

Additional Information

Proposed Amendments to Ontario Regulation 413/05, Vehicle Weights and Dimensions – For Safe, Productive, Infrastructure-Friendly (SPIF) Vehicles

Background

Since the last major amendment to Regulation 413/05, Vehicle Weights and Dimensions (VWD) – For Safe, Productive and Infrastructure-Friendly (SPIF) Vehicles, completed in January 2016, some alternative applications of existing technologies, as well as new technologies, have come to the market. The regulation requires updating to allow industry to take advantage of these innovations. Use of wide base single (WBS) tires would be proposed at par with dual tires on single axles. Stinger-steer auto carriers would be allowed to be loaded with boats. Certain configurations currently allowed under special vehicle configuration (SVC) permit would be accepted as part of the regulation, removing the need for permits. Technical issues with the control for liftable axles would be adjusted to have manufacturers provide a better and more workable system toward road safety.

(1) Modify Weight Allowances for Single Axles Equipped with WBS Tires

WBS tires are already at par with dual tires on most of the vehicle configurations allowed in Ontario. However, configurations with single axles equipped with WBS tires restrict the weight allowance to 9,000 kg, while allowing such axles at 10,000 kg if equipped with dual tires. In addition to this, WBS tire sizes have increased, facilitating the need to increase allowable weight on single axles only, as tandems, tridems, and quad axle have already been allowed such a measure since 2008.

The Reconciliation and Cooperation Table (RCT) identified the need to harmonize the weight allowance for WBS tires throughout Canada, facilitating trade among the provinces while reducing trade barriers. During the annual meeting of the interprovincial Task Force on VWD Policy that took place in November 2018, it was agreed to allow WBS tires at par with dual tires, harmonized nationally.

The proposed allowance affects a number of SPIF configurations and all of them would be adjusted to let single axles equipped with WBS tires at the same axle weight as if equipped with dual tires. This measure exceeds all other Canadian jurisdictions while also harmonizing with Quebec, which would remove trade barriers between the two provinces for those carriers operating configurations equipped with single axles.

(2) Authorizing Stinger-Steer Auto Carriers to Carry Boats

The US allows the use of stinger-steer auto carriers for the transportation of boats. In response to requests from stakeholders in Canada, the interprovincial Task Force on VWD Policy agreed to allow the loading of boats under the same weight and dimensional limits applicable to the carriage of vehicles. The Ministry is proposing to

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include such allowance in regulation, as it has already been in-place in policy for a number of years. Ontario was the first Canadian jurisdiction to allow such a practice, as detailed by stakeholders in the fiberglass boat manufacturing industry.

(3) Elimination of Certain SVC Permit Requirements

In early 2018, the Ministry introduced SVC permits allowing the operation of long wheelbase tractors, over-length saddlemount configurations, and the use of smart lift axles on semitrailers under specific restrictions on the axle(s) to lift.

The three SVC proposed to be moved into regulation are:

- Tractors with long wheelbase, up to 6.8 metres, on designated tandem tractor semitrailer configurations currently not privy to such an allowance;
- Saddlemount configurations with 2 or 3-Vehicles up to 27.5 metres in length; and
- Smart Lift Axles on designated tractor semi- and double-trailers.

(3.1) Longer Wheelbase Tractors

Long wheelbase tractors facilitate the accommodation of technologies required to meet air quality and GHG emissions mandates, alternative fuel platforms that require more on-board space (fuel tanks, batteries, etc.) than diesel platforms, and more comfortable sleeper berths for drivers. Further, the extended wheelbase limit aids in accommodating electric Auxiliary Power Unit (APU) technology, natural gas fuel platforms, anti-idling devices, and duel fuel conversion kits.

Prior to introducing the permit regime other vehicle configuration were already allowed the use of longer wheelbase tractors within regulation. The proposed addition to other configurations helps carriers standardize their tractor fleet, reducing capital costs.

However, the longer tractor requires the semitrailer to reduce the wheelbase so as maintain the required lane space when taking corners, so to maintain road safety. Via the SVC permit regime, it has been appreciated that the trade-off between tractor and semitrailer wheelbase is an effective way to allow long wheelbase tractors while maintaining road safety, and is welcomed by Ontario truck carriers.

(3.2) Longer Saddlemount Configurations

Allowing 3-vehicle saddlemounts to operate from the current 25.0 metre overall length to 27.5 metres in length, facilitating the accommodation of heavy truck-tractors requiring longer length limits due to alternative fuel platforms. This measure increases productivity in the newly manufactured truck-tractor sector, as less trips would be required to move the same number of vehicles across the province.

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(3.3) Smart Lift Axles (SLAs)

SLAs would be allowed on tandem, tridem and quadruple axles on designated tractor semi- and double-trailers. The systems automatically lift one, two or three of the axles, depending on the type of axle, when the remaining deployed axles come within the allowable axle weight limits. This reduces drag on the vehicle, thus correlating to fuel savings for carriers, and reduced emissions in relation to such fuel savings.

(4) Clarifying the Lift Axle Control Provision

The amendment would clarify that the exemption to allow manual controls on designated trucks and tractors to lift a self-steering axle in emergency situations must be designed to activate separately and independently of the 4-way flashers, only while the vehicle is traveling under 60 km/h. The switch should be designated as an Emergency Lift Axle Override Control, whereby when tractive effort is required while under low-speed, the axle can be lifted so to provide such traction. Above such a speed, when an axle is raised, braking ability and control can be compromised. If the vehicle is experiencing an emergency event as described, other road users will have the ability to appreciate via the emergency/hazard flashers on the vehicle. Further, this will give the ability for trucks to more rapidly lift the axle when required, including when exiting the highway to enter driveways, which has been an issue noted by the aggregate and other sectors of industry. In addition, the axle would be required to re-deploy once the vehicle stops, turns off or when the lift axle has been raised for 3 minutes.