Using the Occupational Health and Safety Regulation in Agriculture



Farm and Ranch Safety and Health Association



WORKERS' COMPENSATION BOARD OF BC

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Foreword

There are a significant number of occupational hazards in agriculture. Hazardous activities include those often found in other industries, such as the use of chemicals, entry to confined spaces, work near rotating machinery, and the use of mobile equipment. Hazards also arise from work that is largely unique to agriculture, such as hay baling, post driving, animal handling, and the use of orchard ladders.

Compensation statistics have shown a substantial claims and fatalities picture. Measures to protect health and safety in agriculture benefit not only workers covered by the compensation system, but also other people on the farm whether they be young children, other family members, or visitors.

In 1983, the WCB extended mandatory compensation coverage to agriculture. Guidelines for health and safety were developed, but regulations were not applied.

In 1993, following consultation with the agriculture sector, a basic set of requirements was made applicable to agriculture. They included some of the core requirements from the *Industrial Health and Safety Regulation* (IHSR), along with first aid and WHMIS requirements. Some provisions on hazards in the workplace, particularly hazards specific to agriculture, were covered in the *Regulations for Agricultural Operations*. The Farm and Ranch Safety and Health Association (FARSHA) was established at this time to provide educational and advisory services to the agriculture sector on occupational health and safety.

It was intended that the requirements applicable to agriculture be reviewed at a later point, following the development of the *Occupational Health and Safety (OHS) Regulation*, which was completed in 1998. In 2004, public hearings were held on proposed amendments to make the *OHS Regulation* applicable to agriculture. The amendments were subsequently adopted and became effective on January 1, 2005.

The Board wishes to extend its thanks to all the persons in the agricultural community who have, over the years, provided advice to the WCB on agricultural regulations, including all those who have participated in public hearings.

Purpose of this booklet

This booklet provides a brief overview of how to use the *OHS Regulation* in agriculture. It is meant for farmers, ranchers, health and safety coordinators, safety committees and others concerned with health and safety in agriculture. It covers topics such as:

- How the Regulation is organized, and where agriculture fits in it. An appendix provides the text of Part 28 on Agriculture
- How the Regulation will be implemented, particularly in the first year
- An overview of the parts of the Regulation that apply to agriculture
- An outline of the requirements that are new or substantially new to agriculture, along with an appendix that gives a detailed list
- Information on how to comply with requirements on particular topics: noise exposure, confined spaces, lockout and fall protection, and
- Contact information and services available from each of FARSHA and the WCB.

1. What is the *OHS Regulation*, and how do I use it?

The Occupational Health and Safety (OHS) Regulation came into effect in April 1998 for all industries within the jurisdiction of the WCB, except agriculture. It represented an update and consolidation of previous requirements. Effective January 1, 2005, the OHS Regulation became applicable to agriculture as well.

The OHS Regulation is organized in three broad groups:

- **Core Requirements (Parts 1 4)**: These requirements deal with topics common to all workplaces, for example, application of the *OHS Regulation*, health and safety programs, workplace inspections, the right to refuse unsafe work, and general conditions in the workplace. Most Core Requirements apply to agriculture.
- **General Hazard Requirements (Parts 5 19)**: These requirements deal with health and safety hazards found in a number of workplaces, usually in higher hazard operations. Topics include chemical safety, protection against noise, vibration and thermal stress, the use of personal protective equipment, confined spaces, lockout, safety with machinery and equipment, mobile equipment, the transportation of workers, and electrical safety. About half of these requirements apply to agriculture.
- Industry/Activity Specific Requirements (Parts 20 32): These requirements apply to specific industries, such as agriculture, forestry, and construction, and to specific hazardous activities such as blasting, diving and emergency rescue. They provide hazard control information not found in the General Hazard Requirements, and may include modifications of other requirements of the OHS *Regulation* in order to make them fit with the specific industry. Part 28 deals with agricultural operations on farm land.

Finding requirements in the OHS Regulation:

To access requirements in the OHS Regulation, check the two types of tables of contents provided, which are:

- a general table of contents for the complete Regulation, which can be found at the beginning of the Regulation
- a detailed table of contents for each Part, at the beginning of each Part.

If you are accessing the Regulation on the WCB web site at **www.worksafebc.com** you can also use a search feature, which will give you locations where the search term appears in the *OHS Regulation*, the policies and guidelines used to interpret the Regulation, and Part 3 (Occupational Health and Safety) of the *Workers Compensation Act*.

See Part 7 of this booklet for more information on the use of the WCB web site.

2. How does Part 28: Agriculture fit into the OHS Regulation?

Part 28 is the industry-specific set of requirements that applies to agriculture. Much of it is based on previous regulations that applied to the sector. It is organized in four divisions:

- **General Conditions:** Dealing with various matters related to structures in the workplace, indoor air quality, drinking water, and other matters such as instruction of workers and animal handling.
- **Hazardous Substances:** Dealing with issues such as personal hygiene, anhydrous ammonia, and ventilation of buildings near manure tanks.
- **Personal Protective Equipment:** Dealing with footwear for horseback riding.
- **Equipment:** Dealing with various types of equipment including power take-offs, hay baling equipment, orchard ladders, hoists, and mobile equipment.

There are two broad types of requirements in Part 28: requirements for hazards specific to agriculture, and various modifications and exceptions to other requirements of the *OHS Regulation* to address the specific features of agricultural operations.

Examples of other requirements where modifications or exceptions apply include those for: indoor air quality, means of evaluation of some types of equipment, operating features on mobile equipment, and the transport of workers on farm land. Some of the modifications provide delayed implementation dates, and others restrict the application of requirements to new equipment. When using other Parts of the *OHS Regulation* be sure to consider whether Part 28 provides any adjustment to the requirements.

See Appendix A at the end of this booklet for the text of Part 28 of the OHS Regulation.

3. How will the OHS Regulation be implemented in agriculture?

The WCB has developed a plan for the implementation of the OHS Regulation in agriculture, in consultation with FARSHA. The plan has three main elements:

- A one year period of adjustment to the requirements from January 1, 2005 to January 1, 2006: During this period the WCB will use a consultative and educational approach to help ensure compliance with the requirements that are new or substantially new to agriculture. In addition, FARSHA will be providing educational outreach to the agriculture sector.
- **Support to FARSHA and the agricultural community on key issues:** FARSHA has identified four issues of particular interest: confined spaces, fall protection, hearing conservation/testing, and lockout. The WCB will provide support on such topics through the development of explanatory materials.
- **Communication, education, and training:** The WCB, in consultation with FARSHA, is developing various materials, including guidelines, booklets, and educational presentations, to assist with implementation. Communications updates will be provided periodically to the industry during 2005.

