

Forestry HRS Compliance Guide

This guide is intended to make employers aware of the parts of the Occupational Health and Safety Regulation that prevention officers will be focusing on as part of the [Forestry High Risk Strategy](#).

Relevant OHS Regulation sections for inspectional focuses

The following Occupational Health and Safety (OHS) Regulation references in the left column are not meant to capture all possible sections that could be cited. They are meant to outline the minimum mandatory focus that must be exercised by a prevention officer when conducting a Forestry HRS inspection within the specific phase being inspected and where applicable. The Focus Elements in the right column relate to the sections that are cited below, and they are intended to clarify or provide examples of the relevant elements being inspected.

Manual Falling Inspectional Focus

Falling cuts

26.24(5)

- (a) A sufficient undercut must be used;
- (b) the undercut must be complete and cleaned out;
- (c) sufficient holding wood must be maintained;
- (d) the backcut must be higher than the undercut to provide a step on the stump;
- (e) wedging tools must be immediately available and unless the tree has a pronounced favorable lean, wedges must be set.

Brushing

26.24(5.1) When a tree is being felled, the tree must not brush standing trees if that can be avoided.

Focus Elements

- (b) A number of stumps were observed where the undercuts were not complete and cleaned out. This practice can result in loss of control when the tree falls.
- (c) A number of stumps were observed where the holding wood was not maintained across the stump. This practice can result in loss of control when the tree falls.
- (d) A number of stumps were observed where the backcut was not higher than the undercut to provide a step on the stump. This practice can result in the base of the tree coming back and striking the faller.
- (e) This faller was observed working without wedging tools immediately available and not all trees had a pronounced favorable lean. This practice can result in the tree leaning back and potentially breaking off the holding wood, putting the faller at risk.

Focus Elements

- (5.1) A tree was observed having brushed standing trees. This faller did not create an opening for the tree or otherwise take reasonable care that the tree being felled would not brush standing trees.

Falling and bucking dangerous trees

26.25(1) Falling and bucking must not be started if (a) a tree is in a condition that, if felled or bucked in that condition, the tree or log would pose a reasonable foreseeable risk, or

(b) it appears that the tree cannot be completely felled or the bucking cut cannot be completed, as the case may be.

Falling dangerous trees

26.26 (1) Where practicable, dangerous trees must be felled

(a) progressively with the falling of other timber but before falling adjacent live trees, and

(b) into open areas.

(2) (a) dangerous bark must be removed, where practicable,

(b) stump height must, in the judgment of the faller, allow maximum visibility and freedom of action,

(c) the tree must be felled in the direction of the lean whenever possible, and the undercut must be as deep as necessary to minimize the use of wedges and resulting vibration,

(d) pushing with a green tree must only be undertaken to overcome a falling difficulty, and

(e) wedging over must be used only if there is no alternative and after a careful assessment of the ability of the dangerous tree to withstand wedging.

(3) if conventional methods cannot be safely employed to fall a dangerous tree, blasting or other acceptable methods must be used.

(4) Falling, bucking or limbing activities must not be undertaken in an area made hazardous by a dangerous tree, or a dangerous tree which has been brushed by a felled tree, until the dangerous tree has been felled.

Responsibilities for falling and bucking

26.24(1) Subject to section 26.29(3) before a tree is felled all workers must be clear of the area within a 2 tree-length radius of the tree

(2) Before falling or bucking starts, all obstructions to the activity must be cleared and a safe escape route to a predetermined safe position must be prepared

(7) When a tree starts to fall, the faller and any other worker must move quickly to a predetermined safe position, at least 3 m (10 feet) away from the base of the tree where possible, and take cover if available.

Focus Elements

(a) This faller was observed falling or bucking dangerous trees or logs where this action would pose a reasonable foreseeable risk to the faller.

(b) This faller was observed having started to fall or buck dangerous trees when the falling or bucking could not be completed due to the high risk of injury to the faller.

Focus Elements

(a) This faller was observed not falling dangerous tree progressively with the falling of other trees and before falling adjacent live trees. This practice can result in the dangerous tree striking other trees and materials being thrown back towards the faller.

(b) This faller was observed falling dangerous trees into areas where there was not a sufficient opening. This can result in the dangerous trees striking other trees and materials being thrown back towards the faller.

(c) This faller was observed falling dangerous trees against the direction of lean. This faller was observed using undercuts not large enough to minimize the use of wedges. This practice can result in the dangerous tree breaking off and parts of the tree then striking the faller.

