

# LOG DUMPS, PONDS AND YARDS

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Oregon Administrative Rules  
Oregon Occupational Safety  
and Health Division

# GENERAL WORK PRACTICES

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## **437-007-1100 General Work Practices.**

- (1)** It is the responsibility of the employer who has actual control of the log or wood fiber unloading, handling or storage activities to develop, post and enforce yard rules.
- (2)** Unauthorized foot and vehicle traffic is prohibited in the log or wood fiber unloading, handling or storage areas.
- (3)** No person is permitted to approach the immediate vicinity of a log or wood fiber handling machine without:
  - (a)** Notifying the operator of the intention to approach the machine, and
  - (b)** Receiving an acknowledgment from the operator.
- (4)** No person may enter the area next to a loaded log truck unless:
  - (a)** They are protected by a barrier or log handling machine, or
  - (b)** The centers of all logs are below the top of the stakes, or
  - (c)** The load is secured with tight wrapper(s).
- (5)** Unauthorized persons must not operate vehicle(s), equipment or machines in log or wood fiber unloading, handling and storage areas.
- (6)** Before starting or moving any machine, the operator must determine that no personnel are in the path of the machine.
- (7)** All persons must be in the clear and plain view of the operator before the log or wood fiber unloading machine is moved.
- (8)** Logs must not be swung over ground personnel, occupied machinery, equipment or vehicles.
- (9)** The operator's attention must not be distracted from duties while engaged in operating a log-handling machine.
- (10)** Loads on forklift-type log handling machines must be transported as low as safely operable without obstructing visibility.
- (11)** Riding on any part of a log handling machine, other than the operator's seat, is prohibited.

**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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| <b>L</b> | <b>GENERAL REQUIREMENTS FOR LOG<br/>&amp;<br/>WOOD FIBER UNLOADING, HANDLING<br/>AND STORAGE AREAS</b> | Oregon Administrative Rules<br>Oregon Occupational Safety<br>and Health Division |
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**437-007-1105 General Requirements for Log and Wood Fiber Unloading, Handling and Storage Areas.**

**(1)** It is the responsibility of the employer who has actual control of the log or wood fiber unloading, handling operations or storage activities to insure that road beds are:

**(a)** Hard-packed material.

**(b)** Of sufficient width and evenness to provide for safe operation of vehicles and mobile machinery.

**(2)** Log or wood fiber handling operations must be arranged so that ground personnel, buildings, machines and vehicles are not exposed to the hazards associated with the movement of logs and log handling machines.

**(3)** A clear space, free of obstructions, not less than 10 feet wide must be maintained the length of and parallel to the log or wood fiber load on the side opposite the unloader.

**(4)** Roadways and traffic lanes must be kept clear of protruding log ends and debris.

**(5)** Log or wood fiber unloading, handling and storage areas must be maintained in a condition which is conducive to safe operation of mobile equipment.

**(6)** Logs or wood fiber in decks or piles must be placed in a orderly manner which will eliminate as far as possible the hazards from rolling or shifting logs.

**(7)** Do not allow bark, chunks, mud and other debris to accumulate enough to become a hazard.

**(8)** The employer must implement an effective method to control dust at log unloading, handling and storage areas.

**(9)** All forklift-type log handling machines must be equipped with a grapple system and the arms must be closed whenever logs or wood fiber are being carried.

**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.

## WRAPPERS REMOVAL GENERAL / BARRIERS FOR SECURING LOG LOADS

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### **437-007-1110 Wrappers Removal General.**

- (1)** Yard rules for removing wrappers, binders and loads must be posted.
- (2)** Loads with logs or wood fiber above the stakes must be secured before all wrappers and binders are removed.
- (3)** Personnel must inspect log or wood fiber loads for potential hazards that could be created when binders are released and wrappers are removed.
- (4)** An extra wrapper or metal band of equal strength must be in place to hold the logs or wood fiber in place when it becomes necessary to remove a wrapper from fouled or dislodged logs.
- (5)** Wrappers must not be removed at weigh stations or other points of transit unless requirements for securing loads are met.