During the period of implementation, FARSHA is playing a key role in the development and delivery of educational materials. This includes publishing explanatory booklets, revising previous publications, and developing educational presentations for use by commodity groups and agricultural workplaces.

The WCB is responsible for interpretive materials such as guidelines, and is participating in the development of educational materials. It provides training to its staff and will provide outreach as needed to the agriculture sector.

4. What requirements in the OHS Regulation typically apply in agriculture?

The OHS Regulation deals with a range of hazards likely to be found in BC workplaces. The presence of these hazards varies from one sector to another. As a result, only some of the requirements of the OHS Regulation address hazards found in agriculture.

Most of the Core Requirements in Parts 1 to 4 deal with matters common to all industries, including agriculture. Many of the provisions in the Core Requirements previously applied in the former *Industrial Health and Safety Regulation*.

Approximately half of the General Hazard Requirements in Parts 5 to 19 of the OHS *Regulation* address hazards found in agriculture. Some of these provisions were previously found in the *Regulations for Agricultural Operations*.

Of the Industry Specific Requirements in Parts 20 to 32, typically only Part 28 applies in whole to agricultural operations. If other operations such as construction or forestry are conducted on farm land, then the associated Parts of the Industry Specific Requirements would apply. There is also a provision in Part 29 to protect flagpersons in the aerial application of pesticides, based on a previous requirement in the *Regulations for Agricultural Operations*.

5. What requirements are new or substantially new to agriculture?

Many of the Core Requirements of the OHS Regulation are based directly on the requirements that previously applied to agriculture. For example, Parts 2 and 3 and some provisions in Part 4 of the OHS Regulation deal with matters that were covered by core provisions in the *Industrial Health and Safety Regulation*. In addition, Part 3 of the OHS Regulation covers occupational first aid.

A number of the General Hazard Requirements of the OHS Regulation have their counterparts in the previous Regulations for Agricultural Operations. Examples include: occupational exposure limits, pesticides, some requirements for personal protective equipment, noise, chain saws, and ROPS on agricultural tractors. In addition, the General Hazard Requirements also cover WHMIS.

However, a number of the requirements in the OHS Regulation are either new or substantially new.

A new requirement is one that had not been present in previous regulations that applied to agriculture. Examples include hearing testing, heat stress, and mechanical lockout.

A substantially new requirement is typically one for which a provision had previously been in place, but where the corresponding provision in the *OHS Regulation* in effect contains new obligations. For example, section 8.24(8) of the previous *Industrial Health and Safety Regulation* addressed the requirement to protect workers from injuries such as back strains when lifting or carrying materials or objects. This requirement is now covered as part of the ergonomics requirements in the *OHS Regulation*. The ergonomics requirements deal with both manual handling and repetitive strain injuries, in a new format that involves steps of risk identification, assessment, and control.

If you already have an effective occupational health and safety program in the agricultural workplace, you have probably already addressed many of the new or substantially new requirements, and hence the transition to the *Occupational Health and Safety Regulation* may not involve much change.

See Appendix B at the end of this booklet for a list of new or substantially new requirements.

6. How do I implement some of the new provisions in agriculture?

FARSHA has identified four topics in the OHS Regulation that may require particular explanation: noise control and hearing conservation, confined spaces, lockout of equipment, and fall protection. Many of the provisions for these topics are new or substantially new. Some introductory information on each is provided below.

6.1 Noise control and hearing conservation

One-quarter of all of British Columbia's workers are exposed to occupational noise loud enough to damage their hearing. Noise is the most common health hazard in industry and can damage hearing at levels above 85 decibels.

Excessive noise damages tiny sensory cells deep inside your ear. The first danger sign of occupational hearing loss is the inability to hear high-pitched sounds (like children's voices). Noise can also cause ringing in the ears. At the end of a day's work, you may notice that some sounds have become muffled or indistinct.

Hearing loss can build up so gradually that you may not realize it's happening. Noiseinduced hearing loss is permanent – it can't be cured or improved.

The length of your exposure to noise is as critical as the loudness. Continuous noise throughout a working day is more damaging than a few minutes at a time.

FARSHA knows that most workdays on the farm do not expose you to enough noise to cause permanent damage. However, many common farm activities are extremely noisy, as you can see from the information on this chart.

Activity	Noise level estimate*
	(decibels)
Empty barn	50
Normal conversation	60
Idling tractor or combine with cab	
Barn cleaner	
Baler	95
Conveyor	00
Elevator	
Powered sprayer	
Blower compressor	
Pneumatic wrench	00
Silage chopper with no cab	90
Mower at full throttle	
Auger	
Tractor without cabs at 80% load (Note: tractors with cabs are likely to reduce exposure of the driver to about 80 decibels)	
Air blast sprayer	100
Squealing sows in barn	
Handheld metal grinder	
Many power tools	
Combine at full throttle (Note: cabs reduce noise exposure)	
10-hp vane axial barn fan	110
Average walkman set above the halfway mark	
Swine confinement at feeding	
Old chainsaw	120
Bad muffler	120
Sandblaster	
Gunshot	
Nearby engine backfire	140
Dynamite blast	

Typical noise levels in agriculture:

Note: The noise levels in this table are estimates, drawn from various publications in different jurisdictions. These are the noise levels that can be generated by various types of equipment or animals. However, the duration of a worker's exposure to this noise is critical in determining the hazard to the worker. The higher the noise level, the shorter the time needed to damage your hearing.

For example, exposure to 85 decibels of noise for 8 hours has the same damaging potential as exposure to 88 decibels for 4 hours. Every time you increase the noise level by 3 decibels, it takes only 1/2 the amount of time to damage your hearing.

Noise control and hearing protection:

The OHS Regulation has set limits for noise exposure in the workplace, based on loudness and duration. The limits are similar to those in the previous Regulations for Agricultural Operations, but are more protective.

If there is reason to believe that workers are exposed to levels above 82 decibels (averaged over the work day and adjusted to an eight hour shift), the noise levels may need to be measured to make sure. However, if information on noise levels is available from another source, for example from the equipment manufacturer, the above chart, or the WCB Noise Database, then that may be sufficient to determine if workers will be overexposed. A noise level survey may not be needed.

FARSHA Regional Safety Coordinators can help you identify dangerous noise levels, and find workable solutions for many of them.

If noise exposure levels are more than 85 decibels (averaged over the work day and adjusted to an eight hour shift), or if there are peak levels at any time that are above 140 decibels, the employer must have a hearing conservation program in the workplace. One aspect of the hearing conservation program is the reduction of noise to non-damaging levels. Unless noise can be reduced to safe levels, you must provide appropriate hearing protection: ear plugs or ear muffs. Another aspect of the hearing conservation program is annual hearing testing for workers who are exposed to potentially dangerous levels of noise.

