



## Oregon Occupational Safety & Health Division Technical Guidance

**DATE:** January 6, 2020

**TO:** All Oregon OSHA Staff

**FROM:** Dave McLaughlin, Standards & Technical Resources Manager

**SUBJECT:** How many transmitters are required when swedging and pre-setting chokers for cable yarding?

### **437-007-0925 Cable Yarding Work Practices**

- (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.

### **437-007-0940 Signaling and Communication Devices (Use of 2 way radios)**

- (13) Voice communication, except as required by 437-007-0950(1), may be used to transmit instructions 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.

#### **Purpose of 437-007-0925(9):**

The intended purpose for having two sets of transmitters is that in case one malfunctions, or if for some reason the primary operator is unable to operate their transmitter, a second person is ready and able to respond to an unsafe situation by stopping the operation with the second set of transmitters. Both transmitter operators must have a clear view of each rigging crew member and be attentive to their safety when lines are moving or are about to move.

#### **Pre-setting chokers:**

A method of cable yarding that typically uses a crew consisting of two workers who alternate the tasks of pre-setting and hooking chokers after each yarding cycle. The crew can consist of two rigging slingers (one slinger designated as the primary and the

other the secondary); or the crew can consist of one rigging slinger and one qualified choker setter. After the carriage returns from the landing and stops, one slinger takes the chokers and sets them, while the other slinger/qualified choker setter takes the hook and hooks the chokers that were set during the previous cycle. After both workers have completed their task, both get in the clear by moving to a safe location. Once in the clear, the primary rigging slinger visually verifies that the secondary rigging slinger is in a safe location and blows a signal to send the turn to the landing. During this time, the secondary slinger must have a clear view of the primary operator and the turn, and be ready to blow a stop if needed.

The place where chokers are being set (per 437-007-0925(9)) is the general area surrounding the location where the carriage is stopped, and can encompass a radius from the carriage of up to 200 feet. However, a radius of no more than 100 feet is generally used. This performance based method allows one slinger to be up to 200 feet from the carriage in one direction setting chokers, while the other slinger could be 200 feet in the opposite direction with the hook. At times, the slingers could be working up to 400 feet apart.

No matter the distance, both slingers must carry functioning transmitters for each signal and control system in use. Also, this method requires both slingers to have clear and unobstructed view of each other and have an effective means of communication to visually and vocally verify the other person is in the clear before lines are moving or are about to move, and to signal a stop when needed. A competent person must evaluate the site conditions first and as needed to determine if, when and where within the unit the method can be safely used. The method may be safe to use in one area of a unit, but not in others. Factors to consider on an ongoing basis include ground conditions, terrain, weather, daylight, complexity of log arrangement to be yarded, and others.

### **Swedging (Front & Back Logging):**

A method of cable logging where chokers are being set in two different areas that are spread out up and down a hill. It is used to balance long and short yarding on a road, provide additional help, and assist when a crew splits into two crews so that one crew can work its way back uphill to clean up prior to a road change. This performance based method is only allowed on slopes and terrain where the uphill crew's activities would not create struck-by hazards (e.g. rolling objects) for the downhill crew. At each location where chokers are being set, the requirements of 437-007-0925(9) must be met. If two rigging slingers are working at separate areas up and down the hill where chokers are being set, then four transmitters for each signal and control system must be in place in the brush. If there is a rigging slinger, or another operator with transmitters, at each area where chokers are being set, then both operators in each area must be in clear view and unassisted voice communication of each other. They must also be attentive to the safety of the other crew's members when lines are moving or are about to move, and are ready to blow a stop if needed. Or the choker setters must be in clear view of the yarder operator, per 437-007-0925(10)(b) above. In any case, a competent person must evaluate the site conditions as described above under the pre-setting choker method.

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