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GENERAL LANDING WORK PRACTICES

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437-007-0900 General Landing Work Practices.

(1) Before starting or moving any machine, the operator must determine that personnel are in the clear.

(2) When vehicles or machines are moved within the landing area all personnel must:

- (a) Stay in the clear of the vehicle(s) or machine(s).
- (b) Inform the operator of the intent to approach or be near the vehicle(s) or machine(s).
- (c) Wait for the operator's permission to approach or be near the vehicle(s) or machine(s).

(3) Personnel must not approach the hazardous pinch point area created by the rotation of the machine's superstructure without:

- (a) Informing the operator of that intent.
- (b) Receiving acknowledgment from the operator that the person's intention is understood.
- (c) The machine being stopped while personnel are within the hazardous area.

NOTE: OAR 437-007-0700 General Work Practices, paragraphs (1) through (3) from Division 7/H, are reprinted here.

437-007-0700 General Work Practices.

(1) Machines must be operated at a sufficient distance from personnel and other machines to not create a hazard for any person.

(2) An unimpaired horizontal clearance of not less than 3 feet must be maintained between the rotating superstructure of any machine and any adjacent object or surface. If this clearance cannot be maintained, personnel must be warned of the pinch point area. Measures taken to warn personnel of the pinch point area may consist of a warning line constructed of rope or ribbon supported on stanchions, barriers, cones, flags, etc.

(3) Items of personal property, tools or other miscellaneous materials must not be stored on or within 3 feet of any machine if such items would expose personnel to hazards caused by the rotation of the machine's superstructure.

EXCEPTION: These items may be stored within 3 feet when in a locked box or otherwise secured and under the exclusive control of the equipment operator.

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GENERAL LANDING WORK PRACTICES / LANDINGS

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- (4) Any tool or rigging that is not being used must be stored in a location where it will not create a hazard.
- (5) Materials must not be pushed, thrown or dumped off the landing in a manner or at a time that will endanger personnel.
- (6) Personnel must not brand, mark, buck, limb or trim logs in a location that will expose them to contact with moving lines, logs, rigging, machines, equipment or vehicles.
- (7) Logs must not be placed in, moved about, or removed from the bucking area of the landing unless all personnel are in the clear.
- (8) Tongs must not be carried over both shoulders with the tong points around the neck.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0905 Landings.

(1) Landing areas must be:

(a) Large and level enough to land, heel, tail/swing or process logs without striking standing timber, rigging, trucks, vehicles, equipment, other machines or objects.

NOTE: This is not intended to restrict the occasional yarding or loading of logs for poles, piling or an infrequent long break or tree length, provided the log is stabilized before unhooking the choker.

(b) Large enough for safe movement of all machinery.

(c) Kept chunked out and have an even surface.

(2) Outrigger pads, tracks or wheels must be on firm, stable ground, cribbing or prepared surface.

(3) During road side thinning, logs stacked on the road side must be placed in a stable position.

(4) Roadside or continuous landings must be wide enough to safely operate the yarding and loading equipment.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

OR-OSHA Admin. Order 2-2005, f. 5/27/05, ef. 6/1/05.

437-007-0910 Landing Logs.

- (1)** Logs must not be landed until all personnel, trucks, machines, or vehicles are in the clear.
- (2)** After a turn is landed, all rigging must be completely stopped and logs must be stable before:
 - (a)** Being approached by personnel.
 - (b)** Chokers are unhooked.
- (3)** When chokers are manually unhooked, the yarder operator must receive a signal from the chaser before any lines are moved.
- (4)** Logs must not be permitted to accumulate in the landing chute to the point where they become a hazard.
- (5)** When yarding uphill, the landing chute must be cleared of logs before the next turn of logs is landed unless:
 - (a)** The logs are fully contained in the landing chute; or
 - (b)** There is no possibility that personnel working below the landing may be struck by sliding or rolling logs or materials coming off the landing.
- (6)** Logs must not be disturbed or moved from the chute when personnel working below could be struck by logs, chunks or other material sliding or rolling off the landing.
- (7)** The following apply when logs are landed. When the landing slope is:
 - (a)** Twenty percent or less, logs may be landed and decked in the chute provided the logs can be left in a stable position.
 - (b)** More than 20 percent, decking is not permitted in the chute if:
 - (A)** A chaser is required to unhook the rigging from the logs.
 - (B)** Personnel are working below the landing chute.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

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LOG DECKS / GENERAL CABLE YARDING & GROUND SKIDDING WORK PRACTICES

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437-007-0915 Log Decks.