**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.

### **437-007-1115 Barriers For Securing Log Loads.**

- (1)** Barriers used to secure loads must:
  - (a)** Be at least 15 feet high.
  - (b)** Be designed to prevent logs from striking personnel while binders and wrappers are removed.
  - (c)** Have the barrier controls, if any, on the release side of the unloading station and forward of the truck cab guard.
- (2)** Barriers and the area surrounding the barrier structure must be free of accumulations of bark, mud and other debris.

**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.

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| <b>L</b> | <b>REMOVING WRAPPERS FROM<br/>BARRIER SECURED LOADS /<br/>REMOVING WRAPPERS FROM<br/>MACHINE SECURED LOADS</b> | Oregon Administrative Rules<br>Oregon Occupational Safety<br>and Health Division |
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**437-007-1120 Removing Wrappers From Barrier Secured Loads.**

**(1)** Any person releasing binders and removing wrappers at a barrier, must not extend their upper body beyond the front of the protective structures.

**(2)** After binders and wrappers have been removed at a barrier, loaded log or wood fiber trucks must not move through areas where ground personnel are present unless:

**(a)** The centers of all logs are below the top of the stakes, or

**(b)** Ground personnel and machines are not exposed to the hazard of falling logs or wood fiber.

**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.

**437-007-1125 Removing Wrappers From Machine Secured Loads.**

**(1)** When a log handling machine is used to secure a load, binders should be released and wrappers removed from the side of the load on which the unloader operates.

**(2)** If binders and wrappers must be removed from log loads on the side opposite the unloading machine, all logs must be secured from displacement before binders and wrappers are removed.

**(3)** Any person removing binders and wrappers must be in the clear and in full view of the unloading operator before giving a signal to move the unloading machine or the load 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.

## REMOVING CENTER WRAPPERS FROM UNSECURED LOADS / UNLOADING LOGS / SPLIT LOADS

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**437-007-1130 Removing Center Wrappers From Unsecured Loads.** When any binder and wrapper is removed before a log load is secured by a barrier or log handling machine:

- (1) There must not be double-ended logs loaded above the stakes on the side of the load from which the binders and wrappers are being released.
- (2) All short logs (27 feet or less) above the stakes or bunk blocks must be secured by a minimum of one tight binder and wrapper prior to the placement of the unloading grapple arms.
- (3) All long logs (more than 27 feet) above the stakes or bunk blocks must be secured by a minimum of two tight binders and wrappers prior to the placement of the unloading grapple arms.

**NOTE:** The wrappers nearest the truck and trailer bunks should be retained to allow clearance for the unloading device.

- (4) The remaining binders and wrappers must not be removed before the load is secured by a barrier or log handling machine.

**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.

### **437-007-1135 Unloading Logs.**

- (1) The truck driver must be in front of the truck or in the truck cab when logs are unloaded.
- (2) When logs are unloaded, the loads must not be passed over the truck cab or personnel.

**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.

**437-007-1140 Split Loads.** When logs are to be unloaded at different destinations within the log handling or storage areas, vehicles must not be moved after each partial unloading until the requirements for securing loads are met unless:

- (1) The centers of all logs are below the top of the stakes, or
- (2) There are no ground personnel and machines exposed to the hazard of falling 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.

**L****LOADING OR UNLOADING TRAILERS /  
TRAILER HOISTS**Oregon Administrative Rules  
Oregon Occupational Safety  
and Health Division**437-007-1145 Loading or Unloading Trailers.**

(1) When forklift-type machines are used to load, unload, or handle trailers, a secure means of holding the lifting attachment on the fork must be installed and used.

(2) When trailers are to be loaded after dark, sufficient lights must be provided for a safe operation.

**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.

**437-007-1150 Trailer Hoists.**

(1) All trailer loading devices must be designed, constructed and maintained so as to have a five-to-one safety factor for the rated load capacity.

