

# Sawmill Safety & Health

Presented By:  
John Boysen  
Safety Consultant  
OHSA Consultation Program

# Objectives

- To gain awareness of the OSHA requirements.
- To understand how to apply those requirements.
- To understand how to recognize actual and potential safety and health hazards.

# Frequently Cited Standards

## Top 12 for Sawmills

<b>29 CFR</b>	Description
1910.147	<b>The Control of Hazardous Energy, Lockout/Tagout</b>
1910.265	<b>Sawmills</b>
1910.219	<b>Mechanical Power-Transmission Apparatus</b>
1910.212	<b>Machines, General Requirements</b>
1910.213	<b>Woodworking Machinery Requirements</b>
1910.305	<b>Electrical, Wiring Methods, Components and Equipment</b>

# Frequently Cited Standards Top 12 for Sawmills

<b>29 CFR</b>	Description
1910.303	<b>Electrical Systems Design, General Requirements</b>
1910.1200	<b>Hazard Communication</b>
1910.23	<b>Guarding Floor and Wall Openings and Holes</b>
1910.178	<b>Powered Industrial Trucks</b>
1910.215	<b>Abrasive Wheel Machinery</b>
1910.95	<b>Occupational Noise Exposure</b>

# Written Programs

- Lockout/Tagout
- Hazard Communication
- PPE Hazard Assessment
- Respiratory Protection
- Employee Emergency Plans and Fire Prevention Plans
- Bloodborne Pathogens
- Confined Spaces

# Vehicles and Mobile Equipment

## ■ Warning Signals

- Horns are required

## ■ Brakes

- Capable of holding and controlling the vehicle upon any grade which it may be operated.

## ■ Overhead Guard

- Applies to all Powered Industrial Trucks

## ■ Lights

- Required for operation in dark or poorly lighted areas



# Lumber Hauling Trucks

Where movement of load on stopping would endanger the operator, a substantial bulkhead shall be installed behind the cab.





# Log Unloading Methods



# Log Unloading Methods

Do not release binders on logs prior to securing with unloading lines or other unloading devices.



2





4



# Log Storage Areas

Log unloading areas must be arranged and maintained to provide a safe working area.



# Cutoff/Swing Saws

Swing saws on log decks must be equipped with a barricade and stops for protection of employees who may be on the opposite side of the log haul chute.



# Cutoff/Swing Saws

Circular log bucking or cutoff saws shall be so located and guarded as to allow safe entrance to and exit from the building.





