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(c) Exemptions. This section shall not apply to the employment of apprentices or student-learners under the conditions prescribed in §570.50 (b) and (c).

[16 FR 7008, July 20, 1951. Redesignated at 28 FR 1634, Feb. 21, 1963, and amended at 28 FR 3449, Apr. 9, 1963. Redesignated and amended at 36 FR 25156, Dec. 29, 1971; 75 FR 28455, May 20, 2010]

# § 570.57 Exposure to radioactive substances and to ionizing radiations (Order 6).

- (a) Finding and declaration of fact. The following occupations involving exposure to radioactive substances and to ionizing radiations are particularly hazardous and detrimental to health for minors between 16 and 18 years of age:
- (1) Any work in any workroom in which (i) radium is stored or used in the manufacture of self-luminous compound, (ii) self-luminous compound is made, processed, or packaged, (iii) selfluminous compound is stored, used, or worked upon, (iv) incandescent mantles are made from fabric and solutions containing thorium salts, or are processed or packaged. (v) other radioactive substances are present in the air in average concentrations exceeding 10 percent of the maximum permissible concentrations in the air recommended for occupational exposure by the National Committee on Radiation Protection, as set forth in the 40-hour week column of table one of the National Bureau of Standards Handbook No. 69 entitled "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," issued June 5, 1959.
- (2) Any other work which involves exposure to ionizing radiations in excess of 0.5 rem per year.
- (b) Definitions. As used in this section:
- (1) The term self-luminous compound shall mean any mixture of phosphorescent material and radium, mesothorium, or other radioactive element;
- (2) The term *workroom* shall include the entire area bounded by walls of solid material and extending from floor to ceiling;

(3) The term *ionizing radiations* shall mean alpha and beta particles, electrons, protons, neutrons, gamma and X-ray and all other radiations which produce ionizations directly or indirectly, but does not include electromagnetic radiations other than gamma and X-ray.

[22 FR 3657, May 24, 1957, as amended at 26 FR 8885, Sept. 21, 1961. Redesignated at 28 FR 1634, Feb. 21, 1963, and amended at 28 FR 3449, Apr. 9, 1963. Redesignated and amended at 36 FR 25156, Dec. 29, 1971]

### § 570.58 Occupations involved in the operation of power-driven hoisting apparatus (Order 7).

- (a) Findings and declaration of fact. The following occupations involved in the operation of power-driven hoisting apparatus are particularly hazardous for minors between 16 and 18 years of age:
- (1) Work of operating, tending, riding upon, working from, repairing, servicing, or disassembling an elevator, crane, derrick, hoist, or high-lift truck, except operating or riding inside an unattended automatic operation passenger elevator. Tending such equipment includes assisting in the hoisting tasks being performed by the equipment.
- (2) Work of operating, tending, riding upon, working from, repairing, servicing, or disassembling a manlift or freight elevator, except 16- and 17-year-olds may ride upon a freight elevator operated by an assigned operator. Tending such equipment includes assisting in the hoisting tasks being performed by the equipment.
- (b) *Definitions*. As used in this section:

Crane shall mean a power-driven machine for lifting and lowering a load and moving it horizontally, in which the hoisting mechanism is an integral part of the machine. The term shall include all types of cranes, such as cantilever gantry, crawler, gantry, hammerhead, ingot pouring, jib, locomotive, motor-truck, overhead traveling, pillar jib, pintle, portal, semi-gantry, semi-portal, storage bridge, tower, walking jib, and wall cranes.

Derrick shall mean a power-driven apparatus consisting of a mast or equivalent members held at the top by guys

or braces, with or without a boom, for use with a hoisting mechanism or operating ropes. The term shall include all types of derricks, such as A-frame, breast, Chicago boom, gin-pole, guy, and stiff-leg derrick.

Elevator shall mean any power-driven hoisting or lowering mechanism equipped with a car or platform which moves in guides in a substantially vertical direction. The term shall include both passenger and freight elevators (including portable elevators or tiering machines), but shall not include dumbwaiters.

High-lift truck shall mean a powerdriven industrial type of truck used for lateral transportation that is equipped with a power-operated lifting device usually in the form of a fork or platform capable of tiering loaded pallets or skids one above the other. Instead of a fork or a platform, the lifting device may consist of a ram, scoop, shovel, crane, revolving fork, or other attachments for handling specific loads. The term shall mean and include highlift trucks known under such names as fork lifts, fork trucks, fork lift trucks, tiering trucks, backhoes, front-end loaders, skid loaders, skid-steer loaders, Bobcat loaders, or stacking trucks, but shall not mean low-lift trucks or low-lift platform trucks that are designed for the transportation of but not the tiering of materials.

Hoist shall mean a power-driven apparatus for raising or lowering a load by the application of a pulling force that does not include a car or platform running in guides. The term shall include all types of hoists, such as base mounted electric, clevis suspension, hook suspension, monorail, overhead electric, simple drum, and trolley suspension hoists.