Hearing tests:

Typically, workers may require hearing tests if they routinely operate noisy equipment such as the ones shown in the chart above, or if they work indoors with swine or other animals with similar noise levels. Field workers who work for short periods during harvesting and similar activities, and who are at a distance from noisy equipment are not likely to require tests.

You can contact any of the private hearing test businesses (called "audiometric contractors") to discuss arranging hearing tests. The businesses with mobile facilities have vans that can visit individual worksites or nearby meeting places. The businesses with fixed facilities have offices that workers may be sent to. An up-to-date list of these businesses is posted on the WCB web site at:

http://hearingconservation.healthandsafetycentre.org/pdfs/hearing/Contractors_List.pdf.

All test facilities and staff should be authorized by the WCB, and should have a certificate on display.

In some parts of BC, it may be possible to make arrangements with a nearby employer that has an in-house hearing test facility. Another option could be for a cooperative, or other organization of farmers or ranchers, to make an arrangement for a hearing test contractor to provide tests.

The WCB recognizes that farm owners will not have ready access to the specialized equipment required for testing noise levels in their workplace, or the exposure of individual workers. For this reason, FARSHA has received funding to perform standardized noise level testing, and to make the test results available to farm

employers who need to reduce the potential exposure of workers to damaging noise levels.

For more specific technical information on noise or hearing issues, contact the WCB occupational audiologist at 604-276-3100, extension 5885 or by direct line at 604-232-5885. For long distance calls, the toll free number is 1-888-621-7233, extension 5885.

6.2 Confined spaces

Confined spaces are deadly spaces unless the hazards within them are eliminated or controlled. This is true in any industry, but of particular importance in agriculture. Of continuing concern are silos and liquid manure pits or tanks. Other confined spaces found in agriculture include underground pumping stations, feed bins, and water or fuel tanks.

The dangers in silos include exposure to nitrogen dioxide or lack of oxygen, and entrapment in material. Manure pits present dangers of exposure to hydrogen sulfide and flammable gases. Feed bins often present hazards of entrapment. Tanks can often present dangers of lack of oxygen or exposure to toxic or flammable material that had previously been stored in the tank. Underground facilities may often be oxygen deficient. In short, confined spaces are dangerous.

Confined spaces are not always easily identified. There may be other confined spaces in your workplace of which you are not aware. In order to determine if there are, look at various work areas where work does not normally take place and where it might be difficult to get an injured person out of the space.

The requirements for confined spaces are found in Part 9 of the *OHS Regulation*. A confined space is typically one that:

- is enclosed or partially enclosed
- is not designed or intended for continuous human occupancy
- has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue, or other emergency response service, and
- is large enough and configured in a way that a worker could enter to perform work.

It may be necessary to consult a qualified person to identify the confined spaces in your workplace.

The previous *Regulations for Agricultural Operations* contained some requirements for confined spaces. A key difference between those requirements and the requirements in the *OHS Regulation* is that the previous regulations treated all confined spaces as if they presented a similar level of hazard, whereas the *OHS Regulation* recognizes three levels of hazard: low, moderate or high. In addition, the *OHS Regulation* provides an improved standard of safety.

Some of the key features of Part 9 of the OHS Regulation are:

• **Confined space entry program:** An employer must ensure the responsibilities, a list of spaces, a hazard assessment for each space, and written safe work procedures are documented in a written confined space entry program.

- Hazard assessment and work procedures: The employer must ensure that each confined space is assessed by a qualified person who is competent to identify all the hazards of the space, and develop the written safe work procedures to properly control those hazards. FARSHA is working with the WCB to develop model programs for different types of confined spaces to illustrate the steps involved in hazard assessments and work procedures.
- Identification and warning signs: The employer must ensure that all confined spaces in the workplace are identified. Each and every point of access to a confined space must either be secured against entry or be provided with a sign or other means of identification at the entrance that indicates the nature of the hazard and either full prohibition of worker entry or prohibition of entry to unauthorized workers.
- **Permits:** A written permit is required for any high hazard atmosphere space, one that requires lockout or isolation procedures, or one in which there is a hazard of entrapment or engulfment.
- Lockout and isolation: Before a worker enters a confined space, all potentially hazardous energy sources must be de-energized and locked out, and the space must be isolated from gases, fluids, or substances which could enter the space.
- Testing the atmosphere: Except for certain low hazard confined spaces, pre-entry testing must be conducted before a worker enters a space, and after work breaks. Additional testing must be done for moderate or high hazard atmospheres as necessary to ensure worker safety. In moderate or high hazard spaces where there may be flammables or explosives above 20% of the lower explosive limit, continuous testing must be done. The air in a confined space is oxygen deficient if oxygen levels are less than 19.5%. Only adequately trained workers are permitted to test the air. All test results must be recorded and posted. FARSHA is working with the WCB to increase the capability of the agriculture industry to carry out testing in confined spaces.
- Ventilation: An employer must ensure clean respirable air is provided to the space during work activity, except in certain circumstances such as inerted spaces, some low hazard spaces, and in an emergency rescue where ventilation is not practicable. Typically ventilation is provided by portable mechanical ventilation units. Natural ventilation may be permitted in some cases. If a contaminant is produced by work done in the confined space (for example during welding) then the space must be ventilated using a local exhaust ventilation system, if practicable.
- **Standby persons**: The duties of standby persons depend on whether the space has been classified as a low, moderate, or high hazard space. Standby persons are responsible for contacting rescue services in the event of an emergency.
- **Rescue:** Before entry into a confined space, there must be provision for rescue. If rescue is to be provided by an outside source, such as another farm or fire department, there must be an agreement in writing. Rescue equipment typically includes lifelines, harnesses, and lifting equipment.

6.3 Lockout

The importance of lockout:

Lockout involves the use of locks to secure isolating devices that control the energy to or in machines or systems. Lockout is intended to prevent a machine or system from being activated while a worker is performing maintenance on it, or to prevent a part of the machine from moving where the movement could be hazardous to a worker. Examples of isolating devices include circuit breakers, main disconnect switches, and valves.

Tasks such as maintaining, repairing, adjusting, cleaning, and lubricating equipment are important in the farming and ranching industry. Equipment such as augers, tractors, combines, balers, mowers, discs, rakes, trucks, hoisting, and other equipment are critical to agricultural operations and pose hazards related to energy control when workers undertake maintenance or repairs. Workers in the industry must deal with a range of hazardous energy sources during maintenance on mechanized or other equipment, including mechanical and electrical energy, compressed gas, hydraulic pressure, tensioned springs, and elevated objects (gravity).

Failure to properly isolate and control energy has led to serious injuries and fatalities in the agriculture sector.

