Health and safety in sawmills
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Occupational health and safety issues in sawmills and wood manufacturing plants are common to those of most large industrial facilities, and their prevention and control is similar to those used in such large industrial companies.

Logs are generally unloaded from railroad cars or heavy trucks and stacked by machines before being moved to log conveyors and log decks for processing in the sawmill. Injuries due to vehicle movement in log yards are common, in addition to injuries from logs that roll off or are dropped by handling equipment or are dislodged from log stacks. Logs may also be stored in log ponds prior to being conveyed to the sawmill.

The occupational health and safety issues associated with sawmilling and wood products manufacturing primarily include:

- Machine safety
- Conveyor systems
- Lifting, repetitive work, and work posture
- Noise
- Chemicals
- Dust
- Explosions.

Machine safety

Wood processing plants employ various kinds of cutting equipment, for example, saws, routers, chippers, planers, sanders, slicers, peelers, etc. Debarkers may also expose workers to injury. Cutting and debarking equipment is often in rapid motion. Accidents often happen when machines are inadvertently switched on during maintenance and cleaning.

All cutting and debarking equipment should be fitted with safety guards to prevent access to moving parts.
The following recommendations to prevent, minimize, and control injuries from cutting and debarking equipment should be adopted where appropriate:

All cutting and debarking equipment, such as circular saws and rotary debarkers, should be fitted with safety guards or interlocks capable of preventing access to moving parts.
Workers should be trained on the safe use of cutting and debarking equipment, such as the use of push-sticks and other means to move timber past a blade while keeping all parts of the body away from the blade.
Work stations should be aligned to minimize human danger from fragments which could arise from breakage.
Saws and debarking equipment should be regularly inspected and maintained to prevent equipment failure.
All personnel operating cutting equipment should use protective eyewear, and other Personal Protective Equipment (PPE) as necessary. Saws should be equipped with screens or other devices to protect the worker from log kick-back.

**Conveyor systems**

Sawmills typically transport wood using electric, movable, multi route conveyor systems. Conveyors under high tension may break, resulting in injury. Clothing or limbs can also become entangled in conveyors.

The following measures are recommended to prevent, minimize, and control injury from conveyor systems and include:

Plant design should emphasize simple conveyor routes that are clearly demarcated, with use of skirt boards to prevent access as necessary.
Moving gears, chains, and rollers should be fully enclosed.
Hard hats should be worn in areas where elevated conveyors are in use.
Conveyor belt arrestors should be installed to stop the conveyor in the event of a belt failure. Belts should be inspected on a daily basis by trained personnel to ensure that they are in good working order.

Problem: Loose clothing can be caught in conveyor belt and injure the worker.

Lifting, repetitive work, and work posture

Sawmill and wood manufacturing activities may involve working in awkward postures, movement of heavy pieces of equipment or timber, resulting in injuries to the back if lifting is not done correctly. In addition, many of the process tasks are repetitive and can lead to strains/injuries to hands and arms.

Problem: Working in an awkward posture can cause the worker to suffer from back problems.

Noise

Sawmill and wood manufacturing operations may result in high noise levels. The following guidelines can be used to address noise problem:

- Enclose machines and equipment with high noise emissions (e.g. in excess of 85dB(A)) in noise reduction housing
- Conduct regular maintenance, including water lubrication of machines and cutting blades, and resin build-up removal
- Adjust circular saw parameters (e.g. bite depth, blade angle, blade speed) in