Manlift shall mean a device intended for the conveyance of persons that consists of platforms or brackets mounted on, or attached to, an endless belt, cable, chain or similar method of suspension; with such belt, cable or chain operating in a substantially vertical direction and being supported by and driven through pulleys, sheaves or sprockets at the top and bottom. The term shall also include truck- or equipment-mounted aerial platforms commonly referred to as scissor lifts,

boom-type mobile elevating work platforms, work assist vehicles, cherry pickers, basket hoists, and bucket trucks.

- (c) Exception. (1) This section shall not prohibit the operation of an automatic elevator and an automatic signal operation elevator provided that the exposed portion of the car interior (exclusive of vents and other necessary small openings), the car door, and the hoistway doors are constructed of solid surfaces without any opening through which a part of the body may extend; all hoistway openings at floor level have doors which are interlocked with the car door so as to prevent the car from starting until all such doors are closed and locked; the elevator (other than hydraulic elevators) is equipped with a device which will stop and hold the car in case of overspeed or if the cable slackens or breaks; and the elevator is equipped with upper and lower travel limit devices which will normally bring the car to rest at either terminal and a final limit switch which will prevent the movement in either direction and will open in case of excessive over travel by the car.
- (2) For the purpose of this exception the term *automatic elevator* shall mean a passenger elevator, a freight elevator, or a combination passenger-freight elevator, the operation of which is controlled by pushbuttons in such a manner that the starting, going to the landing selected, leveling and holding, and the opening and closing of the car and hoistway doors are entirely automatic.
- (3) For the purpose of this exception, the term automatic signal operation elevator shall mean an elevator which is started in response to the operation of a switch (such as a lever or pushbutton) in the car which when operated by the operator actuates a starting device that automatically closes the car and hoistway doors—from this point on, the movement of the car to the landing selected, leveling and holding when it gets there, and the opening of

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the car and hoistway doors are entirely automatic.

[16 FR 7008, July 20, 1951, as amended at 20 FR 6386, Aug. 31, 1955. Redesignated at 28 FR 1634, Feb. 21, 1963, and amended at 28 FR 3449, Apr. 9, 1963; 32 FR 15479, Nov. 7, 1967. Redesignated and amended at 36 FR 25156, Dec. 29, 1971; 75 FR 28455, May 20, 2010]

# § 570.59 Occupations involved in the operation of power-driven metal forming, punching, and shearing machines (Order 8).

- (a) Finding and declaration of fact. The following occupations are particularly hazardous for the employment of minors between 16 and 18 years of age:
- (1) The occupations of operator of or helper on the following power-driven metal forming, punching, and shearing machines:
- (i) All rolling machines, such as beading, straightening, corrugating, flanging, or bending rolls; and hot or cold rolling mills.
- (ii) All pressing or punching machines, such as punch presses except those provided with full automatic feed and ejection and with a fixed barrier guard to prevent the hands or fingers of the operator from entering the area between the dies; power presses; and plate punches.
- (iii) All bending machines, such as apron brakes and press brakes.
- (iv) All hammering machines, such as drop hammers and power hammers.
- (v) All shearing machines, such as guillotine or squaring shears; alligator shears; and rotary shears.
- (2) The occupations of setting up, adjusting, repairing, oiling, or cleaning these machines including those with automatic feed and ejection.
- (b) Definitions. (1) The term operator shall mean a person who operates a machine covered by this section by performing such functions as starting or stopping the machine, placing materials into or removing them from the machine, or any other functions directly involved in operation of the machine.
- (2) The term *helper* shall mean a person who assists in the operation of a machine covered by this section by helping place materials into or remove them from the machine.
- (3) The term forming, punching, and shearing machines shall mean power-

driven metal-working machines, other than machine tools, which change the shape of or cut metal by means of tools, such as dies, rolls, or knives which are mounted on rams, plungers, or other moving parts. Types of forming, punching, and shearing machines enumerated in this section are the machines to which the designation is by custom applied.

(c) Exemptions. This section shall not apply to the employment of apprentices or student-learners under the conditions prescribed in §570.50 (b) and (c).

[16 FR 7008, July 20, 1951, as amended at 25 FR 9848, Oct. 14, 1960. Redesignated at 28 FR 1634, Feb. 21, 1963, and amended at 28 FR 3449, Apr. 9, 1963. Redesignated at 36 FR 25156, Dec. 29, 19711

# § 570.60 Occupations in connection with mining, other than coal (Order 9).

- (a) Finding and declaration of fact. All occupations in connection with mining, other than coal, are particularly hazardous for the employment of minors between 16 and 18 years of age or detrimental to their health or well-being and employment in such occupations is therefore prohibited under section 12 of the Fair Labor Standards Act, as amended, except the following:
- (1) Work in offices, in the warehouse or supply house, in the change house, in the laboratory, and in repair or maintenance shops not located underground.
- (2) Work in the operation and maintenance of living quarters.
- (3) Work outside the mine in surveying, in the repair and maintenance of roads, and in general clean-up about the mine property such as clearing brush and digging drainage ditches.
- (4) Work of track crews in the building and maintaining of sections of railroad track located in those areas of open-cut metal mines where mining and haulage activities are not being conducted at the time and place that such building and maintenance work is being done.
- (5) Work in or about surface placer mining operations other than placer dredging operations and hydraulic placer mining operations.