

G26.1-1 Forestry operations and similar activities

Issued May 1, 2008

Section 26.1 of the *OHS Regulation* (“*Regulation*”) states:

“**forestry operation**” means a workplace where work is done in relation to silviculture or harvesting trees, including constructing the means of access and transporting the harvested trees to a facility where they are processed or from which they are exported.

Purpose of guideline

The purpose of this guideline is to describe the scope and application of the requirements of Part 26.

“Forestry Operations and Similar Activities” and the application of Part 26

The title of Part 26 of the *Regulation* is “Forestry Operations and Similar Activities.” This title reflects the intent to capture in the scope of Part 26 not only those workplaces that are involved in forestry operations as defined in s. 26.1, but operations that have similar characteristics, hazards and work processes.

The application of a specific provision in Part 26 will depend on the wording of the particular section. Certain provisions in Part 26 will state that they relate only to “forestry operations,” while others will not be limited by the use of this term.

For example, section 26.2 requires all aspects of a forestry operation to be planned and conducted in a manner consistent with this *Regulation*.” This section would only apply to owners of workplaces that fall within the definition of a forestry operation by being workplaces “where work is done in relation to silviculture and harvesting trees....”

In contrast, section 26.21 states that “a worker must not fall trees or be permitted to fall trees...” unless the worker is qualified and only performs work within his or her documented capabilities, and does not restrict itself to workers in a “forestry operation.” As this section does not refer specifically to forestry operations, it can be applied more broadly to both forestry operations and similar activities.

What is work relating to “harvesting trees”?

The definition of “forestry operation” includes “work done in relation to ... harvesting trees.” WorkSafeBC considers work relating to “harvesting trees” to be any operations that are undertaken pursuant to a permit, license or other tenure or permission from the Ministry of Forests or other government agency. In particular, this includes any falling activity on land designated as provincial forest, which includes Crown forest land, range land, or private land that is subject to a tree farm license, community forest agreement or a woodlot license. “Forestry operations” may also include any falling that is done on private land that is not subject to a timber tenure, provided that the harvesting is undertaken as part of an enterprise that has as a purpose falling trees for the purposes of selling or processing them to be made into merchantable wood products.

For greater certainty, WorkSafeBC considers the following to involve “harvesting trees” and to therefore be “forestry operations”:

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- Harvesting timber for processing or sale either pursuant to a license or permit from the Provincial Government, or on a private woodlot
- Falling trees in connection with forest fire fighting or fire prevention activities
- Falling trees in connection with oil and gas exploration and site preparation, including seismic line falling

Workers who exclusively fall trees that measure less than 15cm (6") diameter at 30cm (12") height are not considered to be engaged in harvesting trees.

“Similar activities”

Certain types of operations that do not fit the definition of “forestry operations” in s. 26.1 may present similar types of working conditions and hazards as forestry operations. Despite not being “forestry operations,” it is appropriate that certain elements of Part 26 apply to these operations, given the similarities. For example, an arborist crew that falls trees in order to maintain rights of way for electrical conductors in remote locations will perform work very similar to a typical forestry operation, though, depending on the type of work they are doing, they may not fall within the definition of a “forestry operation.” In such a case, there must be compliance with the procedures for falling and bucking in sections 26.23 through 26.29, as those sections are not specific to “forestry operations,” though a Notice of Project under s. 26.4 need not be filed, as that requirement is limited to certain forestry operations.

G26.1-2 Owners' obligations

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Section 119 of the *Workers Compensation Act* ("Act") states:

Every owner of a workplace must

- (a) provide and maintain the owner's land and premises that are being used as a workplace in a manner that ensures the health and safety of persons at or near the workplace,
- (b) give to the employer or prime contractor at the workplace the information known to the owner that is necessary to identify and eliminate or control hazards to the health or safety of persons at the workplace, and
- (c) comply with this Part, the regulations and any applicable orders

Section 26.1.1 of the *OHS Regulation* ("Regulation") states:

If the owner of a forestry operation enters into an agreement referred to in section 118 (1) of the Act designating a person to be the prime contractor for a workplace, the owner must ensure that

- (a) the person designated
 - (i) is qualified to be the prime contractor in respect of that workplace, and
 - (ii) has the authority necessary to fulfill the responsibilities of prime contractor under the Act, including, without limitation, authority over any employer, worker or other person who may be carrying out the work of the owner at the workplace, and
- (b) not more than one person holds the designation of prime contractor for that workplace at any given time.

Section 26.2 of the *Regulation* states:

- (1) The owner of a forestry operation must ensure that all activities of the forestry operation are both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.

Purpose of guideline

The purpose of this guideline is to provide information regarding obligations on owners of forestry workplaces.

"Owners" - Who is an owner?

A number of requirements in Part 26 relate specifically to the "owner" of a forestry workplace or forestry operation. Section 119 of the *Act* also sets out general responsibilities of owners, and section 118 of the *Act* will create prime contractor obligations on owners of multiple employer workplaces that do not designate a prime contractor.

The definition of *owner* in section 106 of the *Act* expands the commonly understood meaning to include a “licensee or occupier of any lands or premises used or to be used as a workplace” or “a person who acts for or on behalf of an owner as an agent or delegate.” Accordingly, a number of parties may be owners of a forestry workplace.

Both the Ministry of Forests and Range (MOFR) and those that hold forest tenures are considered to be owners of workplaces where forestry operations are undertaken.

Most forestry in British Columbia takes place on publicly owned Crown lands managed by the province through the MOFR. The MOFR grants rights to harvest and market timber to licensees through a variety of types of licence, or tenure. The MOFR is an administrative department of the Crown and does not have a separate legal identity from the Crown. As the workplace for almost all forestry operations will be located on Crown lands, the MOFR should be considered an owner of workplaces in which forestry operations are taking place.

In addition, licensees and holders of forestry tenures administered by MOFR will also be considered to be owners. The definition of owner, which includes licensees and occupiers of lands, clearly includes these workplace parties.

Which owner is responsible for which obligations?