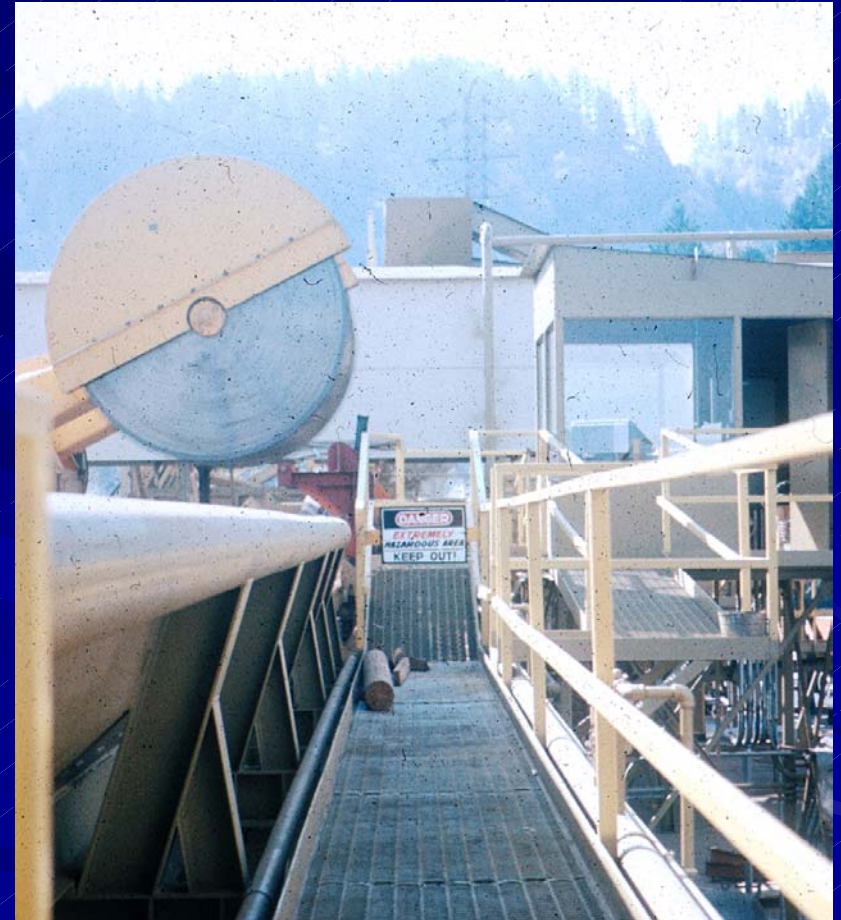
# Cutoff/Swing Saws

Where the cutoff saw partially blocks the entrance from the log haul runway, the entrance must be guarded.



# Elevated Platforms or Walkways

- 4-feet or higher requires a standard railing
  - 42-inch top rail
  - 21-inch mid rail
- Exceeding 6-feet
  - Requires a Toe Board



# Stairways

## ■ Strength

- 5 times the intended load or a minimum of 1000 lbs. live load.

## ■ Width

- 22-inch minimum

## ■ Angle

- 30-50 degrees to the horizontal

## ■ Platforms

- No less than the width and a minimum of 30-inch length.

# Stairways

- Railings and Handrails
  - 4 or more risers
  - 30-34 inches above the tread
- Vertical Clearance
  - Minimum of 7-feet overhead



# Rotary Debarking

Rotary barking devices must be guarded to protect employees from flying chips, bark, or other material.



# Debarking

- The hazardous area around ring barkers and their conveyors must be fenced off or posted as a prohibited area.
- Hydraulic barkers must be enclosed with strong baffles at the inlet and outlet. The operator must be protected by adequate safety glass or equivalent.
- Holddown rolls must be installed at the infeed and outfeed sections of mechanical ring barkers to control the movement of logs.

# Log Decks

- Log decks must be provided with adequate stops, chains, or other safeguards to prevent logs from rolling down the deck onto the carriage or its runway.



# Log Decks

- Safe access to the head rig must be provided.
- Erect a barricade to stop any log between the sawyer's stand and the log deck.





# Log Carriages and Carriage Runways



A substantial stop or bumper with adequate shock-absorptive qualities shall be at each end of the carriage runway.



**GIT-R-DONE!!**

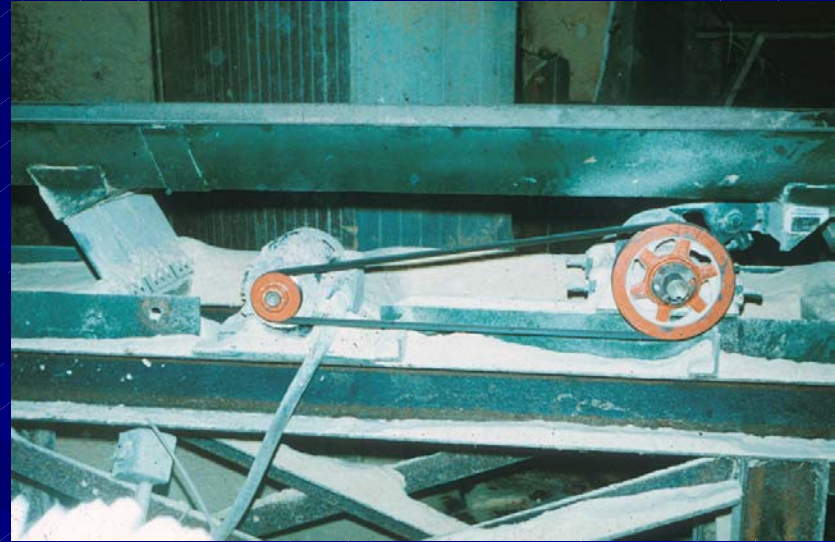
- Provide a control locking device, carriage tie-down, or both to prevent unintended movement of the carriage.



- Provide a barrier to prevent employees from entering the travel space of the carriage. Post warning signs at possible entry points to this area.

# Conveyors

- Belts and Pulleys



- Chains and Sprockets



# Saws

- Inspect Frequently.
- Do not operate at speeds in excess of those specified by the manufacturer.
- Maintain all original guarding as equipped by the manufacturer.
- Where employees are exposed to the point of operation and additional guarding is not feasible, provide a minimum “safe distance” of 42-inches for the hazardous area (by erecting barriers).