To control or isolate hazardous sources of energy during maintenance means stopping and securing the machine, process, or system and protecting the worker by eliminating, controlling, or guarding against the danger of uncontrolled release of hazardous energy.

A first step in dealing with hazardous energy is to eliminate or isolate the energy source, and to de-energize the system wherever possible. Examples include shutting down machines, opening circuit breakers or main disconnect switches, eliminating material from augers (which might cause the auger to rotate because of gravity), disconnecting and de-pressurizing compressed air tools, and lowering or blocking hydraulic systems and implements.

The method of control that effectively guarantees a source of energy will not be turned on or stored energy released is the application of locks to ensure that equipment cannot be re-energized. This is commonly referred to as "locking out".

Basic requirements:

Lockout is addressed in Part 10 of the *OHS Regulation* (De-energization and lockout). A basic requirement is found in section 10.2, which states:

If the unexpected energization or startup of machinery or equipment or the unexpected release of an energy source could cause injury, the energy source must be isolated and effectively controlled.

Effective control typically means "locking out" the source of energy.

The OHS Regulation goes on to state that when equipment is shut down for maintenance, no work may be performed until:

- all parts have been secured against inadvertent movement,
- · the hazards have been effectively controlled, and

• all relevant energy isolating devices such as switches and valves have been shut off and locked out in the off position.

Before starting work on the machinery or equipment, procedures for lockout must be established as required by section 10.4 of the *OHS Regulation*. When developing the procedures you must:

- view the location where the work is to be done,
- identify all relevant energy sources, and
- assess the risk of possible injury to a worker from the release of energy or inadvertent movement of equipment.

When assessing risks and developing safe procedures, you must also watch out for the following pitfalls:

- **Overlooking energy sources:** For example, working on a truck with an elevated box. Gravity is often overlooked as a source of energy. The box must be restrained from falling.
- **Misinterpreting energy action:** For example, performing work on sophisticated conveyor systems that are electrically interlocked to prevent "plugging" if one part of the system were to fail. Locking out only the conveyor being worked on may not eliminate all the hazards if other parts of the system are capable of starting up. Ensure all parts of the system are locked out.
- Relying on control circuits such as start/stop buttons or switches: An example of a control circuit is the starter system in a piece of mobile equipment. It is not enough to control the starter circuit by switching off the circuit and removing the key, even if there is no other key to the equipment. Proper control involves disconnecting the battery and ensuring it cannot inadvertently be reconnected during maintenance work. As a further example, some stationary equipment powered by large electric motors may have a low voltage control circuit for starting and stopping the equipment. The source of the electrical energy that feeds the motor, such as a circuit breaker, must be locked in the open, de-energized position. It is not enough to lock out the control circuit.
- Using procedural options rather than lockout: For example, using extension tools as a way of trying to ensure safety when working near a motor. If the motor were to start up the worker may still be in danger.
- **Relying on vague written procedures** that are not specific to the task or that do not specifically describe when lockout is required.

Lockout procedures:

Section 10.4 of the OHS Regulation establishes the following required procedures:

- (1) When lockout of energy isolating devices is required, the devices must be secured in the safe position using locks in accordance with procedures that are made available to all workers who are required to work on the machinery or equipment.
- (2) The employer must ensure that each worker required to lock out has ready access to sufficient personal locks to implement the required lockout procedure.
- (3) Combination locks must not be used for lockout.
- (4) Each personal lock must be marked or tagged to identify the person applying it.
- (5) Procedures must be implemented for shift or personnel changes, including the orderly transfer of control of locked out energy isolating devices between outgoing and incoming workers.

(6) If the use of a personal lock is not practicable for lockout, another effective means, if approved by the Board, may be used in place of a personal lock to secure an energy isolating device in the safe position.

Situations when the application of locks is not required:

There are some circumstances where the application of locks is not required, as outlined in section 10.11 of the *OHS Regulation*. The application of a lock is not required if either

- (a) the energy isolating device is under the exclusive and immediate control of the worker at all times while working on the machinery or equipment, or
- (b) a tool, machine, or piece of equipment which receives power through a readily disconnected supply, such as an electrical cord or quick release air or hydraulic line, is disconnected from its power supply and its connection point is kept under the immediate control of the worker at all times while work is being done.

For example, an energy isolating device such as a circuit breaker for a piece of electrical equipment is under the exclusive and immediate control of a worker if it is in the immediate field of view of the worker doing work on the equipment, and is located so that any move by another worker to activate the isolating device will be immediately obvious to the worker who is performing the task. In some circumstances in farming or ranching there may be no other workers present, which helps ensure the breaker is under the exclusive control of the one worker.

A common example of a situation where a worker will have immediate control of the connection point of a power supply is with skill saws or other "plug-in" electrical equipment. As long as the worker controls the use of the plug, there is no need for locks.

More information:

For more information you may wish to use the booklet, *Lockout*, which can be accessed at the WCB web site at http://www.worksafebc.com/publications/publication_index/i.asp.

6.4 Fall protection

As in most industry, falls from elevation are a leading cause of injury to workers in the agricultural sector. The fall protection requirements of Part 11 of the *OHS Regulation* are intended to help employers and workers take appropriate control measures when workers are employed at heights of 3 metres (10 feet) or more.

The requirement that workers be protected from fall hazards is purposely designed to provide the highest level of protection, balanced with affording the employer and workers reasonable flexibility in choosing a system that works in the specific circumstances in the workplace. Employers must assess the hazards involved in any work at heights and choose the appropriate form of fall protection for the task.

Guardrails and similar means of restraint:

Properly constructed guardrails are generally the best system of fall protection. Once installed, they protect all workers on that work surface. Guardrails are considered practical alternatives on elevated ramps and walkways, and on the roofs of tanks and silos where there is permanent access provided by way of stairs or fixed ladders. They are often practical on the open sides of haylofts, but in some cases other means of fall protection may be appropriate.

There are many instances where guardrails are not practical to install for various reasons. The *OHS Regulation* then requires the employer to consider the next best available option – a fall restraint system.

Fall restraint:

Similar to guardrails, a fall restraint system is intended to prevent a worker from falling by restraining or restricting their travel to the unguarded edge of the work surface. Typically, such a system involves personal fall restraint, consisting of a safety belt or harness worn by each worker, and a lanyard or lifeline tied to a safe point of anchorage. The lanyard or lifeline is then adjusted to a length that will prevent the worker from travelling to the open or unguarded edge of the work surface.

A personal fall restraint system would be a practical alternative in repairing a low sloped roof, or in cases where a section of a guardrail had to be removed to facilitate the work.

Fall restraint may also be provided by a system that applies to an area of work. For example, one option for work on haylofts may be the use of retractable netting adjacent to the work area, positioned and tensioned so as to provide fall restraint.