Where there are multiple owners of forestry workplaces, it is necessary to determine which owner is responsible for which obligation. Policy Item D3-119 sets out the factors to consider in determining each owner’s responsibility in a multiple owner situation. These factors relate to the knowledge of workplace hazards, control over the workplace, and the reasonableness of imposing the particular obligation on that owner.

In accordance with Policy Item D3-119-1, WorkSafeBC officers should consider issuing orders to owners where the owner in question has knowledge and control over the workplace hazards in question. Among the factors to be considered in issuing orders to owners are

- *Knowledge*: whether the owner knew or should have known that the health and safety of the persons at or near the workplace would likely be harmed by the condition or use of the workplace and the extent of the harm, if it occurred, would be more than minor or trivial.

For example, where a hazard has been created due to inadequate road maintenance on a Road Permit Road, most often the Road Permit holder, or “maintainer,” should be held responsible for the hazard, as the Road Permit holder is obligated to maintain forest roads. However, whether the MOFR had also become aware of the hazard, or whether a secondary road use permit holder knew of the hazard but did not address it, should also be explored.

- *Control*: whether the owner had some control or influence over the safety of the workplace in that the owner could practicably have taken measures necessary to eliminate or reduce the risk or extent of the potential harm.

For example, determining responsibilities of MOFR and licensees will necessarily reflect the control over forestry workplaces administered by the tenuring system.

MOFR's control over safety would be relatively indirect, as licensees are positioned to have the predominant control over the high level planning of work in most forestry workplaces, MOFR has control over the allocation of the tenure as well as monitoring the performance of its licensee, and its obligations as owner will centre on how tenures are allocated and providing appropriate information around hazards encountered in monitoring these tenures.

- *Communication*: whether the owner possessed material information and failed to communicate all the material information in the owner's possession to the persons at or near the workplace, thus preventing them from taking measures to protect themselves.

These factors assist in determining which obligations each owner will have under s. 119 of the *Act* as well as under s. 26.2 of the *Regulation*. For example, if there are specific hazards with respect to certain forest roads, such as areas with steep grades, dangerous curves, washouts, and other hazards the licensee knows or should know of, the licensee must take steps to make users aware of these hazards so the users may take measures to protect themselves.

Which “owner” may designate the prime contractor?

With respect to multiple employer workplaces, the obligations of the prime contractor under s. 118 of the *Act* must be fulfilled by “the owner” of the workplace, if the owner does not designate a prime contractor. In addition section 26.1.1 imposes certain requirements on the owner who designates a prime contractor for a forestry workplace. As a practical matter, it is only possible to have one owner who may designate a prime contractor, or who must fulfill that role if none is designated.

In accordance with Policy D3-119-1, it will be the owner with the most control over and knowledge of a particular workplace who must fulfill the obligations of s. 118 of the *Act*, or who may designate a prime contractor. In making this determination, the elements of knowledge and control should relate to the ability to plan and manage the workplace as a whole. That is, the owner that may designate a prime contractor or who must act in that capacity if none is designated, will be the owner that has the most ability to control how work is done by others at the workplace, and who has the most knowledge of how work is to be done in general.

Licensees will normally have the most knowledge of and control over forestry workplaces, and therefore it will be reasonable in most situations to view licensees as the owners with the most responsibility over forestry workplaces. For most forestry operations, the licensee will be the owner for the purposes of s. 26.1-1 and s. 118.

That said, where MOFR retains primary control over certain multiple employer workplaces, it will be the primary owner and prime contractor where none is designated. This may include multiple employer workplaces like

- Forest Service Roads
- Road Permit Roads where the primary user does not have sufficient control over secondary permit holders on the road
- Small business sales through the BC Timber Sales program

Though licensees are the primary owners of forestry workplaces, MOFR retains some owner obligations. MOFR compliance with obligations in section 119(a) to “provide and maintain ... lands and premises that are being used as a workplace in a manner that ensures health and safety” will to a great extent be shaped by the legislation governing the disposition of forest licences and the terms of the licence granted by MOFR to the licensee. For example, the MOFR may itself construct, modify, or maintain forest service roads or it may permit the licensee to design and build Road Permit Roads. Failure of the MOFR to adequately construct, modify, or maintain forest service roads should be considered as a violation of section 119(a). Failure of the MOFR to ensure licensees construct forest roads to safe road design criteria or the MOFR’s use of criteria that are in and of themselves unsafe may also be considered a violation of section 119(a). While Road Permit Holders would typically be responsible for road signage and maintenance, MOFR road use policy, enacted through the directives of MOFR district managers, could have an impact on safety of workers at the workplace.

With respect to the obligation in section 119(b) to give “information... necessary to identify, eliminate or control hazards,” the MOFR should typically be expected to communicate to licensees, prime contractors, or any relevant employer in a licence area, information about any safety hazard it becomes aware of, or should have become aware of, particularly with respect to hazards encountered during the course of inspecting forestry operations to ensure that the terms of the forest licence and forestry legislation are being adhered to. In particular, the MOFR should be expected to note and raise with licensees safety hazards such as degraded roads, washouts, obscured or inadequate signage, or other unsafe forestry practices that the MOFR becomes aware of.

G26.1.1-2 Prime contractor obligations

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Section 26.1.1 of the *OHS Regulation* ("Regulation") states:

If the owner of a forestry operation enters into an agreement referred to in section 118 (1) of the Act designating a person to be the prime contractor for a workplace, the owner must ensure that

- (a) the person designated
 - (i) is qualified to be the prime contractor in respect of that workplace, and
 - (ii) has the authority necessary to fulfill the responsibilities of prime contractor under the Act, including, without limitation, authority over any employer, worker or other person who may be carrying out the work of the owner at the workplace, and
- (b) not more than one person holds the designation of prime contractor for that workplace at any given time.

Section 118 of the *Workers Compensation Act* ("Act") states:

- (1) In this section:

"multiple-employer workplace" means a workplace where workers of 2 or more employers are working at the same time;

"prime contractor" means, in relation to a multiple-employer workplace,

- (a) the directing contractor, employer or other person who enters into a written agreement with the owner of that workplace to be the prime contractor for the purposes of this Part, or
 - (b) if there is no agreement referred to in paragraph (a), the owner of the workplace.
- (2) The prime contractor of a multiple-employer workplace must
 - (a) ensure that the activities of employers, workers and other persons at the workplace relating to occupational health and safety are coordinated, and
 - (b) do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with this Part and the regulations in respect of the workplace.
 - (3) Each employer of workers at a multiple-employer workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's workers at that workplace.

