

## CHAPTER 19

# LUMBER YARDS AND WOODWORKING FACILITIES

### SECTION 1901 GENERAL

**1901.1 Scope.** The storage, manufacturing and processing of timber, lumber, plywood, veneers and byproducts shall be in accordance with this chapter.

**1901.2 Permit.** Permits shall be required as set forth in Section 105.6.

### SECTION 1902 DEFINITIONS

**1902.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**COLD DECK.** A pile of unfinished cut logs.

**FINES.** Small pieces or splinters of wood byproducts that will pass through a 0.25-inch (6.4 mm) screen.

**HOGGED MATERIALS.** Wood waste materials produced from the lumber production process.

**PLYWOOD and VENEER MILLS.** Facilities where raw wood products are processed into finished wood products, including waferboard, oriented strandboard, fiberboard, composite wood panels and plywood.

**RAW PRODUCT.** A mixture of natural materials such as tree, brush trimmings, or waste logs and stumps.

**STATIC PILES.** Piles in which processed wood product is mounded and is not being turned or moved.

**TIMBER and LUMBER PRODUCTION FACILITIES.** Facilities where raw wood products are processed into finished wood products.

### SECTION 1903 GENERAL REQUIREMENTS

**1903.1 Open yards.** Open yards required by the *International Building Code* shall be maintained around structures.

**1903.2 Dust control.** Equipment or machinery located inside buildings that generates or emits *combustible dust* shall be provided with an *approved* dust collection and exhaust system installed in accordance with Chapter 13 and the *International Mechanical Code*. Equipment or systems that are used to collect, process or convey *combustible dusts* shall be provided with an *approved* explosion control system.

**1903.2.1 Explosion venting.** Where a dust explosion hazard exists in equipment rooms, buildings or other enclosures, such areas shall be provided with explosion (*deflagration*) venting or an *approved* explosion suppression system complying with Section 911.

**1903.3 Waste removal.** Sawmills, planing mills and other woodworking plants shall be equipped with a waste removal system that will collect and remove sawdust and shavings. Such systems shall be installed in accordance with Chapter 13 and the *International Mechanical Code*.

**Exception:** Manual waste removal when *approved*.

**1903.3.1 Housekeeping.** Provisions shall be made for a systematic and thorough cleaning of the entire plant at sufficient intervals to prevent the accumulations of *combustible dust* and spilled combustible or flammable liquids.

**1903.3.2 Metal scrap.** Provision shall be made for separately collecting and disposing of any metal scrap so that such scrap will not enter the wood handling or processing equipment.

**1903.4 Electrical equipment.** Electrical wiring and equipment shall comply with NFPA 70.

**1903.5 Control of ignition sources.** Protection from ignition sources shall be provided in accordance with Sections 1903.5.1 through 1903.5.3.

**1903.5.1 Cutting and welding.** Cutting and welding shall comply with Chapter 26.

**1903.5.2 Static electricity.** Static electricity shall be prevented from accumulating on machines and equipment subject to static electricity buildup by permanent grounding and bonding wires or other *approved* means.

**1903.5.3 Smoking.** Where smoking constitutes a fire hazard, the fire code official is authorized to order the *owner* or occupant to post *approved* "No Smoking" signs complying with Section 310. The fire code official is authorized to designate specific locations where smoking is allowed.

**1903.6 Fire apparatus access roads.** Fire apparatus access roads shall be provided for buildings and facilities in accordance with Section 503.

**1903.7 Access plan.** Where storage pile configurations could change because of changes in product operations and processing, the access plan shall be submitted for approval when required by the fire code official.

### SECTION 1904 FIRE PROTECTION

**1904.1 General.** Fire protection in timber and lumber production mills and plywood and veneer mills shall comply with Sections 1904.2 through 1904.4.

**1904.2 Fire alarms.** An *approved* means for transmitting alarms to the fire department shall be provided in timber and lumber production mills and plywood and veneer mills.

**1904.2.1 Manual fire alarms.** A manual fire alarm system complying with Section 907.2 shall be installed in areas of

timber and lumber production mills and for plywood and veneer mills that contain product dryers.

**Exception:** Where dryers or other sources of ignition are protected by a supervised *automatic sprinkler system* complying with Section 903.

**1904.3 Portable fire extinguishers or standpipes and hose.** Portable fire extinguishers or standpipes and hose supplied from an *approved* water system shall be provided within 50 feet (15 240 mm) of travel distance to any machine producing shavings or sawdust. Portable fire extinguishers shall be provided in accordance with Section 906 for extra-high hazards.

**1904.4 Automatic sprinkler systems.** *Automatic sprinkler systems* shall be installed in accordance with Section 903.3.1.1.

### SECTION 1905 PLYWOOD, VENEER AND COMPOSITE BOARD MILLS

**1905.1 General.** Plant operations of plywood, veneer and composite board mills shall comply with Sections 1905.2 and 1905.3.

**1905.2 Dryer protection.** Dryers shall be protected throughout by an *approved*, automatic deluge water-spray suppression system complying with Chapter 9. Deluge heads shall be inspected quarterly for pitch buildup. Deluge heads shall be flushed during regular maintenance for functional operation. Manual activation valves shall be located within 75 feet (22 860 mm) of the drying equipment.

**1905.3 Thermal oil-heating systems.** Facilities that use heat transfer fluids to provide process equipment heat through piped, indirect heating systems shall comply with this code and NFPA 664.