- (1) Logs must be placed in and removed from decks in an orderly manner to minimize rolling or shifting.
- (2) Logs must not be decked in a location where they will slide or roll in the direction of personnel, vehicles, equipment or machines.
- (3) Logs must be rearranged or decked at a different location if the landing process or weather conditions (rain, snow, ice, mud) prevent log stability and personnel are exposed to the hazard of rolling or sliding logs.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0920 General Cable Yarding and Ground Skidding Work Practices.

(1) The requirements of OAR 437-007-0225(1) and (2) (working near unstable objects and danger trees) apply to all cable yarding and ground skidding operations, especially when yarding downhill.

(2) Choker holes must be dug from the uphill side of the log when there is danger of the log rolling or moving.

(3) Chokers must be placed near the end of logs.

NOTE: Chokers may be placed in the middle of the log ("gut shot") if it will provide greater control when the turn is yarded or landed.

(4) Personnel must not stand on or near logs, root wads, or other objects which may be moved by the turn of logs.

(5) Before the go-ahead signal is given personnel must:

(a) Move to the side and behind all logs in the turn and be in the clear.

(b) Remain on their feet and face the turn.

(c) Stay in the clear until it is safe to return to the area where chokers are being set.

(6) When approaching or working around hang-ups, personnel must:

(a) Approach from above the hang-up.

(b) Be alert to the danger of logs rolling or sliding, siwashes, widow makers and danger trees.

GENERAL CABLE YARDING & GROUND SKIDDING WORK PRACTICES / CABLE YARDING WORK PRACTICES

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(7) Workers must not ride on arches, reaches and turns of logs.

Stat. Auth.: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0925 Cable Yarding Work Practices.

- (1) Personnel must not ride hooks, lines, rigging, logs suspended in the air or being moved.
- (2) Personnel must not hold onto haywire, running lines, drop lines or chokers as an assist when walking uphill.
- (3) Personnel must not work in the bight of lines under tension.

EXCEPTIONS: Personnel may be in the bight of lines when:

- (a) Minor positioning of the rigging is needed to set chokers.
- (b) They are protected by standing timber, terrain, or other objects of sufficient size to assure their safety.

NOTE: "Lines under tension" means when:

- (a) Logs are being moved or suspended.
 - (b) The rigging or carriage is moving to the landing or returning to the brush.
 - (c) Lines are tight-lined to clear up the road.
 - (d) Any movement or tightening of the line(s) other than that needed for minor positioning of the rigging or carriage to set chokers.
- (4) Personnel must be in the clear of all lines, rigging and chokers until movement has stopped. Swinging chokers, hooks and rigging must be lowered to the ground.
 - (5) Personnel must be in the clear of trees, logs, root wads, chunks, rolling material, all lines and rigging before any lines are moved.
 - (6) Personnel must not stand next to skyline or running line anchor straps under tension.
 - (7) A minimum of one choker setter in each crew must be a qualified choker setter.
 - (8) Only one employee in any crew can give signals or voice communication at the point where chokers are being set.

NOTE: Any person is authorized to give a stop signal when an employee is in danger or any other emergency condition is apparent.

J	CABLE YARDING WORK PRACTICES / WORKING NEAR STANDING TREE ANCHORS & TAIL/INTERMEDIATE SUPPORT TREES	Oregon Administrative Rules Oregon Occupational Safety and Health Division
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(9) At least two members of the rigging crew must carry transmitters for each signal and control system being operated where chokers are being set.

(10) When only one person is setting chokers on any cable yarding system, they must:

(a) Carry transmitters for each signal and control system being operated where chokers are being set.

(b) Be in clear view of the yarder operator or another person with transmitters for each signal and control system being operated where chokers are being set.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0927 Working Near Standing Tree Anchors, and Tail /Intermediate Support Trees.

(1) Affected personnel must be notified of the potential failure zone of any tail tree, intermediate support tree and standing tree anchor.

