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Purpose of this guideline

This guideline provides information on the application of requirements for protective structures on older mobile equipment used in agriculture, as covered by sections 28.38 and 28.40 of the *OHS Regulation ("Regulation")*. [Section 28.38](#) deals with protective structures on equipment other than tractors, and 28.40, with agricultural tractors. They provide exceptions to the general requirements for installing protective structures on mobile equipment found in [section 16.21](#) of the *Regulation*.

The guideline explains what is meant by protective structures, reviews general requirements found in [Part 16](#) of the *Regulation*, and then explains the exceptions to those requirements found in [Part 28](#).

What are protective structures?

Protective structures are the structures that are designed to protect operators against falling, flying or intruding objects or materials. Examples include cabs, screens, grills, shields and deflectors. As such, they are not roll-over protective structures (ROPS), which are covered by separate requirements.

General requirements for protective structures in Part 16

These requirements are covered by the three subsections found in section 16.21. Section 16.21(1), which sets out the circumstances in which protective structures are required for mobile equipment, states:

- (1) Operators of mobile equipment must be protected against falling, flying or intruding objects or material by means of suitable cabs, screens, grills, shields, deflectors, guards or structures.

This requirement applies if there is a danger of objects or materials falling, flying or intruding into the operator's area on the mobile equipment. If, for example, a load being lifted by a piece of mobile equipment is restrained at the point at which it is being lifted so that it does not present any danger to the operator then the requirement for a protective structure at the operator's area does not apply. Or in another example, if a load can be lifted in a bucket only to an angle that does not present a danger of falling or otherwise intruding into the operator's area, then again no protective structure is needed.

Section 16.21(2) lists thirteen different standards for protective structures for various types of mobile equipment. See Part 16 of the *Regulation* for a list of the standards referenced. Some of the standards in that list have been developed by WorkSafeBC, and can be found on the WorkSafeBC web site at worksafebc.com.

Section 16.21(3) is an operational requirement, which requires the operator to leave the cab of a vehicle if a load is elevated over top of the cab, unless there is an adequate overhead protection. It states:

- (3) A worker must not remain in the cab of a vehicle while loads are elevated over the cab unless the cab is protected by an adequate overhead guard.

The protective structure exceptions found in Part 28 deal only with the installation requirements of section 16.21(1) and (2), not with the operational requirement in subsection (3). Thus, section 16.21(3) applies to all mobile equipment used in agriculture, regardless of the date of manufacture or first use. Note that the requirement for an overhead guard applies only if a load is lifted over top of the area in which the operator sits. It does not apply, for example, if a vehicle is used to lift a load up in front of that area, even if at a relatively steep angle.

Exceptions to protective structure requirements in Part 28

The exceptions to protective structure requirements found in Part 28 are discussed below. This guideline deals first with section 28.38, which addresses equipment other than tractors, and then with agricultural tractors under section [28.40](#). The separate requirements for agricultural tractors and other mobile equipment arise from the fact that protective structures on tractors were previously covered by the *Regulations for Agricultural Operations*, whereas protective structures on other equipment were not.

a) Protective structures on mobile equipment in agriculture, other than tractors

Section 28.38 of the *Regulation* states:

- (1) Other than for agricultural tractors, section 16.21(1) and (2) applies only to new equipment purchased for first use after January 1, 2006.
- (2) Despite subsection (1), the Board may require a protective structure to be installed on any mobile equipment if the design of the equipment or the circumstances of use indicate the need.

Section 28.38(1) limits the application of section 16.21(1) in agricultural operations to new equipment purchased for first use after January 1, 2006. It also limits the application of section 16.21(2), which deals with the standards that protective structures must meet.

Section 28.38(2) permits WorkSafeBC to require a protective structure on any mobile equipment in situations where the design of the equipment or the circumstances of use indicate the need to provide the operator protection from proven hazards. This includes agricultural tractors. If such a determination is made, it is expected information will be provided in an update to this guideline.

b) Protective structures on agricultural tractors

Section 28.40 of the *Regulation* states:

Section 16.21(1) and (2) does not apply to an agricultural tractor manufactured on or before January 1, 1985.