Fall arrest:

There are also situations where both guardrails and fall restraint systems are not practical. The next level of fall protection to consider is fall arrest. When a fall arrest system is selected, it is conceded that the worker may fall from the elevation they are working. However, the system is designed to catch the falling worker before they strike the surface below them. These systems consist of safety nets, or approved fall arrest harnesses, lanyards, and lifelines connected to a substantial point of anchorage.

Fall arrest systems are most practical when a worker is on a narrow work surface or working at the edge of a structure and is required to reach beyond the safe work area. Fall arrest systems can be practical alternatives during the construction of buildings, such as installing trusses and the roof sheathing on a barn or similar tall structure.

Personal fall restraint and fall arrest systems may not be practical alternatives as they require suitable points of anchorage, and an anchor point of sufficient rated capacity is not always available. Therefore the final means to protect workers from falling is by minimizing the risk of falling through the use of work procedures.

Work procedures:

Work procedures consist of careful planning of the work, and instruction, training, and supervision of the worker(s) to safely carry out the tasks. Work procedures must take into account the type of work to be conducted, environmental conditions and hazards, the experience of the worker, the length of time the task will take, and more.

Common tasks where work procedures are used in place of conventional fall protection systems are light duty work conducted from ladders, such as fruit picking from an orchard ladder, or carrying out small painting jobs while standing on an extension ladder.

Work procedures can only be used as the method of fall protection when other conventional means are impracticable. In some cases, they may be used in combination with other forms of fall protection, such as platforms for cleaning greenhouse roofs.

The fall protection regulations in Part 11 also address requirements that must be followed once a particular fall protection system has been selected for use in the workplace. As an example, if a personal fall arrest system is chosen, the requirements list rated capacities for anchors that must met before the anchor is used.

More information on the types and uses of personal fall restraint and fall arrest systems (those requiring the use of belts, harnesses, lanyards, and lifelines) can be found in the WCB publication *An Introduction to Personal Fall Protection Equipment*. The publication is available free of charge when downloaded from the WCB web site at http://www.worksafebc.com/publications/publication_index/i.asp.

Information on fall protection requirements can also be found by accessing OHS Guidelines on the WCB web site at http://regulation.healthandsafetycentre.org/s/GuidelinePart11.asp.

7. Where do I get more information?

FARSHA:

The Farm and Ranch Safety and Health Association (FARSHA) provides information to farm employers and workers on all aspects of agricultural health and safety, including guidance on implementing the requirements in the *Workers Compensation Act* and the *OHS Regulation*. FARSHA Regional Safety Coordinators across BC are available for speaking engagements at commodity associations and agricultural community groups; farm site visits; training courses on a wide range of topics; and other consultation.

FARSHA is an industry-based health and safety association, with a mandate to develop and provide health and safety services to agriculture. FARSHA is independent of the WCB, and does not play a role in the WCB's regulatory enforcement, collection of insurance assessments, or the provision of workers' compensation services. FARSHA's work is funded by a levy on the assessments paid to the Workers' Compensation Board (WCB) by the registered farm employers in British Columbia.

To contact FARSHA, or to get contact information for the FARSHA Regional Safety Coordinator nearest you, contact the Farm and Ranch Safety and Health Association at:

Suite 311, 9440 – 202 Street Langley, BC, V1M 4A6 Tel.: 1-877-533-1789 or (604) 881-6078 Fax: (604) 881-6079 Email: farmsafe@farsha.bc.ca Web site: www.farsha.bc.ca

Note: If you wish to order a copy of the OHS Regulation in CD format, contact FARSHA.

WCB:

The WCB is available to provide information and consultation on the *OHS Regulation*. To contact a WCB Officer, call the Worksafe Call Centre at (604) 276-3100 or toll free at 1-888-621-7233 or the WCB Regional Office nearest you. An on-line Agriculture Industry Centre has been developed to provide the industry with current information. The Centre includes health and safety resources, downloadable injury prevention publications, and identification of the parts of the *OHS Regulation* particularly relevant to agriculture. Visit the Agriculture Industry Centre at http://www.healthandsafetycentre.org/s/Home.asp.

Appendix A: Part 28 of the OHS Regulation: Agriculture

Definitions

28.1 In this Part:

"agricultural operations" include the production activities related to

- (a) apiculture,
- (b) berry farming,
- (c) Christmas tree culture,
- (d) composting,
- (e) dairy farming,
- (f) egg farming,
- (g) forest seedling and seed production,
- (h) grain and oilseed production,
- (i) greenhouse operations,
- (j) herb production,
- (k) horticulture, including floriculture, tree nurseries and ornamental nurseries,
- (l) insects raised for biological pest control,
- (m) orchards,
- (n) poultry farming,
- (o) a riding academy, or the boarding or breeding of horses,
- (p) seed production,
- (q) sod or turf production,
- (r) vegetable farming,
- (s) wool, hide, feather or fur production, and
- (t) the raising of crops or animals for human or animal consumption,
- but do not include
- (u) the production of agricultural byproducts or of manufactured derivatives from agricultural raw material,
- (v) the breeding or raising of pets other than horses, or
- (w) aquaculture;
- "agricultural tractor" means a vehicle, with more than 20 engine horsepower, running on wheels, designed to furnish the power to pull, carry, propel or drive an implement that is designed or used for agriculture, but does not include a selfpropelled implement;

"farm land" means land used for agricultural operations;

"low-profile tractor" means an agricultural tractor with the following characteristics:

- (a) the front wheel spacing is equal to the rear wheel spacing, as measured from the centre line of each right wheel to the centre line of the corresponding left wheel;
- (b) the clearance from the bottom of the tractor chassis to the ground does not exceed 46 cm (18 in);

- (c) the highest point of the hood does not exceed 1.5 m (60 in);
- (d) the tractor is designed so that the operator straddles the transmission when seated;
- "**orchard ladder**" means a self-supporting portable ladder of the tripod type, wide at the bottom and tapering towards the top, non-adjustable in length, and consisting of side rails, flat steps and a hinged, single leg back section.

Application

28.2 This Part applies to agricultural operations on farm land.

Division 1 – General Conditions

Cold storage rooms

28.3 Cold storage rooms must have at least one door that can, at all times, be opened from inside the room.

Bridges and culverts

- **28.4** (1) Bridges and culverts under roadways within the agricultural workplace must be
 - (a) designed, constructed and maintained so as to safely support the heaviest load expected to be imposed on them, and
 - (b) of sufficient width to permit equipment and machinery to cross safely.
 - (2) A bridge within the agricultural workplace must also be provided with bullrails not less than 25 cm (10 in) in height.