NOTE: The potential failure zone is that area which could be impacted by the failure of any part of a tail tree, intermediate support tree or standing tree anchor as the result of forces or loads imposed on the tree by guylines, running lines or skylines.

(2) The boundaries of the potential failure zone must be determined by a competent person.

(3) The boundaries of the potential failure zone must encompass the area into which the tree or parts of the tree could fall, slide or roll and all trees, logs, lines and material that could be impacted by the tree failure.

(4) Personnel must be in the clear of the turn and out of the potential failure zone of a standing tree skyline or running line anchor before lines are tensioned.

NOTE: Personnel may be in the potential failure zone when minor positioning of the rigging is needed or to set chokers.

NOTE: "Before lines are tensioned" means before:

(a) Logs are moved or suspended.

(b) The rigging or carriage is moved to the landing or returned to the brush.

(c) Lines are tight-lined to clear up the road.

(d) Any movement or tightening of the line(s) other than that needed for minor positioning of the rigging or carriage to set chokers.

WORKING NEAR STANDING TREE ANCHORS & TAIL/INTERMEDIATE SUPPORT TREES / GRAPPLE YARDING

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(5) Personnel working around tail and intermediate support trees must be in the clear of the turn and out of the potential failure zone before lines are tensioned.

NOTE: Personnel may be in the potential failure zone when minor positioning of the rigging is needed or to set chokers.

(6) If the potential failure zone cannot be determined, personnel must move at least 1 1/2 tree lengths from the base of tail and intermediate support trees, and in the clear before lines are tensioned.

(7) A competent person must instruct affected personnel in the safe work practices required for work activity in any potential failure zone. This instruction must identify the:

(a) Boundaries of the potential failure zone

(b) Potential for the boundaries of the failure zone to change when line pull and line angles change.

(c) Limitations or restrictions for entering or working in the potential failure zone.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0930 Grapple Yarding.

(1) An audible signal does not need to be sounded before lines are moved while grapple yarding if employees are not exposed to logs or rigging movement.

(2) Chokers must not be set when using a grapple yarding system during:

(a) Hours of darkness.

(b) Periods when visibility is reduced to such an extent that the yarder operator cannot clearly see the person setting the choker.

(3) One person carrying a whistle signaling device may use voice communications to transmit instructions and directions to the yarder operator when picking up an occasional log with a choker on a grapple yarding system only:

(a) During daylight hours.

(b) When the choker setter is in clear view of the yarder operator at all times.

(c) When all lines are slacked to the ground prior to the choker setter approaching the rigging.

(d) When all lines remain stable until the choker setter returns to a safe location away from any running lines.

J**GRAPPLE YARDING / OPERATION
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(4) Standard yarding system whistle signals must be used when the choker setter is not in clear view of the yarder operator when chokers are set on grapple yarding systems. (See Appendix 7-A.)

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0935 Operation of Ground Skidding Machines and Vehicles.

(1) Machines must not be operated on slopes in excess of the following limits unless specified by the manufacturer of the equipment.

(a) Rubber-tired skidders – 30 percent.

(b) Crawler tractors, tracked feller bunchers, tracked excavators and loaders – 40 percent.

(c) Other forestry equipment designed for steep slopes – 50 percent.

(2) Operation in excess of the above limits may be permitted for specific limited application or in identified small areas provided the operator and the competent person plan how to safely operate on the steep slopes considering the:

(a) Experience of the operator.

(b) Limitations of the machine and the soil conditions.

(c) Direction of travel (traveling straight up and down the slope).

(d) Requirements for turning the machine or vehicle on the slope.

(e) Weather.

(f) Load sizes.

(g) Any other adverse conditions.

(3) Turnarounds must be provided on all skidding roads so operators do not have to backup more than 250 feet.

(4) Towed equipment, such as skid pans, pallets, arches, and trailers, must be attached in a manner which will prevent overrunning of the towing vehicle, equipment or machine.

(5) Tractors, skidders, arches, or logs being yarded must not run over or rub against anchored lines, tailhold stumps, or other rigging.

(6) The yarding machine or vehicle, including its load, must be operated with safe clearance from trees, snags, logs, or other objects that may create a hazard for an employee.

OPERATION OF GROUND SKIDDING MACHINES & VEHICLES / SIGNALING AND COMMUNICATIONS

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(7) Each machine must be positioned during winching so the machine and winch are operated within their design limits.