Purpose of guideline

The purpose of this guideline is to provide information on prime contractor obligations, including how to determine the scope of a workplace to evaluate whether prime contractor obligations must be fulfilled, and what qualifications a prime contractor must have.

The prime contractor designation - What is “the workplace”

Forestry workplaces will often be multiple-employer workplaces. This means that the obligations under s. 118 of the *Act* relating to coordination and maintaining a system of compliance must be fulfilled, either by a prime contractor, or if none is designated, the owner.

Section 106 of the *Act* defines “workplace” broadly. It states

“**workplace**” means any place where a worker is or is likely to be engaged in any work and includes any vessel, vehicle or mobile equipment used by a worker in work.

In typical commercial or industrial operations, what constitutes the workplace is often self-evident, as the location is well defined. With respect to forestry operations, which involve a variety of activities undertaken by a range of contractors over a broad geographic area, identifying the workplace is less certain. Work locations may be undefined until the work is actually performed, and may be located anywhere within the licence area.

Policy Item D-3-118-1 provides that a multiple-employer workplace may exist even if workers of different employers are present at the same time working on *different* projects. In addition, the Policy provides that the phrase “at the same time” will be given a “fair large and liberal construction” in order to “best attain the objectives of s. 118.” According to the Policy, “at the same time” means that workers of 2 or more employers are merely present in the workplace over “an appropriate interval” rather than at any precise point in time, and that the duration of the interval of time to be considered will depend upon the circumstances of the individual workplace. In addition, the Policy provides that it does not matter whether the workers of the different employers actually come into contact, as long as one employer’s workers and their activities could well affect the health and safety of another employer’s workers who come into the workplace at some other time.

Assessing what the workplace is for the purposes of establishing prime contractor obligations in the forestry industry will, in addition to the factors outlined in Policy D-3-118-1, depend on

- The degree to which the activities of one employer will impact the health and safety of workers of another employer in a given area
- The degree to which a given area constitutes a single contiguous administrative unit
- Exclusivity of control over the given area

The multiple employer workplace may, depending on the circumstances, be a single block, a cutting permit area, or, in certain situations where the above factors are present, an entire licence area.

Section 118(1) provides that the prime contractor will be the owner, unless there is a specific agreement designating another person as prime contractor. As the owner with the greatest control over the workplace, it is appropriate that the licensee act as “default” prime contractor. Even though there may be a “stump to dump” contractor who may be a directing contractor over a broad portion of forestry operations, that contractor will not be the prime contractor unless there is a specific designation in a written agreement that the contractor will act as prime contractor for the purposes of coordinating occupational health and safety matters.

Also, in accordance with Policy Item D3-118-1, there can be only one “prime contractor” at a workplace at any point in time. If an owner enters into more than one agreement purporting to create a “prime contractor” for the same period of time, the owner will be considered to be the prime contractor.

For information on which owner may designate the prime contractor, please refer to guideline G26.1-1

“Qualified”

Section 26.1.1 states that the owner must ensure the prime contractor at a multiple employer forestry workplace is qualified. “Qualified” is defined in section 1.1 of the *Regulation* as “being knowledgeable of the work, the hazards involved, and the means to control the hazards, by reason of education, training, experience or a combination thereof.” Multiple employer forestry workplaces will involve a complex mix of work activities and hazards. Owners are therefore expected to ensure that prime contractors they designate have a significant level of experience and training specific to the types of operations that they will be coordinating. Being “qualified” also involves possessing knowledge of how to control hazards; a qualified prime contractor must not only have knowledge of work processes, but knowledge of hazard recognition and managing health and safety risks.

Note that under s. 118 of the *Act*, the owner must agree in writing with the prime contractor that the prime will act in that capacity. The prime must be aware that it has agreed in writing to act in that capacity, and the language of the agreement must be adequately clear that the parties intended that the prime contractor act in that capacity. Failure to have an adequate written agreement will result in the owner being required to fulfill the prime contractor obligations.

What are the obligations?

Under section 118(2) of the *Act*, the prime contractor is responsible for coordinating activities relating to health and safety at the workplace. Coordination will extend to logistical matters relating to the work carried out by the employers at the workplace. The prime contractor of a forestry workplace must, as a function of this coordination role, perform a risk assessment to determine appropriate measures to eliminate or reduce hazards faced by workers in the area in question.

The prime contractor is also responsible for establishing a system or process to ensure health and safety compliance. This may involve establishing a safety program as described in Part 3, Division 4 of the *Act* and section 3.3 of the *Regulation* with respect to the entire workplace, as well as making regular inspections of the workplace as contemplated by section 3.5 of the *Regulation*. It may also involve the creation of a joint

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health and safety committee for the entire workplace. At a minimum, prime contractors should ensure that things like the initial safety meeting under s. 26.5 and the orientation of young or new workers under s. 3.23 take place. In addition, a necessary feature of any system or process is the ability to monitor and maintain that system. Prime contractors must take steps to ensure the employers it is coordinating are complying with and participating in its system.

In addition to the duties on prime contractors contained in the *Act*, section 26.4 of the *Regulation* requires the prime contractor to submit a notice of project of a forestry operation.

G26.2-1 Planning and conducting a forestry operation

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Section 26.2 of the *OHS Regulation* (“*Regulation*”) states:

- (1) The owner of a forestry operation must ensure that all activities of the forestry operation are both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.
- (2) Every person who has knowledge and control of any particular activity in a forestry operation must ensure that the activity is both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.
- (3) The planning required under this section must
 - (a) include identification of any work activities or conditions at the workplace where there is a known or reasonably foreseeable risk to workers,
 - (b) be completed before work commences on the relevant activity, and
 - (c) be documented at the time of planning.
- (4) If, after any planning referred to in subsection (3), there is a change in the workplace circumstances, including the work activities and the conditions of the workplace, and the change poses or creates a known or reasonably foreseeable risk to workers that was not previously identified, then
 - (a) the plan must be amended to identify and address the risk and provide for the health and safety of the workers at the workplace, and
 - (b) the amendment must be documented as soon as is practicable.

