

## OVERVIEW

### **TITLE: Warning signal devices on waste and recycling trucks**

Part 16 Mobile Equipment

New section 16.8.1, Warning signal device – extended component

#### **1. WHAT IS THE NATURE OF THE PROBLEM TO BE SOLVED?**

There have been a number of incidents investigated by WorkSafeBC in the past five years where mobile wastes and recyclable material collection, transportation and compaction equipment has contacted overhead obstructions or overhead wiring because the vehicle was being driven with some part of its equipment in a raised position, above legal load height limits. One of these occurrences resulted in a fatality. In these incidents, the driver appears to have been unaware the vehicle was travelling with the equipment in a raised position. There is a safety standard for this type of equipment that requires warning signals be provided in the operator's cab to indicate a part of the equipment is in a raised position. In the incidents investigated, the equipment did not have such warning devices or the devices were not functioning.

#### **2. WHAT IS THE PURPOSE OF THE PROPOSED AMENDMENTS?**

To add to the Occupational Health and Safety Regulation a provision requiring mobile wastes and recyclable material collection, transportation and compaction equipment have visual or audible warning signals that meet the requirements of clause 7.2.14.1, Warning signals in *ANSI Standard Z245.1-1999 Mobile Wastes and Recyclable Material Collection, Transportation, and Compaction Equipment—Safety Requirements*. This clause states “A visual or audible warning signal or both, shall be provided in the cab to indicate when lifting mechanisms, top door covers, body, tilt frame, or tailgate are extended above the minimum overhead clearance requirements, or which would create a hazardous driving condition during transit. Visual devices, when used, shall be located within the drivers scan. Audible warnings, when used, shall be distinct.”

#### **3. SOURCE OF REQUEST**

WorkSafeBC Investigations Division (Lessons Learned)

## PART 16: MOBILE EQUIPMENT

### GENERAL REQUIREMENTS

Warning  
signal device  
– backup  
alarm

- 16.8 Mobile equipment in which the operator cannot directly or by mirror or other effective device see immediately behind the machine must have an automatic audible warning device which
- (a) ~~activates whenever the equipment controls are positioned to move the equipment in reverse, and~~
  - (b) ~~if practicable, is audible above the ambient noise level.~~

**If an operator of mobile equipment cannot directly or by a mirror or other effective device see immediately behind the mobile equipment, the mobile equipment must not be used unless the mobile equipment has an audio warning device that**

- (a) provides a signal to people in the vicinity that, if practicable, is audible above the ambient noise level in the workplace where the equipment is being used, and**
- (b) is activated automatically when the equipment controls are positioned to move the equipment in reverse.**

Warning  
signal device  
– extended  
component

- 16.8.1
- (1) If mobile equipment is used to collect, transport or compact waste material, recyclable material or both, the mobile equipment must have a visual or audio warning device that**
    - (a) provides a signal to the operator of the mobile equipment when a lifting mechanism, top door cover, body, tilt frame or tailgate component of the mobile equipment is extended in a manner that**
      - (i) is likely to contact an overhead obstruction when the mobile equipment is in use, or**
      - (ii) creates a hazardous condition, and**
    - (b) meets the requirements of subsection (2) or (3), whichever is applicable.**
  - (2) If a visual warning device is provided under subsection (1), the visual warning signal from the device must display within the operator's field of vision when the operator is using the mobile equipment.**
  - (3) If an audio warning device is provided under subsection (1), the audio warning signal from the device must make a distinct sound that is audible to the operator above the ambient noise level when the operator is using the mobile equipment.**

#### Explanatory Note:

There have been a number of incidents investigated by WorkSafeBC in the past five years where mobile waste and recyclable materials collection equipment has contacted overhead obstructions, including overhead wiring, because the vehicle was being driven with some part of its equipment in a raised position. One of these occurrences resulted in a fatality. In these incidents, the operator appears to have been unaware the vehicle was travelling with some part of the equipment raised above a safe position. There is a safety standard for this type of equipment that requires warning signals be provided in the operator's cab to indicate a part of the equipment is in a raised position. In the incidents investigated, the equipment did not have such warning devices or the devices were not functioning.

**PROPOSED AMENDMENTS FOR PART 16: MOBILE EQUIPMENT  
IN THE OCCUPATIONAL HEALTH AND SAFETY REGULATION**

It is proposed to add a new section to Part 16, Mobile Equipment in the Occupational Health and Safety Regulation to require mobile waste and recyclable materials collection, transportation and compaction equipment have a visual or audio warning signal device that meet the requirements of clause 7.2.14.1, Warning signals in *ANSI Standard Z245.1-1999 Mobile Wastes and Recyclable Material Collection, Transportation, and Compaction Equipment—Safety Requirements*. This clause states “A visual or audible warning signal or both, shall be provided in the cab to indicate when lifting mechanisms, top door covers, body, tilt frame, or tailgate are extended above the minimum overhead clearance requirements, or which would create a hazardous driving condition during transit. Visual devices, when used, shall be located within the drivers scan. Audible warnings, when used, shall be distinct.”

For the purposes of proposed new section 16.8.1, “using the equipment” is intended to include driving the equipment when transiting between pickup points and to and from drop off, dump and depot locations.

Proposed section 16.8.1 would not apply to a dump truck or similar vehicle with a cargo box fixed to the vehicle chassis and having a tilt hoist to allow end dumping of the contents of the box. The tilt hoist mechanism for such equipment is not a “tilt frame” as it is not used for handling different containers.

It is proposed to amend the marginal note for section 16.8 to include reference to its focus as a requirement for a backup alarm, and to amend the provision to improve clarity.

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