(d) This faller was observed pushing a dangerous tree with a green tree when this was not necessary. This practice can result in the dangerous tree breaking off and parts of the tree then striking the faller.

(e) This faller was observed wedging a dangerous tree when this was not necessary. This faller could have used other methods to fall the dangerous tree.

(3) This faller did not have access to or use other means for falling a dangerous tree such as blasting or other acceptable methods.

(4) This faller was observed falling and bucking in an area made dangerous by a danger tree that had been brushed by the falling of another tree.

Focus Elements

(1) This faller has not made sure all workers are clear within a 2 tree length radius of the tree before starting to work.

(2) This faller was observed not clearing all obstructions and preparing a safe escape route before starting to fall or buck trees.

(7) This faller was observed not moving at least 10 feet away and taking cover, where possible, when the tree started to fall.

Hazards created through road construction

26.80 Road or skid trail construction, including any blasting activity, must be carried out in a manner that prevents hangups, hanging broken tops or limbs, leaners, sidebind of pushed trees, or similar hazards which could endanger fallers or other workers.

Focus Elements

This owner/employer has not ensured that road/trail construction was carried out in a manner that prevents accumulation of roadside debris or other hazards which could endanger workers. Hazards that were observed included: stumps, boulders and debris hung up in standing timber; trees or logs pushed into or leaning against standing timber; destabilized trees or stumps.

Mechanized Harvesting Inspectional Focus

Maintenance work plan and lockout

10.3 (1) If machinery or equipment is shut down for maintenance, no work may be done until

- (a) all parts and attachments have been secured against inadvertent movement,
- (b) where the work will expose workers to energy sources, the hazard has been effectively controlled, and
- (c) the energy isolating devices have been locked out as required by this Part.

Focus Elements

10.3 (1)(a) Workers were observed performing maintenance work on machinery or equipment when all parts and attachments have not been secured against inadvertent movement.

(b) Workers were observed working on machinery or equipment that exposed workers to an energy source and this hazard has not been effectively controlled.

(c) Workers were observed working on machinery or equipment and the energy isolating devices have not been locked out as required.

Three Point Contact procedures

Obligation to use fall protection

11.2(5) If subsection (4) is not practicable, or will result in a hazard greater than if a fall arrest system or a rope access system was not used, the employer must ensure that work procedures are followed that are acceptable to the Board and minimize the risk of injury to a worker from a fall.

(6) Before a worker is allowed into an area where a risk of falling exists, the employer must ensure that the worker is instructed in the fall protection system for the area and the procedures to be followed.

Focus Elements

11.2(5) Workers were observed assessing equipment where a hazardous fall could occur and three point contact procedures were not followed by workers.

(6) This employer does not have safe work procedures for assessing equipment that would minimize the risk of injuries to the workers from a fall. This employer has not trained workers in safe work procedures for assessing equipment.

Steep slope assessment plans

26.16(4) Despite subsections (2) and (3) but subject to subsection (5), logging equipment may be operated beyond the maximum slope operating stability limits specified in those subsections if

- (a) a qualified person conducts a risk assessment of that operation, and
- (b) written safe work practices acceptable to the Board are developed and implemented to ensure the equipment stability during operation.

(5) Despite anything in this section, logging equipment must not be operated in a particular location or manner if its stability cannot be assured during that operation.

Focus Elements

26.16(4)(a) The risk assessment for the logging equipment operating beyond the maximum slope stability limits specified in the Regulation has not been developed by a qualified person.

(b) The written safe work practices developed and implemented are not acceptable to the Board.

(5) Logging equipment operated in this particular location cannot be assured of its stability.

Cable Harvesting Inspectional Focus

Clearing the turn

26.39 Safe location

- (1) A worker must not be positioned within the bight of any running lines under tension, nor in a position where the worker could be struck by a line if it were to break or come loose, or be tightened if slack.
- (2) A worker must be positioned in a the clear to avoid being exposed to moving logs, saplings, rood wads, chunks, rigging or other material.
- (3) A worker must be positioned clear of rigging which is stopped by an obstruction until the rigging has been slackened to reduce the hazard.

Yarding angles (planning)

26.2(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.

26.40(1.1) A standing tree must not be used to anchor guylines if a worker would be endangered were the tree to be pulled over.