Purpose of guideline

This guideline provides guidance to officers as well as stakeholders in the forest industry regarding accountability and responsibility for aspects of planning and conducting operations to ensure health and safety compliance in forestry operations.

Background

Most forestry in British Columbia takes place on publicly owned Crown lands managed by the province through the Ministry of Forests and Range (MOFR). The management of the forests and lands in which forestry operations take place is governed by a variety of legislation, including the *Forest Act* and the *Forests and Range Practices Act* and regulations associated with these Acts.

Under this legislation, the MOFR grants rights to harvest and market timber to licencees through a variety of types of licence, or tenure. These licencees also place certain obligations on the licencees. In general the terms of the licence include conditions relating to harvesting practices, forest management, road building, reforestation, firefighting, and the like. Certain terms are dictated by forestry legislation; certain terms are functions of MOFR policy.

Historically, timber harvesting and related operations, particularly on the coast, were typically carried out directly by the licencee. In recent years, however, forest operations have evolved into a complex multi-layered mix of contractors, subcontractors, and independent operators. In the interior, the evolution has been less dramatic, as in that

region operations have historically involved a wide variety of contractors, often provided for in the tenure provided to licencees.

The MOFR determines an Annual Allowable Cut (AAC) for a particular broad region of the province, called a Timber Supply Area, which area may include any number of licencees, and provides specific authority to licencees to harvest certain areas included in their respective licence area through specific cutting permits.

Licencees tend to contract operations related to harvesting and forest management to subsidiary organizations or to third-party contractors. In particular, licencees will often contract with subsidiaries or third party contractors to oversee harvesting operations in specific areas (referred to as “blocks”) within the cutting permit area. Such contractors (often referred to as “stump to dump” contractors) are often responsible for a wide range of operations with respect to a given cutting permit.

Those organizations, in turn, tend to contract out portions of the harvesting operations (such as falling, yarding, or timber transportation) within specific blocks to subcontractors (often referred to as “phase” contractors). Those subcontractors, in turn, may engage individuals such as fallers or equipment operators to perform specific tasks. These individuals might be employees under a contract of service or independent contractors, who also may engage other workers as employees or under contract.

All of these different organizations and individuals have responsibilities for ensuring forestry operations are planned and conducted in a manner that ensures the health and safety of forest workers.

“Planning and conducting” and the contracted out forestry workplace

Section 26.2(2) of the *Regulation* requires every person who has knowledge of and control over any particular activity in a forestry operation to ensure that the activity is both planned and conducted in a manner consistent with this *Regulation* and with safe work practices acceptable to WorkSafeBC.

Responsibility for health and safety at forestry workplaces is the responsibility of all workplace parties that have influence on how work is conducted. Section 26.2(2) reinforces that idea by requiring each person in a forestry operation to plan and conduct activities that they have knowledge of and control over. This obligation lies with all workplace parties. For example, the MOFR must ensure that access to Crown lands is provided in an adequately planned way so that workers of different tenure holders are not placed at risk. Licensees must plan overall operations in a manner that ensures that work can be carried out with a minimum of risk. And for their part, workers must carry out their work in a manner that protects their own safety and the safety of other workers.

With respect to work that is to be provided under contract, “plan and conduct” should include such obligations as

- Evaluating the risks the operations of contractors at one workplace within the licence area will impose risks on the workers at another, and, where necessary, coordinating those activities in order to ensure that health and safety of workers is not put at risk. For example, the prime contractor must evaluate the use of the forest road system shared by contractors at the forestry workplace. The degree of coordination required, ranging from alerting contractors of the presence of

other users to fuller traffic control measures, will depend on the risk of that shared use creating hazards for workers.

- Monitoring the operations of contractors that they are meeting their health and safety obligations and are, in turn, monitoring the health and safety performance of their subcontractors. As noted above, where the contracting employer appoints a contract supervisor, that individual should monitor compliance with health and safety requirements as a function of his or her duties to monitor compliance with the terms of the contract.

Obligation of employers to workers of different employers

In considering the importance of planning and conducting work in contracted out forestry workplaces, it is important to note the obligation of s. 115(1)(a)(ii) of the Act, which states:

115(1) Every employer must

- (a) ensure the health and safety of
 - (i) all workers working for that employer, and
 - (ii) any other workers present at a workplace at which that employer's work is being carried out . . .

This section requires that every employer must ensure not only the health and safety of its workers, but also the health and safety of "any other workers present at a workplace at which that employer's work is being carried out."

A given work activity is not necessarily merely the work of the direct employer of the workers carrying out the work. The work may also be considered to be the work of an employer that has engaged a contractor instead of having its own workers carry out that work.

With respect to forestry operations, the entire range of activities relating to timber harvesting, transportation, and forest management should be viewed as the licensee's work, as well as the work of the contractors and subcontractors performing the work. In turn, the entire range of harvesting activities which a stump to dump contractor has been contracted to administer should be considered that contractor's work in addition to the licensee's work. In this way, the work of a single hand faller, for example, may be considered the work of many entities up the contracting chain for the purposes of establishing the health and safety duties of that entity under s. 115(1)(a)(ii).

Every contractor and subcontractor will have health and safety duties with respect to the worker and workplace where the work is carried out. The extent of that duty, and the manner in which it is discharged, will depend on the circumstances. Factors to be considered in assessing whether an employer has a health and safety obligation at a particular workplace include

- The degree of control exercised by the contracting employer over the contractor in other areas of its business. The degree of control should be evaluated by reviewing both the terms of the contract between the parties as well as the reality of the relationship.

- The extent to which the contracting employer knew or should have known of a hazard or situation of non-compliance created by the activities of its contractor. For example, where the contracting employer appoints an individual such as a contract supervisor to monitor compliance with the terms of contract, it may be reasonable to conclude that the contracting employer knew or should have known of a lack of compliance with health and safety requirements.
- Whether it is reasonable to expect the contracting employer to have undertaken safety precautions.