# Chainsaw Safety Devices

- Chain Brake
- Chain Catch
- Throttle Interlock

Chaps and Eye Protection  
are required Personal  
Protective Equipment

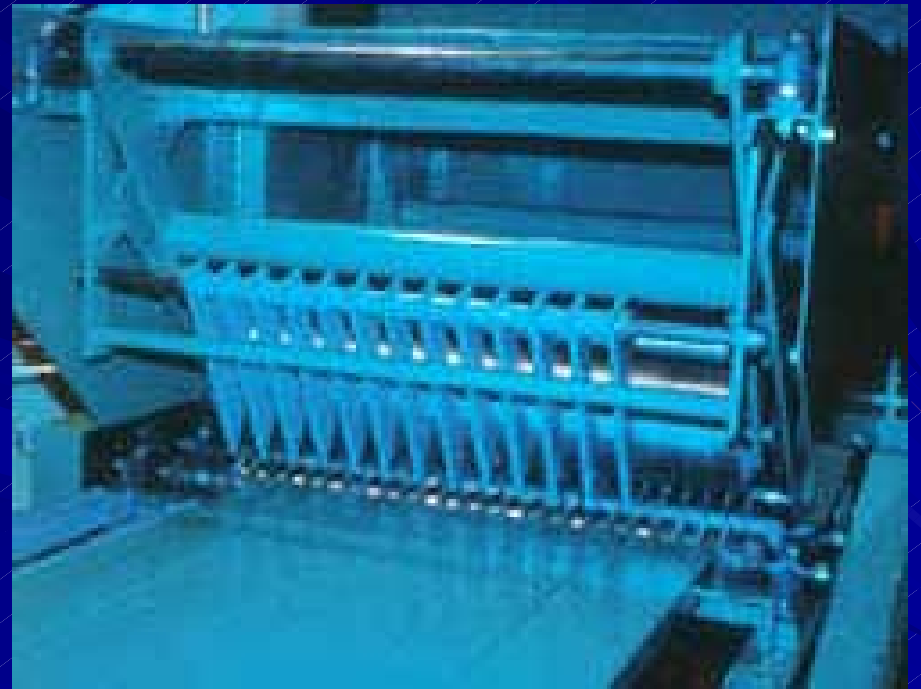


# Woodworking Equipment Guarding Requirements



# Edgers

- Shall be adequately guarded.
- Equipped with pressure feed rolls.
- Equipped with anti-kickback devices.
- Shall not be located in the main roll case behind the head saws.





# Planers

- All cutting heads shall be guarded.
- Pressure feed rolls and “pineapples” shall be guarded.



# Planers

Cover cutting heads with a metal guard or cage.  
The exhaust system may be integrated with the guard.



# Whole Log Chippers

- The feed system shall be arranged so the operator does not stand in direct line with the spout or hopper.
- The spout shall be enclosed to a height of not less than 36-inches from the floor or operator's platform.
- Otherwise, a safety belt and lifeline shall be worn by the operator (to prevent falling into the chipper).



# Lumber Piling and Storage

- Foundations must be designed and arranged to support maximum loads without sinking, sagging or permitting the piles to topple.
- Piles of lumber which have become unstable, shall be immediately made safe.



JUL 23 2003

# Health Hazards

- Steam pipes may be insulated with asbestos.
- Some babbitts may contain lead.
- CO<sub>2</sub> formed as a byproduct of combustion from LPG powered equipment.
- High temperatures in drying kilns and power plants.
- Lasers are injurious to eyes and body.
- Paints and adhesives may necessitate PPE.

# Health Hazards cont.

- Silver Solder (used in saw sharpening) may contain cadmium.
- Welding Fumes
- Wood Preservatives may cause dermatitis and severe irritation of the eyes and respiratory track.
- Wood Dust (most hardwood dusts are considered to be toxic)
- Ventilation – mechanical exhaust



# Blower, Collecting, and Exhaust Systems

## ■ Collecting Systems

- Applies to all machines creating dust, shaving, chips, or slivers during a period of time equal to or greater than 25% of the working day.

## ■ Exhaust or Conveyor Systems

- Applies to all machines that create dust, shavings, chips, or slivers.
- Located and adjusted to remove the maximum amount of refuse.



# Exhaust System

- Exhaust pipes shall not discharge into an unconfined outside pile if uncontrolled fire or explosion hazards are created.
- They may empty into settling or dust chambers, designed to prevent the refuse from entering the work area.
- Refuse must be removed daily in all operations not required to have an exhaust system.

# Lighting

- Illumination shall be provided in work areas.
- It shall be adequate and effective.



Comments  
or  
Questions