Work area arrangement

26.56(2) Work in a work area in a forestry operation must be planned and the work area must be located, constructed, maintained and operated to ensure the following:

- (a) logs can be moved safely in the area;
- (b) log piles and equipment used to handle the logs do not become unstable or otherwise create a hazard;
- (c) workers are able to work in locations clear of moving logs and equipment;
- (d) workers are not exposed to incoming or runaway logs or other debris;
- (e) the area is kept free from buildup of bark and other debris to the extent that it would pose a risk to workers.

Focus Elements

26.39 Safe location

- (1) A worker was observed positioned within the bight of running lines under tension. A worker was observed in a position where the worker could be struck by a line if it were to break, come loose or be tightened.
- (2) A worker was observed in a position not in the clear and exposed to moving logs, saplings, rood wads, chunks, rigging and other materials.
- (3) A worker was observed not positioned in the clear of rigging that is stopped but not slackened to reduce the hazard.

Focus Elements

26.2(2) Yarders and anchors for lines planned for movement of logs were observed at such angles that workers will be exposed to runaway logs or other materials.

26.40(1.1) A standing tree was observed being used for an anchor guyline and workers would be endangered if the tree was pulled over.

Focus Elements

- (a) Logs were observed being moved in the landing in close proximity to workers in an unsafe manner.
- (b) Logs were observed piled and moved by equipment in such a way they could become unstable and put workers at risk from being hit by logs.
- (c) Workers are not able to work safely clear of moving logs and equipment in this landing.
- (d) This work area is arranged in such a way that workers are exposed to runaway logs or other debris.
- (e) This work area has not been kept free from buildup of bark and other debris to such an extent that workers are at risk of injury.

Log Transporting Inspectional Focus (See the Log Transporter Inspection Checklist)

Road Assessment (planning)

26.2(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.

Best practices for Loading and Off-Loading Suspended logs

26.59(1) A log must not be passed over any worker or occupied vehicle or equipment.

(2) Despite subsection (1), a log may be passed over a vehicle or equipment that is being loaded, if the log

(a) does not pass over any portion of the vehicle or equipment that is being loaded, and

(b) does not constitute a hazard for the occupant of the vehicle or equipment.

(3) A worker must not stand or pass under a suspended log.

Vehicle movements

26.61(1) Effective means of communications must be used in a forestry operation to control vehicle movements in any location where

(b) trucks are moving at landings, load-out points, water dumps, dry land sorts or railway reloads.

Bunks and stakes

26.66(4.1) A worker must not go on bunks and trailer assemblies to raise or lower stakes and extensions unless it is impracticable to do otherwise.

(4.2) If a worker must go on a bunk or trailer assembly to collapse stakes or extensions, the worker must be provided with safe means of getting on and off the bunk or trailer assembly.

Load specifications

26.67 (1) In order to control the movement of a log transporter while it is being loaded, an effective means of communication must be established between the transporter operator and any worker loading the logs.

(1.1) Logs must not be loaded on a log transporter unless all workers in the vicinity are in a safe location and clear of any moving logs or logs that might move or fall during that operation.

(1.2) While a log transporter is being loaded, a worker must not stand on the cab platform of the transporter or between the transporter cab and a log being loaded.

Focus Elements

26.2 (1) This owner has not ensured all activities on this road system are both planned and conducted in accordance with safe work practices acceptable to the Board with regards to traffic volumes and maintenance of roads and bridges.

Focus Elements

26.59(1) Logs were observed being passed over an occupied vehicle.

(3) A worker was observed standing or passing under a suspended log.

Focus Elements

26.61(1) Effective means of communications are not being used at this forestry operation to control the movement of trucks at landings, load-out points, water dumps, dry land sorts or railway reloads.

Focus Elements

26.66(4.1) A worker was observed going on bunks or trailer assemblies to raise or lower stakes and extensions when it is practicable to do otherwise.

(4.2) A worker is required to go on bunk or trailer assemblies to collapse stakes and extensions and the worker has not been provided with safe means of getting on and off the bunk or trailer assembly.

Focus Elements

26.67(1) There is not an effective means of communication established between the operator of the log transporter and the worker loading the logs to control the movement of the log transporter.

(1.1) Workers were observed in close proximity of log transporter being loaded and workers were not in the clear should a log move or fall.

(1.2) A worker was observed standing on the cab platform or between the transporter cab and the log being loaded.