The extent to which an employer took into consideration occupational health and safety matters in structuring and administering its relationship with any contractor it engaged should also be examined.

In engaging a contractor to carry out forestry operations, the contracting employer must take reasonable steps to ensure that the contractor is capable of discharging its health and safety obligations towards its workers and subcontractors, and take reasonable steps to monitor the contractor's safety performance and address any issues that arise. What monitoring activities are reasonable in the circumstances, ranging from receiving safety reports or reviewing administrative records through to direct inspections, will correlate generally to the degree of control the contracting employer exercises over and the monitoring of other aspects of the contractor's operations.

G26.2-2 Planning log hauling operations for varying road grades

Issued September 28, 2005; Editorial Revision May 1, 2008

Regulatory excerpt

Section 26.2 of the *OHS Regulation* ("*Regulation*") states:

- (1) The owner of a forestry operation must ensure that all activities of the forestry operation are both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.
- (2) Every person who has knowledge and control of any particular activity in a forestry operation must ensure that the activity is both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.
- (3) The planning required under this section must
 - (a) include identification of any work activities or conditions at the workplace where there is a known or reasonably foreseeable risk to workers,
 - (b) be completed before work commences on the relevant activity, and
 - (c) be documented at the time of planning.
- (4) If, after any planning referred to in subsection (3), there is a change in the workplace circumstances, including the work activities and the conditions of the workplace, and the change poses or creates a known or reasonably foreseeable risk to workers that was not previously identified, then
 - (a) the plan must be amended to identify and address the risk and provide for the health and safety of the workers at the workplace, and
 - (b) the amendment must be documented as soon as is practicable.

Purpose of guideline

The purpose of this guideline is to provide direction about appropriate risk assessments that should be conducted in planning log hauling operations on varying road grades to ensure worker safety.

Risk assessment

If log haul operations are to be conducted on road grades that exceed those listed in the Ministry of Forests' *Forest Road Engineering Guidebook*, a risk assessment should be conducted before any hauling is conducted. The risk assessment factors will depend on the grade of the road, namely

1. *Grades 0 to 18% (18% for short pitches is the maximum listed in the Forest Road Engineering Guidebook)*

The following conditions should be in place to ensure log haul operations on these grades do not present a safety concern:

- The vehicle can be brought to a safe stop on the road surface and grade given the weather conditions at that time.
- The vehicles are properly maintained.

- Speed is not excessive (excessive speed for this guideline is considered as speed above the design speed, above which the operator is not in adequate control of the vehicle, or speed above which the unit could not be brought to a safe stop given a single failure in the driveline).
- Vehicle loads are within the limits of the equipment.

2. *Grades in excess of 18% (grades exceeding road grades listed in the Ministry of Forests' Forest Road Engineering Guidebook):*

There are many factors that contribute to safe operations on these grades, including: weather conditions; road surface friction; grade and horizontal alignment; side slope; velocity of the vehicle; load carried by the vehicles; size, style and condition of brakes; obstacles ahead; and location and size of drop-offs.

The employer must perform a risk assessment to ensure that the equipment being used is capable of performing in a safe manner given weather conditions at the time of log hauling. This assessment should include the following:

- Specifications regarding the road surface condition
- Vehicle speed
- Length of pitch
- Road relief
- Curve radius
- Comments on specific terrain hazards to negotiate

The risk assessment should not rely solely on the fact that trucks or other equipment may have negotiated similar roads without incident during past operations.

The risk assessment should also address the situation where if an upset condition (such as adverse weather conditions or a failure in the driveline) were to occur, how that upset condition would be controlled or mitigated. The risk assessment needs to confirm that the vehicle or other equipment can be brought to a safe stop under the anticipated hauling or upset conditions. If hauling conditions fall outside the anticipated parameters of the risk assessment, a reassessment should be conducted before hauling continues.

A clear work procedure must be developed based upon the risk assessment described above and include specific instructions for all factors included in the risk assessment. In addition, the risk assessment should include instructions for correct brake adjustment, and if necessary, brake temperature checks. The risk assessment and subsequent work procedure should be discussed and agreed upon with the loading and hauling crews.

Once completed, the risk assessment must confirm that the vehicles or other equipment travelling on these slopes are capable of doing so safely before hauling operations begin.

G26.21/26.22 *Faller training – Application*

Issued September 28, 2005; Revised May 1, 2008

Regulatory excerpt

Sections 26.21 and 26.22 of the *OHS Regulation* (“*Regulation*”) state:

26.21 Faller qualifications

- (1) A worker must not fall trees or be permitted to fall trees, or conduct or be permitted to conduct bucking activities, associated with falling trees, unless
 - (a) the worker is qualified to do so to a standard acceptable to the Board, and
 - (b) the work being performed is within the documented and demonstrated capabilities of that worker.

...

26.22 Forestry operation faller training

- (1) A worker may not work as a faller in a forestry operation unless the worker receives training for falling that is acceptable to the Board and is certified in writing as a competent faller under this section.

...

Purpose of guideline

Hand falling remains one of the most dangerous professions in British Columbia. It is crucial that fallers are trained in safe work practices so that they are able to recognize and eliminate or minimize hazards.

This guideline sets out what training is acceptable to WorkSafeBC for the purposes of s. 26.22(1) of the *Regulation*, and who is required to receive faller training. It also describes what the “documented and demonstrated capabilities” of the worker mean for the purposes of s. 26.21.

Who must receive training?

The faller training requirement in s. 26.22 applies to workers in a “forestry operation.” Section 26.1 of the *Regulation* states that a forestry operation “means a workplace where work is done in relation to silviculture or harvesting trees, including constructing the means of access and transporting the harvested trees to a facility where they are processed or from which they are exported.” Workers who fall trees in such workplaces will have to be trained and certified in accordance with s. 26.22. For discussion of what “forestry operation” is intended to cover, please refer to Guideline G26.1-1

Faller training

To address the need for acceptable training, WorkSafeBC, in conjunction with forest industry employer associations, representatives of organized labour and experienced hand fallers, has developed a faller training standard that meets the requirements of section 26.22.