Barriers for manure pits

- **28.5** (1) Where manure or other material is loaded into pits by self-propelled equipment, the employer must install barriers sufficient to prevent the equipment from falling or inadvertently entering the pit.
 - (2) If the use of barriers required by subsection (1) is not practicable, the employer must adopt procedures that provide equivalent protection for workers.

Instruction of seasonal, temporary and other workers

28.6 When workers, including seasonal and temporary workers, start employment, the employer and the employer's supervisor must ensure that they are instructed about the safe performance of their duties.

Animal handling

- **28.7** (1) An employer must ensure that workers have a safe means of escape from any enclosure occupied by animals that are potentially dangerous to workers.
 - (2) If a worker is required to handle animals, the employer must ensure that the worker is effectively instructed and trained and is competent to perform the assigned work.

Indoor air quality exception

28.8 Sections 4.70 to 4.80 (Indoor air quality) do not apply to a private residence.

Control of environmental tobacco smoke exception

28.9 Sections 4.81 to 4.83 (Environmental tobacco smoke) do not apply in a private residence, except when a worker, other than the occupant of the residence, is working in the residence.

Drinking water

- **28.10** (1) An employer must ensure that an adequate supply of potable drinking water is available to workers during the workday.
 - (2) Water in irrigation ditches or other similar sources is not potable drinking water for the purposes of subsection (1).
 - (3) If drinking water is provided in portable dispensers, the dispensers must be
 - (a) equipped with a tap,
 - (b) capable of being covered, and
 - (c) maintained in a sanitary condition.
 - (4) Workers must be informed of any water supplies that are unsafe to drink.

Division 2 – Hazardous Substances

Personal hygiene

- **28.11** (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.

Biohazards exception

28.12 Section 6.36 (3) does not apply to agricultural operations on farm land.

Anhydrous ammonia

- **28.13** (1) Sections 6.116 to 6.132 (Toxic process gases) do not apply to anhydrous ammonia fertilization systems.
 - (2) If anhydrous ammonia is stored or used for the purpose of fertilization, the employer must ensure that
 - (a) the equipment containing anhydrous ammonia is inspected before each use, to prevent accidental leakage or spillage,
 - (b) the hose end-valves are in the closed position when the equipment is not operating, and
 - (c) the relief and vapour valves are positioned so that any discharge is directed upwards and away from the worker's operating position.

Ventilation of buildings near manure tanks

- **28.14** (1) A worker must not enter or remain in a building or structure adjoining a liquid manure tank while the manure is being agitated.
 - (2) Following agitation of the manure, any adjoining building or structure must be thoroughly ventilated before a worker is permitted to re-enter it.

Division 3 – Personal Protective Equipment

Horseback riding exception

28.15 Section 8.23 (non-slip footwear) does not apply to a work activity involving horseback riding.

Division 4 – Equipment

Warning signs for power take-off devices

28.16 At conspicuous locations near rotating shafts driven by power take-off devices, warning signs must be located specifying that shields must be kept in place.

Signs and procedures for equipment guarding

- **28.17** If the removal of a guard or access door would expose a worker to a component that continues to rotate after the power to the component has been disengaged,
 - (a) the employer must apply a sign to the guard or access door warning of the danger, and
 - (b) the guard must not be removed or access door opened until enough time has elapsed to bring all components to a complete stop.

Hay balers

28.18 A worker using a hay baler must not attempt to clear hay from the collection area unless the engine is stopped and cannot be inadvertently started.

Round balers

28.19 A worker must keep clear of the discharge area of a round baler and the area under the hatch unless the hatch is blocked open.

Post-hole diggers

- **28.20** A post-hole digger must have
 - (a) the tractor or machine brakes set before digging,
 - (b) shear bolts as specified by the manufacturer, and
 - (c) a hold-to-run control when operated as a hand-held unit.

Post drivers

- **28.21** A worker operating a post driver must
 - (a) lower the hammer and stop the engine when adjustment or maintenance is required,
 - (b) if necessary for safety, steady the post with a steady fork or guide, and
 - (c) lower or block the hammer when the machine is not in use.

Chain saws exception

28.22 Section 12.72 does not apply to a chain saw used in agricultural operations on farm land, if the chain saw was purchased for first use before December 31, 1993.

Hand winch for auger conveyors

28.23 A hand winch for raising an auger conveyor must

(a) have a control that will hold the auger at any angle, and

(b) respond only when the handle is turned.

Alternative means of evaluation for automotive lifts and vehicle supports

- **28.24** (1) Despite section 12.76, if written instructions are not available from the manufacturer or a professional engineer, the instructions may be provided instead by any other person qualified to develop them.
 - (2) Despite sections 4.8 and 12.79, if a modification is made to a device listed in section 12.79 (1) or if the manufacturer's rated capacity is not known, the rated capacity may be determined by a person qualified to do so.

Orchard ladders exception

28.25 Sections 13.2(1), 13.5(a),(b) and (c) do not apply to orchard ladders.

Orchard ladders design

28.26 An orchard ladder must

- (a) meet the construction requirements of CSA Standard CAN3-Z11-M81, *Portable Ladders*, except that the spreader requirement does not apply to orchard ladders,
- (b) have a rail spread that increases at least an average of 6 cm (2.5 in) for each 30 cm (12 in) of ladder length, and
- (c) when necessary for safety, have the feet of the ladder equipped with steel points or other non-slipping bases designed for the ground on which the ladder will be used.

Orchard ladders instructions and use

28.27 An employer must ensure that

- (a) the ladder used is appropriate for the task, and
- (b) a worker using an orchard ladder is instructed in its proper use.

Previously installed fixed ladders exception

28.28 Despite section 13.2(1)(a), a fixed ladder existing on or before January 1, 2006, and not conforming to the current or an earlier edition of *ANSI Standard A14.3-1992, Safety Requirements for Fixed Ladders*, may remain in use subject to any modifications considered necessary by the Board.

Small cranes and hoists exception

- **28.29** (1) Sections 14.2 to 14.33 and 14.44 do not apply to a job built crane or hoist for use on site with a rated capacity of less than 1 tonne (2 200 lbs) if
 - (a) the device is built or otherwise assembled by a person qualified to do the work,
 - (b) the rated capacity of the device, including support structures, is determined by a person qualified to make the assessment,
 - (c) the rated capacity is marked on the device and is not exceeded,
 - (d) the device is not used to support a worker,
 - (e) the device is operated so that a worker is not under the load,

- (f) the device is inspected and maintained at a frequency and to the extent required to ensure that every component is capable of carrying out its original design function with an adequate margin of safety,
- (g) inspection and maintenance records are maintained for the device consistent with Part 4 (General Conditions), and
- (h) any modifications to the device are made by a person qualified to do the work.
- (2) Despite subsection (1), the Board may require compliance with sections 14.2 to 14.33 and 14.44 if the design of the equipment or the circumstances of use indicate the need.