Protective structures on agricultural tractors, unlike other types of mobile equipment in agriculture, were previously regulated in the *Regulations for Agricultural Operations*. Section 28.40 maintains that earlier requirement, which applied to tractors manufactured after January 1, 1985. Agricultural tractors manufactured on or before that date are also exempt from meeting the requirements of acceptable standards for protective structures listed in section 16.21(2). For tractors manufactured after January 1, 1985, there is a [guideline for section 16.21\(2\)](#) that recognizes an SAE standard for protective structures on tractors, that was previously found in the *Regulations for Agricultural Operations*.

As noted previously in this guideline, section 28.38(2) of the *Regulation* permits WorkSafeBC to require a protective structure on any mobile equipment, including tractors, if the design of the equipment or the circumstances of use indicate the need. It is expected such information would be reported in an update to this guideline.

G28.11 Personal hygiene – Shower and change facilities

Issued January 1, 2005

Section 28.11 of the *OHS Regulation* ("*Regulation*") states:

- (1) Section 5.82(2)(a) and (b) does not apply to agricultural operations on farm land.
- (2) If work processes involving substances such as lead, mercury, asbestos, silica or pesticides are high hazard, the employer must ensure that workers are provided with adequate and appropriate shower and change facilities.

Section 28.11(1) provides an exception to the application of section 5.82(2)(a) and (b) that requires a specific configuration of showers and change rooms for general industry. To assist with feasibility in agriculture, section 28.11(2) requires that the employer ensure agricultural workers are provided with adequate and appropriate shower and change facilities when engaged in high hazard work processes with a range of substances including lead, mercury, asbestos, silica, and pesticides.

Pesticides can present a risk of skin contamination and absorption. There are a variety of pesticides used in the agriculture sector, including organophosphates, carbamates, nitrophenols, and organonitrogens.

Under section 28.11(2), shower facilities are normally considered adequate and appropriate if they permit the worker to effectively wash off any skin contaminants, in privacy and in reasonable comfort. A person can wash effectively if the volume and head pressure of the water is *sufficient* for proper cleansing, and if the temperature of the water is sufficiently comfortable to permit the worker to shower for the time necessary to wash off contaminants. The shower need not involve plumbed water supply lines. For example, the source of water may be a tank with sufficient quantity and head pressure. Appropriate facilities will also include provision of cleansing agents and means of drying the body.

A change facility is normally considered adequate and appropriate if it is a sheltered place where workers can change clothes and store personal clothing while wearing protective clothing. A "sheltered place" is normally a weatherproof building, room, vehicle, or tent that has sufficient space for workers to change in privacy and to store their clothes.

Note: Other requirements that apply to personal hygiene include:

- [Section 5.82\(1\)](#), which addresses washing facilities and laundering of protective clothing.
- [Section 5.82\(2\)\(c\)](#), which requires that the employer provide workers with time for showering and clothing change before the end of the work shift.
- [Section 5.82\(3\)](#), which addresses reduced requirements for change rooms and shower facilities in remote locations.
- [Section 6.95\(1\)](#), which lists work activities with pesticides that require provision of wash facilities, and shower facilities where there is a risk of body contamination.

DIVISION 2 – HAZARDOUS SUBSTANCES

G28.11 [Personal hygiene – Shower and change facilities](#)

DIVISION 4 – EQUIPMENT

G28.38/28.40 [Protective structures on mobile equipment in agriculture](#)

[Other Guidelines That Reference Agriculture](#)

Also note: some other guidelines that have specific reference to agriculture include:

G3.1-2 [Farm labour contractors and growers – Responsibilities and OHS programs](#)

G4.41 [Waste material in agricultural operations](#)

G4.65 [Illumination levels](#)

G5.3-8 [The application of WHMIS in agriculture](#)

G7.8-1 [Annual hearing tests](#)

G8.12/8.13 [Use of safety headgear for workers on ATVs and similar equipment in agricultural operations](#)

G11.2-5 [Fall protection in agriculture](#)

G16.21(2)-1 [Operator protective structure standards for agricultural tractors](#)

G16.23 [ROPS standards – acceptable alternate standards](#)