The delivery of training meeting the B.C. Faller Training Standard is currently being administered by the B.C. Forest Safety Council. The B.C. Forest Safety Council can be

contacted at 1-877-324-1212. Faller training for the oil and gas industry is being administered by Enform, who can be contacted at (250) 785-6009.

The B.C. Faller Training Standard consists of two primary components. The first component addresses new faller training, and covers the selection and use of appropriate personal protective equipment, the maintenance and operation of falling equipment and tools, hazard recognition and control, and safe falling, bucking and limbing procedures. The second component involves a written exam and a practical field evaluation of the faller's falling abilities, which, if successfully completed, will result in the issuance of a certificate to the faller.

Experienced fallers

Fallers with more than 2 years experience may be deemed to have received training acceptable to WorkSafeBC in accordance with s. 26.22(2) of the *Regulation* by successfully challenging the B.C. Faller Training Standard. Experienced fallers may contact the B.C. Forest Safety Council for more information on challenging the Standard.

Other courses

WorkSafeBC recognizes that other training courses may be developed that may meet the requirements for acceptance under section 26.22(1). WorkSafeBC will review any proposed courses for acceptance to ensure consistency with the B.C. Faller Training Standard. Any new courses WorkSafeBC identifies as acceptable under section 26.22(1) will be added to this guideline for the information of workplace parties and prevention officers.

Persons wishing to have WorkSafeBC consider an alternative course for acceptance under section 26.22(1) may submit that course to WorkSafeBC for review and evaluation. Please contact WorkSafeBC Certification Services at (604) 276-3090 for further information.

Forestry operation fallers - Employer's obligation to ensure faller qualified

While the obligations in s. 26.22 regarding receiving training are imposed on workers in a forestry operation, employers should note their obligations under s. 26.21 of the *Regulation*.

Employers are required, as part of the obligation in s. 26.21 to verify that fallers have received WorkSafeBC approved training. This can be done by ensuring that the faller possesses a valid faller training certificate or by enquiring with the B.C. Forest Safety Council.

In addition to verifying that the faller has received WorkSafeBC approved training, employers are required to ensure that fallers are able to fall safely the size and type of timber that the faller will encounter in the conditions (such as terrain) that will be present at the workplace. Faller experience should be documented in the log book issued to each faller as part of the training process. Reviewing this information will assist the employer to make an appropriate decision whether the faller is qualified for the conditions he or she will encounter. Employers should also evaluate the workmanship of the faller as part of determining whether the faller is capable of falling safely in the conditions he or she will face.

If the employer determines that a faller is not capable of falling the type of timber present in the workplace, the employer must either refuse to permit the faller to fall trees in those conditions, or provide the necessary training that would allow the faller to safely perform that work. Where training is provided, the employer should include the training information in the faller's log book.

Section 26.21 - Fallers in “similar activities” to forestry operations

While section 26.22 applies to fallers in forestry operations, section 26.21 is not restricted to “forestry operations” (see guideline G26.1 for information on the application of Part 26 to forestry and similar operations).

Employers at workplaces that are not “forestry operations” but who will have workers falling and bucking trees must ensure that these workers are qualified for the tasks they will be carrying out. These types of operations may include

- Arborists in forestry settings
- Parks workers
- Firefighters falling in emergency circumstances
- Land clearing where timber is being felled but not being “harvested”

G26.41 Guylines

Issued May 1, 2008

Regulatory excerpt

Section 26.41 of the *OHS Regulation* states:

(1) Guylines for a mobile yarder must be positioned

- (a) as specified by the manufacturer, or
- (b) in a manner acceptable to the Board.