Altered application dates for cranes and hoists

- **28.30** (1) The certification of drop stops required under section 14.19 (2) must be completed by January 1, 2006.
 - (2) Section 14.54 applies to a bridge, overhead or gantry crane, if installed after January 1, 2006, or to a crane or its runway if it is modified after that date.

Alternative requirements for rigging identification

28.31 The requirements for identification of various rigging components in sections 15.5, 15.24 (3), 15.42, 15.46, 15.52, 15.55 and 15.59 may also be met if the employer is able to determine the information required for a particular device by any means of identification specific to it.

Evaluation of a rigging device

28.32 The requirements of sections 15.6 (2), 15.27, 15.28 (1), 15.32 and 15.36 for the competency of a person evaluating a device may be met by a person who is qualified to conduct the evaluation.

Older mobile equipment exception

28.33 The requirements for emission controls, supplementary steering, safe starting and load ratings of sections 5.75, 16.14, 16.16 and 16.20 apply, in agricultural operations on farm land, only to equipment purchased for first use after January 1, 2006.

Means of escape exception

- **28.34** (1) Mobile equipment that does not require window guarding as specified by section 16.21 is exempt from section 16.17 (1) for an alternate means of escape.
 - (2) Equipment with a single cab entrance door, that is exempt under subsection (1), must have an opening window or alternate means of escape on a surface other than the door side, satisfying the requirements of the *Society of Automotive Engineers (SAE) Standard J185, June 1988, Recommended Practice for Access Systems for Off-road Machines.*

Alternative evaluation of an attachment

28.35 Despite section 16.19, a bucket, fork, boom, hoist or other load handling equipment may be installed on mobile equipment if authorized by a person qualified to evaluate the safety of the installation.

Alternative for design of riding station

28.36 The design of safe facilities specified under section 16.31 (2) (b) also may be done by a person qualified to design the facilities.

Safety device on older trucks exception

28.37 Section 16.37 (4) (requirements for a mechanical device capable of supporting an empty dump box in the raised position) applies only to dump trucks with a chassis manufactured after January 1, 2006.

Protective structures exception for mobile equipment

- **28.38** (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.

ROPS on older equipment exception

28.39 Other than for agricultural tractors, the requirements of section 16.22 (1) for rollover protective structures (ROPS) apply only to new equipment purchased for first use after January 1, 2006.

Protective structures exception for agricultural tractors

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

ROPS exception for agricultural tractors

- **28.41** (1) Section 16.22 (1) does not apply to an agricultural tractor manufactured on or before January 1, 1985.
 - (2) An agricultural tractor manufactured after January 1, 1985 must be equipped with a rollover protective structure, except for
 - (a) a low profile tractor used in agricultural situations where there is low overhead clearance, such as orchards, hop yards, farm buildings and greenhouses where overhead clearance is not adequate to allow a tractor equipped with a rollover protective structure to operate, and when its use is incidental to the work in those situations, and
 - (b) an agricultural tractor fitted with implements incompatible with the rollover protective structure.

Use of seat belts on agricultural tractors

28.42 Despite section 16.33 (2), a seat belt must be used at all times when operating an agricultural tractor equipped with a rollover protective structure.

General requirements for mobile elevating work platforms

- **28.43** A mobile elevating work platform used in an orchard must
 - (a) have a platform equipped with a non-skid surface,
 - (b) be provided with a drive system that ensures there will be no unintended movement of the unit, and
 - (c) not be operated on sloping ground unless

- (i) specific instructions from the manufacturer for the operation are followed, and
- (ii) the unit is equipped with a braking system capable of restraining the machine under any condition of use, or the unit is equipped with wheels that will not turn unless driven.

Mobile elevating work platform design standards

- **28.44** (1) Except as provided by subsection (2), a mobile elevating work platform used in an orchard must meet the requirements of section 13.2(1).
 - (2) A mobile elevating work platform may be used in an orchard if it has
 - (a) a platform equipped with
 - (i) a gate that does not swing outward and that can be securely fastened in the closed position to minimize the risk of accidental opening,
 - (ii) a top rail approximately 90 cm (36 in) in height above the floor and capable of withstanding a load of 890 N (200 lbs) applied in any direction at any point on the top rail, and
 - (iii) a toe rail, on the sides not serviced by a gate, which is approximately 8 cm (3 in) in height with a maximum clearance between the floor and the bottom edge of the toe rail of 5 cm (2 in), and
 - (b) for equipment manufactured after December 31, 1993, a maximum platform height of 3.6 m (12 ft).

Identification on mobile elevating work platforms

- **28.45** A mobile elevating work platform used in orchards, if manufactured after December 31, 1993, must have the following information permanently and conspicuously marked on it:
 - (a) certification to confirm the standard met by the device;
 - (b) the make, model, serial number and manufacturer's name;
 - (c) the rated platform workload;
 - (d) the maximum platform height and travel height;
 - (e) the maximum slope on which the device may be operated when the platform is elevated.

Fall protection exception

28.46 Section 13.33(1) and Part 11 (Fall Protection) do not apply to a worker using a mobile elevating work platform in an orchard if the platform height is 3.6 m (12 ft) or less.

Annual inspection and certification exception

28.47 For the purposes of application of sections 13.12, 13.23(1)(b) and 13.23(5), a person may make the inspection and determination of safety for continued use of a mobile elevating work platform used in orchards if the person is qualified to do so, and the work platform has a maximum operational height of 3.6 m (12 ft).

Operational devices exception

28.48 Sections 13.24(2), 13.25 and 13.26 do not apply to mobile elevating work platforms when they are used in orchards at a height of 3.6 m (12 ft) or less.

Pulling loads

28.49 When a tractor or other mobile equipment is used for pulling loads,

- (a) the point of pull on the tractor or other mobile equipment must be the point specified by the manufacturer's instructions, and
- (b) the weight of a load pulled must not exceed that specified by the manufacturer.

Transportation of workers

- 28.50 (1) Despite section 16.31 and Part 17 (Transportation of Workers), a worker may be elated on farm land, on mobile equipment not designed for the transportation of workers, if
 - (a) the worker is safely seated, and
 - (b) the equipment is not operated at more than 10 km/h (6 mph).
 - (2) A worker must not ride on
 - (a) a tongue or drawbar connected to equipment in tandem, or
 - (b) a bucket, forks or other equipment that pose a risk of injury to the worker.

Note: The complete *OHS Regulation* can be accessed at the WCB web site: <u>www.worksafebc.com</u>. For a copy of the complete *Regulation* in CD format, contact FARSHA.

