*

Exceptions to this policy may be granted on a one time one way only basis for emergency situations or when the move is approved after analysis by Frank Richards, Pavement Management Engineer – Juneau 465-3900. Typically pavement analysis will require a 24 hour lead time. In addition, a one time move may be allowed when future remedy is guaranteed in writing. Future remedy means that additional tires or tires with greater tread width will be installed or that some part of the equipment will be permanently removed to reduce the weight and the corresponding tire loading to within allowable parameters.

\*\* NOTE: If Sue or Scott are not available to review moves with tire loading greater than 750, then issue the permit using the old system of "...reducing cold tire air pressure by 25% (hot, by 30%) if travel is more than ½ of max distance