

# RAISED DUMP BODY

## LIGHT AND SOUND WARNING SYSTEM Questions-Answers

The answers are based on the draft regulations republished on 29 August 2018 for comments. An update may be required when publishing the final version.

### 1. What vehicles are targeted?

All trucks, trailers and semi-trailers with a dump body height exceeding 4.15 m when the dump body is raised to its maximum position. The Regulations also apply to combinations of vehicles with a combined weight of 4,500 kg or more and a height exceeding 4,15 m (for example, a pick-up truck towing a dump trailer).

### 2. Are trucks registered outside Quebec also targeted?

Yes. All targeted vehicles that circulate in Quebec must be equipped with this device, regardless of their origin.

### 3. Are « roll-on, roll-off » tipper vehicles also targeted?

Yes, vehicles equipped with removable dump bodies, designed to be deposited and then recovered, are targeted because they are equipped with a lifting system allowing the dump body to tilt.

### 4. Are tipping tank trucks covered?

No, tipping tank trucks are not targeted as the tank cannot be considered assimilated to the tipper.

### 5. Will there be a tolerance to the deadline of April 18, 2019?

No, April 18, 2019 is the introduction date of new section 257.1 in the Highway Safety Code. It is on the date of entry into force of the Regulation, which is September 1st 2020, that concerned vehicles will be required to be equipped with dump truck safety devices.

### 6. Must we install a safety device approved by the SAAQ?

No, the SAAQ does not approve any product or installer. You must ensure that the system meets the requirements of the Tipper Safety Devices Regulations as published in the Gazette officielle du Québec dated April 24th 2019.

### 7. Can the device read the position of the dump body on the hydraulic pressure of the cylinder or on the lifting control of the dump body?

No, the device must take its reading without intermediary.

### 8. How should the new section 4 of the Regulations be interpreted?

Article 4 requires the system to be able to self-check its operation. Thus, in case of loss of the signal of the bucket position, by a bad connection or a broken sensor, the device will behave as if the bucket was not completely lowered.

### 9. What is meant by completely lowered? Is there some tolerance?

Yes, it is possible to provide a small clearance to prevent the system from engaging with normal chassis movements due to irregularities in the surface.

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### Audible warning

#### 10. Should the audible warning be heard as soon as the bucket starts to rise?

Yes, but it is preferable to provide a certain tolerance (clearance) to prevent the audible warning to come from buzzing during movements of the bucket due to irregularities of the ground.

#### 11. Is there a noise level in decibels to respect?

No, but it must be possible to hear the audible warning inside the operator's cab when the truck's engine is running in a work environment, such as around a construction site or at the entrance of quarry.

#### 12. Must the audible warning device be installed at a specific location?

No, but it must be possible to hear it inside the cockpit when the truck engine is running in a work environment.

Only the audible warning device's sound level will be verified by a police officer or a road vehicle audit agent.

### Speed alert

#### 13. What is the tolerance for the speed at which the vehicle can travel before the safety device activates?

The audible warning and the flashing red light should come on as soon as the bucket starts to rise, regardless of the speed. However, the audible warning may turn off after 5 seconds. It will have to be activated again as soon as the truck starts moving or its speed reaches 12 km/h.

Attention: the accuracy of the means used to measure the speed must be taken into account. For example, if the accuracy is 2 km/h or 10%, the installer will have to adjust the activation threshold to 10 km/h.

It is also possible to choose a speed below 12 km/h from which the system will restart.

#### 14. Must the security device stop after 5 seconds then resume from 12 km/h?

No, the security device can work even when the vehicle is not moving and the engine is running. This additional functionality, which is not mandatory, targets vehicles which, in order to limit the inconvenience to the driver, must move at a reduced speed during unloading/shouldering.

#### 15. Does the vehicle speed need to be obtained from the vehicle's ECU or engine control unit?

No, speed measurement can be done with any reliable technology independent of the vehicle's ECU. It should be noted that the weather conditions or the passage of the vehicle in a tunnel may disrupt the operation of certain technologies. The loss of the signal used to measure the speed must then restart the safety devices if the bucket is not completely lowered.

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### Flashing Red Indicator Light

**16. Must the Indicator Light have a minimum dimension?**

No, but it must be visible in daylight.

**17. Can the indicator light be integrated in the dashboard**

- be placed in such a way that the driver does not have to turn his head to see it;
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**18. Can the indicator light be placed in such a way that the projected light is visible but the source is not?**

Yes, but the intensity adjustment must be done automatically, depending on the ambient light outside (not in the cabin). However, it must be ensured that the passage under lampposts will not affect the light intensity of the indicator light.

**19. Can the intensity of the indicator light be variable so that it is visible during the day without being blinding at night?**

Yes, but the intensity adjustment must be done automatically, depending on the ambient light outside (not in the cabin). However, it must be ensured that the passage under lampposts will not affect the light intensity of the indicator light.