(1.3) Logs must be loaded on a log transporter in a manner that meets all of the following requirements:

(a) the load must be stable without the use of binders

(b) the transporter and the load must remain stable while in transit

(c) the strain on the binder units, bunk stake lines or stakes must not exceed the load that the units, lines or stakes are designed to bear.

(d) the free and full movement of the log transporter must not be impaired.

(4) The log length on a log transporter must not exceed the design capacity of the road.

(5) A log whose length is not contained by the stakes must not be loaded above the level of stakes unless the log

(a) is in a secure lay, and

(b) does not have excessive crook, sweep or deformity.

(5.1) Hazardous limbs must not be transported on a log transporter.

(5.2) A worker must not stand on any part of the load of logs on a log transporter.

Binders

26.68(1) Unless the centres of all logs lie below the top of stakes on a log transporter, at least 2 binders must be installed to restrain the logs before the transporter is moved.

(3) If logs or log chunks could roll or slide off the log transporter, or the logs or log chunks are not contained within stakes, at least 2 binders must be used to secure the logs regardless of the height of the load.

(3.3) A binder on a load of logs must be checked and kept tight during transportation of the logs.

(4) Each binder and attachment must have a breaking strength of a least 53 KN (12,000 lb.)

Binder removal

26.69(4) Binders must not be removed when a worker is preparing to unload logs from a log transporter unless:

(a) a binder removal station is being used, or

(b) the logs are otherwise restrained to prevent them from falling on the worker who is releasing the binders or stakes.

(1.3) A load was observed loaded in such a way that:

(a) the load is not stable without the use of binders;

(b) the transporter and load does not remain stable while in transit;

(c) the strain on binder units, bunk stake lines or stakes exceeds the load that the unit, lines or stakes are designed to bear;

(d) The load was observed being loaded in such a way that the free and full movement of the log transporter is impaired.

(4) The observed log lengths on the log transporter exceed the design capacity of the road.

(5) The load was observed loaded above the stakes and in such a way one or more logs are not contained by the stakes because:

(a) a log is not loaded in a secure lay or

(b) a log has excessive crook, sweep or deformity.

(5.1) A loaded log transporter was observed with hazardous limbs that could pose hazards to other vehicle traffic during transport.

(5.2) A worker was observed standing on a part of the load of logs on a log transporter.

Focus Elements

26.68(1) A loaded log transporter with loaded logs above the stakes was observed without a least 2 binders installed before the transporter was moved.

(3) A loaded log transporter was observed moving with loaded logs and log chunks that could slide off the log transporter and without a least 2 binders installed before the transporter was moved.

(3.3) It was observed that one or more binders on a load of logs were not checked and kept tight during transportation of the logs.

(4) It was observed that several binders on a loaded logging truck did not have the required load rating of 53 KN (12,000lbs) breaking strength.

Focus Elements

26.69(4) A worker was observed removing binders securing the load on a log transporter and:

(a) a binder removal station was not used or

(b) the logs were not restrained by any means from falling on the worker who was releasing the binders or stakes.

Operating procedures

26.71.1(2) Without limiting subsection (1), the operator referred to in subsection (1) must

- (a) not overtake another moving industrial vehicle, except on a signal from the other vehicle operator,
- (b) use extreme caution when approaching vehicles coming from the opposite direction,
- (c) keep a safe distance when following crew transportation vehicles, having due regard for road and grade conditions and visibility,
- (d) drive at speed appropriate to the log transporter's capabilities, the road design and condition, the traffic, the visibility and the weather conditions, and
- (e) not operate the log transporter while impaired by
 - (i) fatigue, or
 - (ii) any other cause, substance or matterthat could prevent the operator from operating the log transporter safely.

Best practices for maintenance work (lock out, access, and egress) Maintenance work plan and lockout

10.3 (1) If machinery or equipment is shut down for maintenance, no work may be done until

- (a) all parts and attachments have been secured against inadvertent movement,
- (b) where the work will expose workers to energy sources, the hazard has been effectively controlled, and
- (c) the energy isolating devices have been locked out as required by this Part.

Three Point Contact procedures

Obligation to use fall protection

11.2(1) Unless elsewhere provided for in this Regulation, an employer must ensure that a fall protection system is used when work is being done at a place

- (a) from which a fall of 3 m (10 feet) or more could occur, or
- (b) where a fall from a height of less than 3 m involves a risk of injury greater than the risk of injury from the impact on a flat surface.