### SECTION 1906 LOG STORAGE AREAS

**1906.1 General.** Log storage areas shall comply with Sections 1906.2 through 1906.3.

**1906.2 Cold decks.** Cold decks shall not exceed 500 feet (152.4 m) in length, 300 feet (91 440 mm) in width and 20 feet (6096 mm) in height. Cold decks shall be separated from adjacent cold decks or other exposures by a minimum of 100 feet (30 480 mm).

**Exception:** The size of cold decks shall be determined by the fire code official where the decks are protected by special fire protection including, but not limited to, additional fire flow, portable turrets and deluge sets, and hydrant hose houses equipped with *approved* fire-fighting equipment capable of reaching the entire storage area in accordance with Chapter 9.

**1906.3 End stops.** Log and pole piles shall be stabilized by *approved* means.

### SECTION 1907 STORAGE OF WOOD CHIPS AND HOGGED MATERIAL ASSOCIATED WITH TIMBER AND LUMBER PRODUCTION FACILITIES

**1907.1 General.** The storage of wood chips and hogged materials associated with timber and lumber production facilities shall comply with Sections 1907.2 through 1907.5.

**1907.2 Size of piles.** Piles shall not exceed 60 feet (18 288 mm) in height, 300 feet (91 440 mm) in width and 500 feet (152 m) in length. Piles shall be separated from adjacent piles or other exposures by *approved* fire apparatus access roads.

**Exception:** The *fire code official* is authorized to allow the pile size to be increased when additional fire protection is provided in accordance with Chapter 9. The increase shall be based on the capabilities of the system installed.

**1907.3 Pile fire protection.** Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible or enclosed conveyor systems shall be equipped with an *approved automatic sprinkler system*.

**1907.4 Material-handling equipment.** *Approved* material-handling equipment shall be readily available for moving wood chips and hogged material.

**1907.5 Emergency plan.** The *owner* or operator shall develop a plan for monitoring, controlling and extinguishing spot fires. The plan shall be submitted to the fire code official for review and approval.

### SECTION 1908 STORAGE AND PROCESSING OF WOOD CHIPS, HOGGED MATERIAL, FINES, COMPOST AND RAW PRODUCT ASSOCIATED WITH YARD WASTE AND RECYCLING FACILITIES

**1908.1 General.** The storage and processing of wood chips, hogged materials, fines, compost and raw product produced from yard waste, debris and recycling facilities shall comply with Sections 1908.2 through 1908.10.

**1908.2 Storage site.** Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned before transferring wood products to the site.

**1908.3 Size of piles.** Piles shall not exceed 25 feet (7620 mm) in height, 150 feet (45 720 mm) in width and 250 feet (76 200 mm) in length.

**Exception:** The *fire code official* is authorized to allow the pile size to be increased when additional fire protection is provided in accordance with Chapter 9. The increase shall be based upon the capabilities of the system installed.

**1908.4 Pile separation.** Piles shall be separated from adjacent piles by *approved* fire apparatus access roads.

**1908.5 Combustible waste.** The storage, accumulation and handling of combustible materials and control of vegetation shall comply with Chapter 3.

**1908.6 Static pile protection.** Static piles shall be monitored by an *approved* means to measure temperatures within the static piles. Internal pile temperatures shall be monitored and recorded weekly. Records shall be kept on file at the facility and made available for inspection. An operational plan indicating procedures and schedules for the inspection, monitoring and restricting of excessive internal temperatures in static piles shall be submitted to the *fire code official* for review and approval.

**1908.7 Pile fire protection.** Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an *approved automatic sprinkler system*.

**1908.8 Fire extinguishers.** Portable fire extinguishers complying with Section 906 and with a minimum rating of 4-A:60-B:C shall be provided on all vehicles and equipment operating on piles and at all processing equipment.

**1908.9 Material-handling equipment.** *Approved* material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

**1908.10 Emergency plan.** The *owner* or operator shall develop a plan for monitoring, controlling and extinguishing spot fires and submit the plan to the *fire code official* for review and approval.

### SECTION 1909 EXTERIOR STORAGE OF FINISHED LUMBER PRODUCTS

**1909.1 General.** Exterior storage of finished lumber products shall comply with Sections 1909.1 through 1909.5.

**1909.2 Size of piles.** Exterior lumber storage shall be arranged to form stable piles with a maximum height of 20 feet (6096 mm). Piles shall not exceed 150,000 cubic feet (4248 m<sup>3</sup>) in volume.

**1909.3 Fire apparatus access roads.** Fire apparatus access roads in accordance with Section 503 shall be located so that a maximum grid system unit of 50 feet by 150 feet (15 240 mm by 45 720 mm) is established.

**1909.4 Security.** Permanent lumber storage areas shall be surrounded with an *approved* fence. Fences shall be a minimum of 6 feet (1829 mm) in height.

**Exception:** Lumber piles inside of buildings and production mills for lumber, plywood and veneer.

**1909.5 Fire protection.** An *approved* hydrant and hose system or portable fire-extinguishing equipment suitable for the fire hazard involved shall be provided for open storage yards. Hydrant and hose systems shall be installed in accordance with NFPA 24. Portable fire extinguishers complying with Section 906 shall be located so that the travel distance to the nearest unit does not exceed 75 feet (22 860 mm).

