

Frequently Asked Questions Regarding Dump Body Safety Devices

The following answers are based on the *Regulation respecting dump body safety devices* as published in the *Gazette officielle du Québec* on April 24, 2019.

1. What is considered a dump body within the meaning of the Regulation?

For the purposes of the Regulation, a dump body is a metallic body whose upper part is generally open and intended for the transportation of bulk materials.

2. Which vehicles are subject to the Regulation?

All heavy vehicles (trucks, trailers, tractor-trailers) with a dump body with a height exceeding 4.15 m when the dump body is raised at its highest position are subject to the Regulation. The Regulation also covers combinations of road vehicles with a gross combination weight rating of 4,500 kg or more (for example, a vehicle with a gross vehicle weight rating (GVWR) of 3,000 kg hauling a trailer with a GVWR of 2,000 kg, for a total of 5,000 kg), if the height of the body exceeds 4.15 m.

3. Are trucks registered outside Québec also subject to the Regulation?

Yes. All covered vehicles operating in Québec must be equipped with a safety device, regardless of their origin.

4. Are trucks equipped with roll-on/roll-off systems subject to the Regulation?

Yes, vehicles equipped with removable dump bodies, designed to be rolled on and off, are subject to the Regulation because they are equipped with a lifting system allowing the container to be raised.

5. Are dumper-type tank trucks subject to the Regulation?

No, dumper-type tank trucks are not covered by the Regulation. A tank is a closed container with a cap or lid that provides some level of sealing. Because a dump body is open, it is not comparable to a tank.

6. Are heavy vehicles that operate only off road (quarries, private properties, etc.) and do not cross public roadways subject to the Regulation?

No, heavy vehicles that **do not cross any public roadways** are not covered by the Regulation. However, these vehicles must be registered for off-road use only and bear a licence plate with a “V” prefix.

7. Are off-road heavy vehicles that occasionally cross public roadways subject to the Regulation?

Yes, off-road heavy vehicles that occasionally **cross public roadways**, even at 90°, are covered by the Regulation **even if they are registered for off-road use only**.

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8. Are farm tractors, with or without a cab, subject to the Regulation if they are pulling a trailer with a dump body whose height can exceed 4.15 m?

Yes, if the combined GVWR of the farm tractor and trailer is 4,500 kg or more. A farm tractor's GVWR corresponds to its net weight.

9. If a tractor truck is hauling a dump body, but does not have the necessary equipment to activate the dump body, does it have to be equipped with the audible warning device and warning light?

No. However, the dump body must be outfitted with the part of the system that detects when it is not completely lowered and the cabling required to connect it.

If the dump body being hauled is equipped in such a way that it can be raised independently from the tractor truck, the tractor truck must be equipped with the audible warning device and warning light.

10. Are temporary detachable equipment and accessories, such as plywood panels installed for snow removal, taken into account when measuring the height of the vehicle?

Yes. The aim is to avoid all contact with infrastructure, the minimum clearance of which is 4.15 m. For this reason, any permanent or temporary equipment or accessories that may cause the total height of the vehicle to exceed 4.15 m when the dump body is lifted must be taken into account.

11. Was April 18, 2019 the deadline for outfitting vehicles that are subject to the Regulation?

No, April 18, 2019 is the date on which the new section 257.1 was introduced into the *Highway Safety Code*. Vehicles that are subject to the Regulation will have to be equipped with dump body safety devices by September 1, 2020, which is the date on which the Regulation comes into effect.

12. Do safety devices have to be approved by the SAAQ?

No, the SAAQ does not approve any products or installers. You must make sure that the devices are compliant with the *Regulation respecting dump body safety devices* as published in the *Gazette officielle du Québec* on April 24, 2019.

13. Can readings of the dump body's position be taken using the cylinder's hydraulic pressure or the dump body's lift command?

No, readings must be taken without any intermediaries.

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14. How should the new section 4 of the Regulation be interpreted?

Section 4 requires that the system be able to self-verify that it is functioning. Therefore, in case the dump body's position signal is lost, due to a poor connection or a broken sensor, the device will switch on as though the dump body were not completely lowered.