(8) No load can exceed the rated capacity of the pallet, trailer, or other carrier.

(9) Arches must be equipped with line guards.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.
OR-OSHA Admin. Order 2-2005, f. 5/27/05, ef. 6/1/05.

437-007-0940 Signaling and Communications.

(1) Hand signals or audible contact, such as, but not limited to, whistles, horns, or radios, must be used whenever noise, distance, restricted visibility, or other factors prevent clear understanding of natural unassisted voice communications between employees.

(2) A whistle or horn, clearly audible and distinguishable to all personnel in the affected area, must be installed and used on all machines operating as yarders, loaders or tree pullers.

(3) All radio-controlled carriages and motorized skycars must have a warning horn which is sounded when any carriage function is activated.

(4) Standard yarding system whistle signals identified in Appendix 7-A must be used at cable logging operations.

(5) A new yarding system whistle signal may be adopted for an unusual or new situation not covered in the standard whistle signals provided:

(a) The new signal is used only for that specific situation.

(b) All employees are informed of the new signal.

(6) A list of the standard yarding whistles, any new yarding system whistle(s) and control system signals used to activate cable logging systems, machinery and equipment functions must be available at the work site.

(7) Affected personnel must understand the control system signals, hand signals and whistles used to activate equipment and machines.

(8) All audible signal systems, equipment and machinery activation signals must be tested and be fully functional prior to beginning the operation.

(9) Spare transmitters must be guarded against accidental activation.

(10) All personnel must be in the clear before any signal is given to move any log, load, rigging, or turn.

J**SIGNALING AND COMMUNICATIONS /
ELECTRICAL SIGNAL SYSTEMS**Oregon Administrative Rules
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(11) Machine operators must not move any lines, logs, loads or rigging unless the signal received is clear and distinct. If in doubt, the operator must repeat the signal as understood and wait for confirmation.

(12) An audible signal must always be sounded before any line is moved.

(13) Voice communication, except as required by 437-007-0950(1), may be used to transmit instruction and direction to the yarder operator to move rigging and control the movement of logs provided that an audible signal is sounded before any line is moved.

(14) An audible signal does not need to be sounded when yarding logs with grapples if personnel are not exposed to line, log or rigging movement.

(15) When hand signals are used, an audible signal does not need to be sounded when personnel are aware of and not exposed to line, log or rigging movement.

(16) Hand signals may only be used:

(a) In plain sight of the machine operator.

(b) Within 300 feet of the machine operator.

NOTE: Hand signals may be used at any time as an emergency stop signal.

(17) Throwing of any type of material as a signal is prohibited.

(18) Citizens' band (CB) radios cannot be used to activate any signal, machine or process either automatically or by voice.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

437-007-0945 Electrical Signal Systems.

(1) All electrical signal system wires and attachments must be weatherproof.

(2) Electrical signal systems must be:

(a) Installed and adjusted to protect against accidental signaling.

(b) Maintained in good operating condition.

(3) Electrical signal system bugs (transmitter) must be designed so they cannot be accidentally tripped.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

VOICE COMMUNICATION ON COMBINED SIGNAL/VOICE TRANSMITTERS

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437-007-0950 Voice Communication on Combined Signal/Voice Transmitters.

(1) Voice communication on the same radio frequencies used to transmit skyline, high-lead, slackline or skidder whistle signals (154.57 and 154.60 MHz channels), is limited to the reporting of injuries, or fire and emergency situations where special tools or precautions are needed to prevent or alleviate a hazardous situation. In addition:

(2) Voice transmissions must not be used to move the rigging and only used when the rigging is standing still.

(3) The rigging crew must call the yarder engineer by name to ensure that proper contact is established.

(4) The yarder engineer must acknowledge the call with a whistle "STOP" signal before the caller starts transmitting the voice message.

(5) Voice transmission must be kept as brief and to the point as possible.

(6) After receiving the voice message, the yarder engineer must again acknowledge with a whistle "STOP" signal that the message has been received and is clearly understood.

Stat. Auth.: ORS 654.025(2) and 656.726(4).

Stats. Implemented: ORS 654.001 through 654.295.

Hist: OR-OSHA Admin. Order 5-2003, f. 6/02/03, ef. 12/01/03.

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