READY MIXED CONCRETE TRUCKS

Seasonal Load Restriction (SLR)

Concrete trucks have a one-of-a-kind configuration that reduces infrastructure and environmental impacts.

Today's concrete trucks axle, tire and engine configuration did not exist when the original studies related to road damage during spring conditions were done 40 years ago.



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A concrete truck configuration shifts the centre of gravity rearwards with additional load size reducing front axle weight. This is different than any other heavy truck because as load size increases in a concrete mixer weight is transferred to the rear axles.

Tire pressures and contact loads are lower by 22% to 25% because a concrete truck's standard vocational tires distribute the weight of the truck and load over a larger footprint. This greatly reduces truck and tire load impact on the road which translates into less road damage.



Electronic engines, along with lower emission fuels are common place with concrete trucks. These greener technologies help to reduce GHG emissions.

EVERY ADDITIONAL TRIP CONTRIBUTES TO INCREASED GHG

Trucks used in the concrete industry are unique – only delivering product to a project for initial construction. The perishable nature of concrete also means that the distance travelled is relatively short compared to other heavy trucks.

Every additional kilometer driven by ready mixed concrete trucks forced to make additional trips because of Seasonal Load Restrictions contributes to increased GHG and air contaminants. The RMCAO study estimates an 800% increase in number of truck trips, fuel used and GHG and CO₂ contributions when seasonal load restrictions of 5,000kg/axle are in force.



Dynamic Weight Loading





CONCRETE TRUCKS MAKE UP SMALL % OF HEAVY TRUCKS IN ONTARIO

	All Heavy Trucks	Concrete Trucks	% of Total
Number of Trucks	108,936	3,200	3 %
Estimated total annual distance travelled	8,497,008,000 km	80,000,000 km	1%

Source - Canadian Vehicle Survey 2005, National Resources Canada

Additional trips, rerouting and travel time for a concrete truck during SLR, especially in densely populated areas, can result in increased congestion and negative consequences for the economy. This can include immediate productivity losses for the local business community and the public due to increased traffic congestion.

CHANGE NEEDED TO SEASONAL LOAD RESTRICTION FOR CONCRETE TRUCKS

While protecting roads from physical damage during the spring thaw is important, a seasonal load restriction of 5,000kg/axle (nine truck trips) creates more trucks on the road, greater environmental impacts and real economic impacts than allowing a concrete truck to travel at 6,500kg/axle (two truck trips).







A CALL TO ACTION

Significant environmental, economic and road damage can be averted by making a simple change to your municipal by-law when it comes to allowances for ready mixed concrete trucks.

Consider changing your by-law to include the following amendment:

Exemption to reduced load period: No ready mixed concrete truck, certified by the RMCAO, shall be operated upon any designated highway where the weight upon an axle exceeds 6,500 kilograms.

CONCRETE

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even smarter than you think