Focus Elements

- 26.71.1(2)(a) A log transporter was observed overtaking another moving industrial vehicle without the other vehicle giving a signal indicating that it was safe to do so.
- (b) A log transporter was observed not using extreme caution when approaching a vehicle coming from the opposite direction.
 - (c) A log transporter was observed not keeping a safe distance when following a crew transportation vehicle and not having due regard for road and grade conditions and visibility.
 - (d) A log transporter was observed not driving at a speed appropriate to the log transporter's capabilities, the road design and condition, the traffic, the visibility and weather conditions.
 - (e) A log transporter operator was observed driving while impaired by
 - (i) fatigue or
 - (ii) another cause, substance or matterthat could prevent the operator from operating the log transporter safely.

Focus Elements

- 10.3 (1)(a) Workers were observed performing maintenance work on machinery or equipment when all parts and attachments have not been secured against inadvertent movement.
- (b) Workers were observed working on machinery or equipment that exposed workers to an energy source and this hazard has not been effectively controlled.
 - (c) Workers were observed working on machinery or equipment and the energy isolating devices have not been locked out as required.

Focus Elements

- 11.2(1)(a) A worker was observed accessing equipment at an elevation of more than 3 m (ten feet) and an effective fall protection system (three point contact) was not being used.
- (b) A worker was observed accessing equipment where the height is less than ten feet but a fall would involve a risk of injury from the impact and the worker was not using an effective three point contact procedure (fall protection system).

Emergency Response Plan (ERP) Inspectional Focus

Helicopter access only daily plan

3.17.1 If air transportation is the primary or only method for transporting an injured worker, all of the following requirements must be met:

(a) before the start of operations in a workplace, arrangements must be made with an air service to ensure that and appropriate aircraft is reasonably available to the workplace during those operations;

(b) the arrangements in paragraph (a) must include procedures for

(i) the employer to determine the availability of the appropriate aircraft before the start of each workday, and

(ii) the air service to notify the employer if an appropriate aircraft ceases to be available.

Lack of Emergency Preparedness

4.13(1) The employer must conduct a risk assessment in any workplace in which a need to rescue or evacuate workers may arise.

4.13(2) If the risk assessment required by subsection (1) shows a need for evacuation or rescue, appropriate written procedures must be developed and implemented, and a worker assigned to coordinate their implementation.

First aid assessment (barriers to first aid)

Basic requirements:

3.16(2) For the purpose of complying with subsection (1), the employer must conduct an assessment of the circumstances of the workplace, including

(a) the number of workers who may require first aid

(b) the nature and extent of the risks and hazards in the workplace, including whether or not the workplace as a whole creates a low, moderate or high risk of injury

(c) the types of injuries that are likely to occur

(d) any barriers to first aid being provided to an injured worker, and

(e) the time that may be required to obtain transportation and to transport an injured worker to medical treatment.

3.16(3) The employer must review the assessment under subsection (2)

(b) whenever a significant change affecting the assessment occurs in the employer's operations.

Focus Elements

3.17.1(a) Air transportation is the only or primary method for transporting an injured worker from this workplace and before the start of operations arrangements have not been made with an air service to ensure that an appropriate aircraft is reasonably available to the workplace during the operation.

(b)(i) Air transportation is the only or primary method for transporting an injured worker from this workplace and the employer has failed to determine the availability of the appropriate aircraft before the start of each work day.

(ii) Air transportation is the only or primary method for transporting an injured worker from this workplace and the employer has failed to ensure there is a system for the air service to notify the employer if an appropriate aircraft ceases to be available.

Focus Elements

4.13(1) The employer failed to conduct a risk assessment in a workplace in which a need to rescue or evacuate workers may arise.

4.13(2) The required risk assessment shows a need for evacuation or rescue, and appropriate written procedures were not developed or implemented, and/or a worker was not assigned to coordinate their implementation.

Focus Elements

3.16(2) This employer has failed to conduct a first aid assessment for the circumstances for this workplace including:

(a) Failure to include the number of workers who may require first aid

(b) Failure to include the nature and extent of the risks and hazards in the workplace, including whether or not the workplace as a whole creates a low, moderate or high risk of injury

(c) Failure to include the types of injuries that are likely to occur

(d) Failure to include any barriers to first aid being provided to an injured worker, and

(e) Failure to include the time that may be required to obtain transportation and to transport an injured worker to medical treatment.

(3)(b) This employer has failed to review the first aid assessment since a significant change affecting the assessment occurred at this employer's operation.