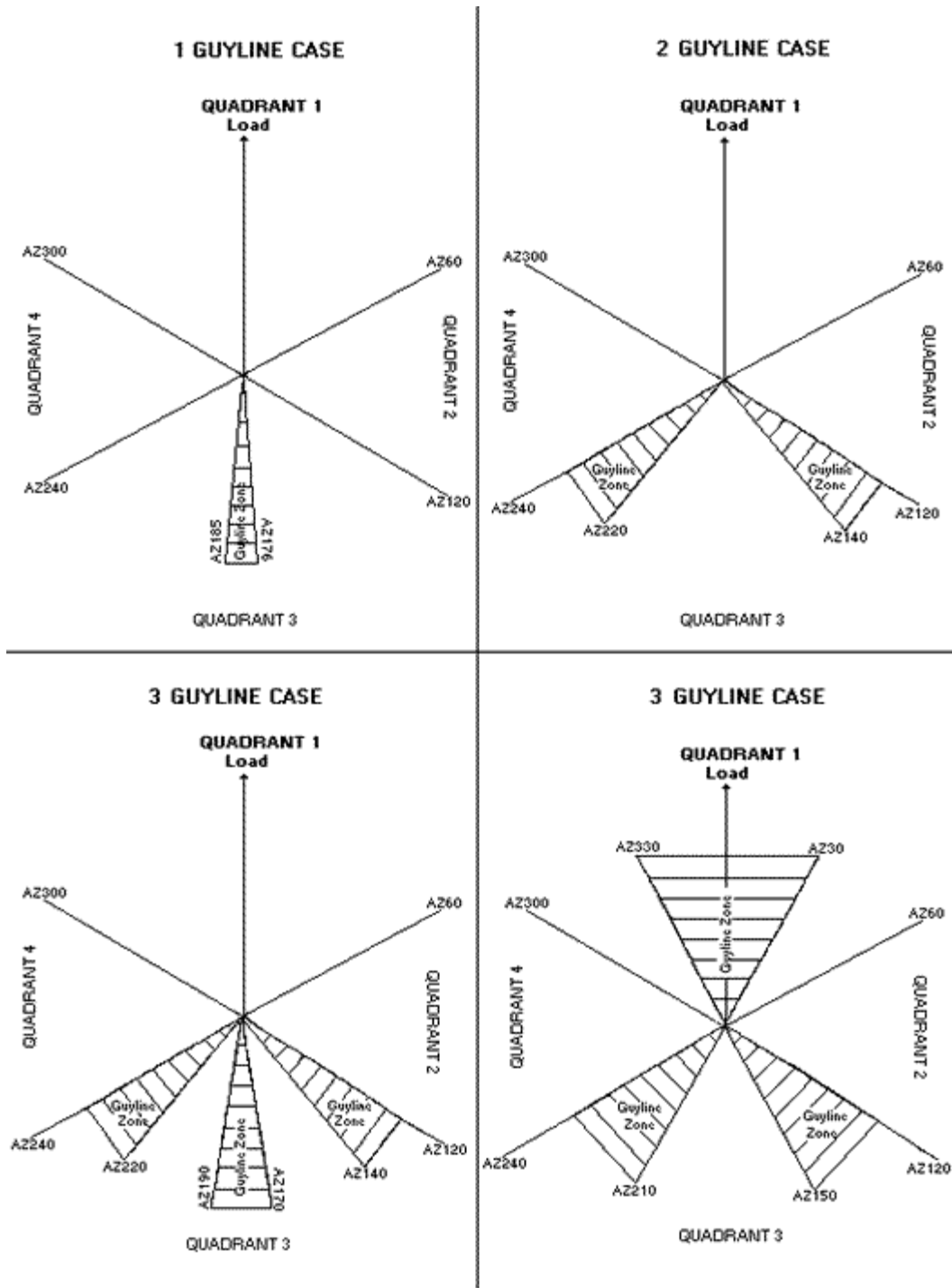
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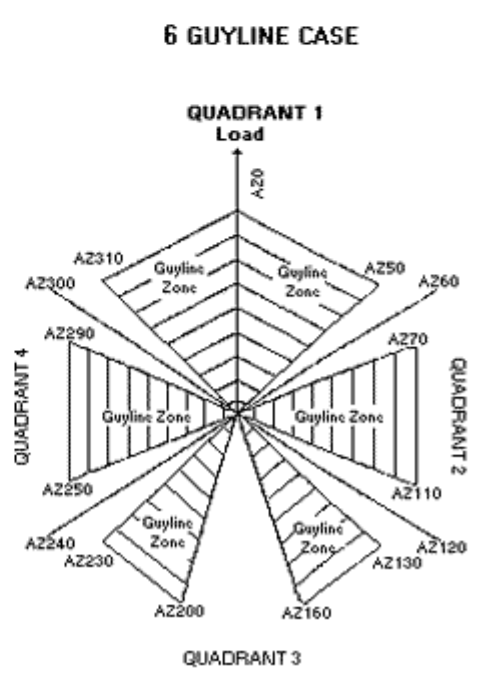
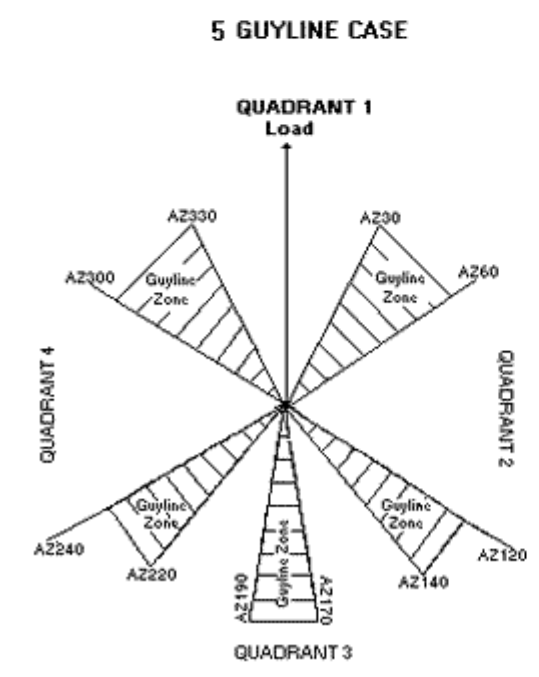
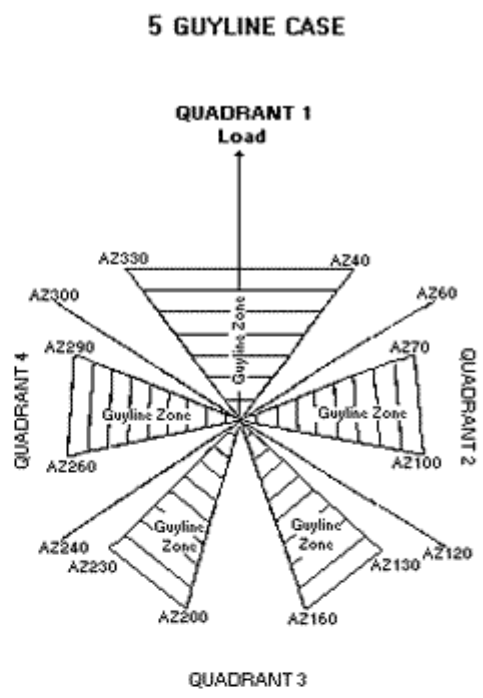
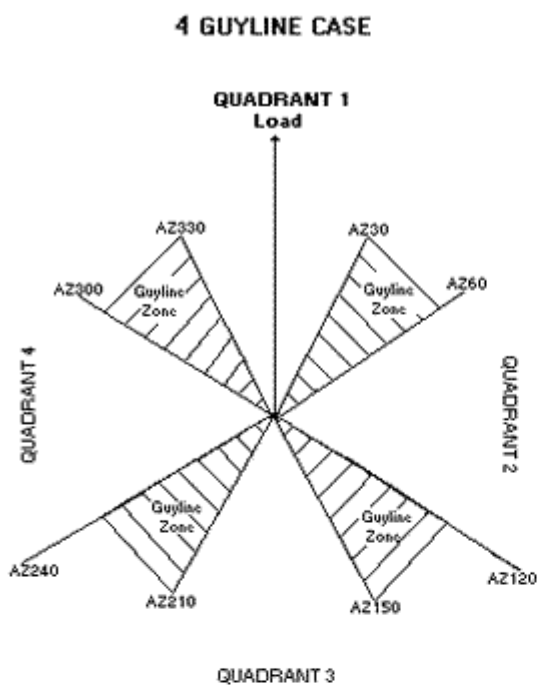
Purpose of guideline

The purpose of this guideline is to describe the positioning of guylines for mobile yarders that is acceptable to WorkSafeBC.