15. What does “completely lowered” mean? Is there some leeway?

Yes, a bit of leeway is acceptable to avoid the system switching on during normal movements of the chassis due to surface irregularities.

16. Can the warning light and audible warning device be replaced by another device that prevents the vehicle from being operated if the dump body is not completely lowered?

No, section 257.1 of the *Highway Safety Code* and the Regulation do not provide any option for replacing the safety devices described therein.

17. Can the warning device flash or emit a sound at a rate outside of the established range of 60 to 120 times per minute when the system senses a defect, as set out in section 4 of the Regulation?

No, but the warning sound and the flashing light do not have to be produced at the same rate when the system indicates that the dump body is not completely lowered. However, both must be produced at rates between 60 and 120 times per minute.

Audible warning device

18. Does the audible warning device have to switch on as soon as the dump body is being raised?

Yes, but it is preferable to give it a bit of leeway to prevent the warning device from switching on during normal movements of the dump body due to surface irregularities.

19. Is there a mandatory sound level?

No, but the warning device has to be audible in the driving compartment when the truck's engine is on in a workplace environment, such as on a construction site or at the entrance of a quarry.

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20. Does the audible warning device have to be installed in a specific location?

No, but it must be audible from inside the driver's compartment when the truck's engine is on in a workplace environment.

Only the audible warning device's sound level will be checked by a peace officer.

Flashing red warning light

21. Does the warning light have to be at least a certain size?

No, but it must be visible in full sunlight.

22. Can the warning light be integrated into the dashboard?

Yes, but it must have the following characteristics:

- be placed in the upper part of the dashboard or on top of the dashboard;
- be visible when the driver is in a driving position with his or her seatbelt fastened;
- be positioned in such a manner that the driver does not need to turn his or her head to see it;
- not be hidden by the steering wheel.

23. Can the warning light be placed in such a way that the projected light is visible, without the light source being visible?

No. The warning light must be visible, even if the light that it emits illuminates the entire cab.

Head-up displays (HUD) projected onto the windshield are not allowed.

24. Can the brightness of the warning light be adjustable, so as to be visible during the daytime without being blinding at night?

Yes, but brightness must adjust automatically, depending on surrounding outdoor light levels (not the light levels in the cab). However, make sure that driving under street lights will not affect the warning light's brightness.

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25. Can the warning light be represented by a red display on a screen (cathode-ray screen, LCD, DEL or other)?

Yes, the warning light is not required to be a bulb or an actual light. However, it must comply with the requirements set out in the Regulation:

- be placed in the upper part of the dashboard or on the dashboard;
- be visible to the driver when he or she is in a driving position with the seat belt fastened;
- be placed in such a way that the driver does not need to turn his or her head to see it;
- must not be hidden by the steering wheel;
- must be visible at all times, regardless of lighting conditions.

Speed

26. What is the tolerance regarding a vehicle's speed before the warning device switches on?

The audible warning device and the flashing red warning light must switch on as soon as the dump body is being raised, regardless of speed. However, the audible warning device may turn off after 5 seconds. It must switch on again as soon as the truck begins moving or its speed reaches 12 km/h.

Important: the accuracy of the method used to measure speed should be considered. For example, if the accuracy margin is 2 km/h or 10%, the installer must set the activation threshold at 10 km/h.

It is also possible to have the system switch on at speeds below 12 km/h.

27. Is the warning device required to turn off after 5 seconds and turn back on once the truck reaches a speed of 12 km/h?

No, the warning device can remain on even when the vehicle is stopped and the engine is on. This additional feature, which is not mandatory, is meant for vehicles that move at reduced speeds during unloading, to limit inconveniences to the driver.

28. Can the vehicle's speed only be determined using the vehicle's engine control unit?

No, speed may also be measured using any accurate independent technology from the vehicle's ECU. Weather conditions or going through a tunnel can disturb the functioning of certain technologies. Any loss of the signal used to measure speed must cause the warning signals to switch on if the dump body is not completely lowered.