(2) Trailer loading hoists must be high and wide enough so they can safely load the maximum-sized trailers they are expected to handle without hanging up or striking the equipment.

(3) Trailer-loading-hoist controls (buttons) must have clear marking to indicating the “up” and “down” directions of travel.

(4) Trailer loading hoists must have an upper limit switch installed and maintained to prevent the hook or other end fittings from contacting the upper sheaves. In addition:

(a) The upper limit switch must not be used as an operating control.

(b) If the upper limit switch does not function properly, the hoist must not be used until repairs are made.

(5) Electric-powered trailer loading hoist controls (buttons) connected to flexible cords (pendant lines) must be secured with devices or fittings that prevents pull from being directly transmitted to joints or terminal screws.

(6) Pendants must be installed so that the control switch does not touch the ground when retracted.

(7) All electrical equipment must be weatherproof-type or adequately protected from the weather, and must meet or exceed the requirements of the National Electrical Code.

- (8)** Electric-powered hoists using handheld cord remote controls in grounded locations must be actuated by circuits operating at less than 50 volts to ground.
- (9)** Trailer loading hoists, except A-frames or bridge cranes, must be equipped with reach guides or devices that will keep the reach in proper alignment.
- (10)** A tag rope or other safe guidance device must be used to guide trailers being loaded by A-frame loaders.
- (11)** The maximum capacity that can be lifted by the trailer loader hoist must be posted in a conspicuous location where it can be easily seen by any person operating the hoist.
- (12)** Trailer loading hoists must be inspected at least every 30 days and must be maintained in good repair.
- (13)** A written trailer loading hoist inspection report signed by the person making the inspection must be kept on file by the company for 12 months.
- (14)** The employer must do an annual lifting test on each loading device and keep a written record of the tests.
- (a)** The written record must contain the:
    - (A)** Date of the test.
    - (B)** Name of person conducting the test.
    - (C)** Amount of weight lifted.
  - (b)** The written record of test results must be kept in the office of the employer or at the site.
  - (c)** The test weight must not be:
    - (A)** Less than 125 percent of the maximum rated load.
    - (B)** More than 130 percent of the maximum rated load.
- (15)** Each trailer loading hoist drum must be designed and arranged so the hoisting line will maintain lead and spool evenly without chafing, crossing, or kinking.
- (16)** A braking system must be installed on trailer loading hoists that has the ability to safely brake and hold 1 1/2 times the weight of the full rated load.

**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.

**437-007-1155 Dry Land Log and Fiber Handling and Processing.**

- (1)** Identification tags must not be applied or pulled unless logs are resting in a stationary place, such as bunks, cradles, skids, or sorting tables.
- (2)** When personnel are required to work on logs unloaded onto skids (bay logs), sufficient space must be maintained between the top of the skids (bay logs) and the ground or deck so logs will clear the prone body of a person.
- (3)** Logs placed onto skids (bay logs) for processing must be laid out so that the person bucking them has enough room to operate the chain saw safely. The diameter of the logs must be taken into consideration.
- (4)** Logs placed in bays or onto skids (bay logs) for processing or scaling must not be moved until the ground personnel have finished their tasks, or unless ground personnel request assistance to move a log to complete the task (i.e., extracting a pinched saw).
- (5)** Machines and ground personnel must not enter the swing radius of a machine without permission of the operator. The swing radius is determined by combining the working radius of the machine and the length of logs being handled.
- (6)** Ground personnel must not walk or work behind front-end loaders and forklift-type log handling machines without contacting the operator.
- (7)** Log handling machines must not carry logs over an active processing bay.
- (8)** Loads on forklift-type log handling machines must be transported as low as safely operable without obstructing visibility.
- (9)** The requirements of OAR 437, Division 2/N, Materials Handling and Storage, apply to Overhead and Gantry Cranes used to unload, process and deck 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.