Appendix B: List of new or substantially new requirements in agriculture

Note: The following is a list of all the requirements in the OHS Regulation that are new or substantially new to agriculture. As noted previously in Part 4 of this booklet, many of the requirements in the Regulation have little or no application in agriculture. For example, about half of the General Hazard requirements in Parts 5-19 have little or no applicability, and most of the Industry Specific requirements in Parts 20-32. This should be kept in mind when using this table.

Part/Division of the OHS Regulation	New/substantially new requirements
Part 4: General Conditions	
Buildings, Structures and Equipment	4.4, 4.5, 4.9
Emergency Preparedness and Response	4.13, 4.18
Violence in the Workplace	4.27 - 4.31
Work Area Requirements	4.35(1), 4.36(1)
Ergonomics Requirements	4.46 - 4.53
Work Area Guards and Handrails	4.57, 4.62(4)
Illumination	4.64 - 4.69
Indoor Air Quality	4.70 - 4.80
Environmental Tobacco Smoke	4.81 - 4.83
Occupational Environment Requirements	4.84 to 4.87
Part 5: Chemical and Biological	
Substances	
Containers and Storage	5.20 - 5.26
Flammable and Combustible Substances	5.27 - 5.35
Substances under Pressure	5.36 - 5.47
Controlling Exposure	5.49 - 5.59
Ventilation	5.60 - 5.71
Internal Combustion Engines	5.72 - 5.75
Hazardous Wastes and Emissions	5.76 - 5.81
Emergency Washing Facilities	5.82, 5.84, 5.86 - 5.96
Emergency Procedures	5.97 - 5.102
Part 6: Substance Specific Requirements	
Asbestos	6.1 - 6.32
Biohazardous Materials	6.33 - 6.41 (except for 6.36(1))
Cytotoxic Drugs	6.42 - 6.58
Lead	6.59 - 6.69
Pesticides	6.100 - 6.109
Rock Dust	6.110 - 6.115
Toxic Process Gases	6.116 - 6.132
Part 7: Noise, Vibration, Radiation and	
Temperature	
Noise	7.3 - 7.5, 7.8, 7.9
Vibration Exposure	7.10 - 7.16

Part/Division of the OHS Regulation	New/substantially new requirements
Radiation Exposure	7.17 - 7.25
Thermal Exposure	7.26 - 7.38
Part 8: Personal Protective Clothing and	
Equipment	
General Requirements	8.4 - 8.6
Safety Headgear	8.12, 8.13
High Visibility and Distinguishing Apparel	8.24, 8.25
Buoyancy Equipment	8.28 - 8.30
Respiratory Protection	8.34, 8.36, 8.40 - 8.44
Part 9: Confined Spaces	
Definitions	9.1
General Requirements	9.5
Responsibilities	9.6
Hazard Assessment and Work Procedures	9.9, 9.11
Identification and Entry Permits	9.13 - 9.16
Lockout and Isolation	9.21 - 9.23
Verification and Testing	9.25(7), 9.26
Cleaning, Purging, Venting and Inerting	9.29
Ventilation	9.31 - 9.33
Standby Persons	9.34 - 9.36
Rescue	9.37(2), 9.38(2), 9.39
Personal Protective Equipment and Other	9.47 - 9.51
Precautions	
Part 10 De-energization and Lockout	All of Part 10
Part 11: Fall Protection	All of Part 11
Part 12: Tools, Machinery and Equipment	
Definitions	
General Requirements	12.2 - 12.6, 12.10 - 12.13, 12.15 (Note: s.
	12.7-12.9 have been repealed)
Guarding Mechanical Power Transmission	12.20, 12.21
Parts	40.00 40.00 event of they early to
Conveyors	12.22 - 12.28, except as they apply to
Dower Dresses, Broke Dresses and Sheare	augers
rower riesses, brake riesses and shears	12.29 - 12.32 (NOLE. S. 12.33 Nas Deeli renealed)
Feed-Rolls and Metal-Forming Rolls	12 34 - 12 36
Machine Tools	12.37 - 12.43
Abrasive Equipment	12.6
Powder Actuated Tools	12 51 - 12 57
Woodworking Tools and Equipment	12.58 - 12.64, 12.66, 12.67
Mobile Chippers	12.68 - 12.71
Chain Saws	12.73
Automotive Lifts and Other Vehicle Supports	12.72 - 12.80
Miscellaneous Equipment	12.81 - 12.83
Drilling Rock or Similar Materials	12.84 - 12.92
Breaking and Melting Metal	12.93 - 12.96
Abrasive Blasting and High Pressure	12.97 - 12.111
Washing	

Part/Division of the OHS Regulation	New/substantially new requirements
Welding, Cutting and Allied Processes	12.114, 12.115, 12.117, 12.119, 12.125
Painting, Coating and Work with Plastics and	12.127 - 12.141
Resins	
Laundry and Dry Cleaning Activities	12.142 -12.166
Rail Car Movement	12.167 - 12.172
Part 13: Ladders, Scaffolds and	All of Part 13
Temporary Work Platforms	
Part 14: Cranes and Hoists	All of Part 14
Part 15: Rigging	All of Part 15
Part 16: Mobile Equipment	
Definitions	16.1
General Requirements	16.2, 16.3, 16.5 - 16.16.20
Guards	16.21 - 16.28, except as they apply to
	agricultural tractors
Seat Requirements and Rider Restrictions	16.29 - 16.31
Operating Requirements	16.34, 16.35, 16.37 - 16.46
Tire Servicing	16.47 - 16.48
All-Terrain Vehicles	16.49 - 16.55
Part 17: Transportation of Workers	All of Part 17, except as it applies to farm
	labour contractors for transport of farm
	workers to and from farm land
Part 18: Traffic Control	All of Part 18
Part 19: Electrical Safety	All of Part 19
Part 20: Construction, Excavation and	All of Part 20
Demolition	
Part 21: Blasting Operations	All of Part 21
Part 22: Underground Workings	All of Part 22
Part 23: Oil and Gas	All of Part 23
Part 24: Diving, Fishing and Other Marine	All of Part 24
Operations	
Part 25: Camps	Note: There are no OHS requirements in
Davit 201 Favo dans On anoticana	Part 25
Part 26: Forestry Operations	All of Part 26
Part 27: Wood Products Manufacturing	All of Part 27
Part 28: Agriculture	
General Conditions	28.8, 28.9
Hazardous Substances	28.11, 28.12
Equipment	28.44, 28.25, 28.28 - 28.39, 28.46 - 28.48
Part 29: Aircraft Operations	All of Part 29, except 29.23
Part 30: Laboratories	All of Part 30
Part 31: Firefighting	All of Part 31
Part 32: Evacuation and Rescue	All of Part 32