Guyline positioning

Unless otherwise specified by the manufacturer, guylines for mobile yarders must be positioned as shown in the diagrams below.





G26.65(3) Logging trucks pulling multiple trailers

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Regulatory excerpt

Sections 26.65(1) and (3) of the *OHS Regulation* (“*Regulation*”) states:

- (1) For the protection of the driver, each logging truck must have, at the back of the cab, a substantial barrier that
 - (a) is at least 15 cm (6 in) higher than the cab, and
 - (b) is at least as wide as the cab....

- (3) For the purposes of subsection (1), the barrier must be capable of withstanding a horizontal forward static load equal to 40% of the weight of the cargo being transported that may shift and contact the barrier, with this load uniformly distributed over the entire barrier.
...

Purpose of guideline

This guideline provides direction on how to calculate the weight that may shift and contact the barrier to determine the strength of the barrier required under section 26.65(3).

Calculation of the weight of cargo being transported that may shift and contact the barrier

Under section 26.65(3) of the *Regulation*, a barrier must support a static load that is at least 40% of the weight of the cargo that could strike the barrier. In some cases the cargo being transported is on a second, and possibly a third trailer. Generally, in determining whether the weight of the trailers may shift and contact the barrier

- 100% of the load directly behind the bulkhead is considered to be able to shift and contact the barrier
- 50% of the second trailer’s load is considered to be able to shift and contact the barrier
- 25% of the third trailer’s load is considered to be able to shift and contact the barrier

Calculation of the strength of barrier required under s. 26.65(3)

In order to calculate the strength of the barrier, barrier protection must withstand at least 40% of the load directly behind the driver, plus one half of 40% of the load in the next trailer, plus one quarter of 40% of the load in the next trailer.

Note: These calculations assume that the

- Load is uniformly distributed and there is not a point load
- Barriers are 1.8 meters or more in height
- Overall length of truck tractors and semi-trailers does not exceed the requirements of the *BC Commercial Transport Regulations*, B.C. Reg. 30/78 as amended

Example

Consider a total load of 100 tons with 50 tons directly behind the barrier and 25 tons on each of two attached trailers. The barrier needs to have a horizontal static load rating of:
 $0.4 \times 50 \text{ tons} + 0.4 \times 0.5 \times 25 \text{ tons} + 0.4 \times 0.25 \times 25 \text{ tons} = 27.5 \text{ tons}$

G26.65(4)(b) Installing the barrier on the logging truck in a manner acceptable to WorkSafeBC

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Regulatory excerpt

Section 26.65(4) of the *OHS Regulation* (“*Regulation*”) states:

The barrier of the logging truck must be

- (a) designed, constructed and maintained so that it has no aperture large enough to permit any item of cargo to pass through it, and
- (b) installed in a manner acceptable to the Board to ensure that the rated capacity of the barrier is not diminished.

Section 4.3(2) of the *Regulation* states:

Unless otherwise specified by this *Regulation*, the installation, inspection, testing, repair and maintenance of a tool, machine or piece of equipment must be carried out

- (a) in accordance with the manufacturer's instructions and any standard the tool, machine or piece of equipment is required to meet, or
- (b) as specified by a professional engineer.

Purpose of guideline

The purpose of this guideline is to provide direction about acceptable installation of a barrier on a logging truck under section 26.65(4)(b).

Installation in a manner acceptable to WorkSafeBC

WorkSafeBC considers any one of the following methods to be acceptable in meeting the requirements for installing a barrier of the logging truck under s. 26.65(4)(b):

1. One of
 - The barrier of the logging truck is installed in accordance with the manufacturer's instructions and any standard the barrier is required to meet (see s. 4.3(2)(a) of the *Regulation*)
 - The barrier of the logging truck is installed as specified by a professional engineer (see s. 4.3(2)(b) of the *Regulation*).

Note: The fasteners for attaching the barrier should be not less than grade 5 and not more than grade 8 quality.

2. The barrier of the logging truck carrying a load of logs weighing up to 84,000 lbs (38,100 kg) is installed so that each barrier will, at a minimum, be attached to the truck by the equivalent of two 7/8 or 1 inch UNF grade 8 bolts (rods) with substantial tie straps. This is preferable to the use of U-bolts. The fastener's torque must meet the manufacturer's specifications. Note: A spacer is often installed in the open section of the tractor C frame to help support the required torque.

3. The barrier of the logging truck carrying a load of logs weighing up to 84,000 lbs (38,100 kg) is installed so that each barrier will, at a minimum, be attached to the truck by the equivalent of one of the following:
 - a) six $\frac{3}{4}$ " grade 8 bolts on each side, three of which must be separated by approximately 5.5 inches starting from about 2 inches from the end at the front and rear of the 34-38" angle iron sill
 - b) two 1" grade 8 U-bolts with bottom plates on each side, one at the front and one at the rear of the 34-38" sill or sub frame
 - c) four $\frac{3}{4}$ " grade 8 bolts and one 1" grade 8 U-bolt on each side (U-bolt at the back towards the trailer), or
 - d) three $\frac{7}{8}$ " grade 8 U-bolts on each side (two U-bolts in the back and one at the front of the barrier)

Also, when attaching the barriers using U-bolts as described above

- The fastener's torque must meet the manufacturer's specifications,
Note: A spacer is often installed in the open section of the tractor C frame to help support the required torque
- The bend radius between the inside of the legs and the inside of the top of the bolt must be at least $\frac{3}{4}$ inch, and
- The U-bolt must closely fit the clamped components to avoid corner bending

Note: Under section 4.8(2)(b) of the *Regulation*, if the barrier attachment system has been modified in a manner which will change its rated capacity or rated load, the rated capacity or rated load must be certified by a professional engineer. Unauthorized modification may lead to equipment failure and operator injury.