### **437-007-1160 Water Dumps, Log Ponds and Booms.**

- (1)** A minimum of two people must work at water dumps when logs are being unloaded. At least one person must be an experienced unloading machine operator.
- (2)** At least two people must be present for stowing, sorting or boom work of any kind except when one person is feeding the slip (hot lane) from a designated area.
- (3)** All water dumps must have brow logs except when logs are lifted from the truck or rail car.
- (4)** If mobile log handling machines are used to dump loads, adequate stops must be provided to prevent the machines from running off the edge of the dump.
- (5)** When a brow log is used with a parbuckle system, all personnel are prohibited from going between the brow log and the load of logs at any time.
- (6)** Unloading lines must be arranged so that it is not necessary for a person to attach them on the water or dump side of the load.
- (7)** The unloading machine operator must:
  - (a)** Have an unobstructed view of the dump and the logs being unloaded; or
  - (b)** Receive a signal before dumping the logs.
- (8)** All personnel must be in the clear and a signal given before logs are dumped.
- (9)** When dry land log dumps use unloading methods similar to those of water dumps, OAR 437-007-1160(5) through (8) will apply.
- (10)** All personnel working on logs or around boom sticks in water must wear sharp-caulked shoes or slip-on sharp-caulked shoes.
- (11)** Metal or conductive pike poles must not be used around exposed electrical conductors.
- (12)** Defective poles, blunt or dull pikes must not be used.
- (13)** Sufficient walkways and floats must be installed and securely anchored to provide safe passage for personnel.
- (14)** Decks, floats or other walkways must be kept above the waterline at all times, and they must be capable of supporting four times the imposed load.

**L****WATER DUMPS, LOG PONDS & BOOMS**Oregon Administrative Rules  
Oregon Occupational Safety  
and Health Division

**(15)** Pond rafts must be removed from service when they are no longer capable of remaining above water while supporting a 500-pound load on any edge.

**(16)** All regular boom sticks and foot logs must be:

- (a)** Reasonably straight, free of protruding knots and have the bark removed, and
- (b)** Capable of supporting any necessary weight of personnel and equipment above the waterline at either end.

**(17)** Gaps between ends of boom sticks must not exceed 24 inches.

**(18)** All wire must be removed from booms and chains before they are reused or hung in rafting stalls.

**(19)** Permanent cable swifters must be arranged so it will not be necessary to roll boom sticks in order to attach or detach them.

**(20)** When cable swifters or dogging lines become hazardous from an excessive amount of jagers, they must be discarded.

**(21)** Stiff booms must be constructed of not less than two float logs or equivalent timbers and must have a minimum width of 36 inches.

**(22)** Float logs or equivalent timbers must be securely joined together by not less than 4-inch by 6-inch cross ties.

**(23)** Stiff booms must be planked over with not less than 2-inch planking, securely fastened and kept in good repair, at all sorting gaps or locations where mechanical devices are operated.

**(24)** Walkways along sorting gaps must be at least 4 feet wide. Other planked walkways must be at least 22 inches wide.

**(25)** Life rings attached to 90 feet of 1/4-inch line with a minimum breaking strength of 500 pounds, must be provided at convenient points adjacent to water that is 5 feet or more in depth.

**(26)** Life rings must have a minimum of 30 inches outside diameter and 17 inches inside diameter.

**(27)** Life rings must be maintained so as to retain a 32-pound positive buoyancy.

**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.

## **437-007-1165 Boats.**

- (1)** Gasoline-powered inboard motorboats must be equipped with a mechanical exhaust system for ventilating the engine compartment and bilges.
- (2)** Mechanical exhaust systems must be powered by non-sparking fans or the fan motor must be located outside the bilge and engine compartment.
- (3)** Gasoline-powered inboard motorboats must not be started until the bilges and engine compartment have been mechanically vented of combustible fumes that may have accumulated.
- (4)** Decks of boats must be covered with a slip-resistant material.
- (5)** Boats must be provided with:
  - (a)** At least one 3A-40B:C fire extinguisher.
  - (b)** A life ring or equivalent with line attached.

**EXCEPTION:** A life ring is not required on small pond boats designed to transport only one employee.

**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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