than 2 inches thick if wood, or of equivalent strength if metal, shall be provided and used by workmen when necessary to enable them to reach any point without walking upon exposed beams.

(d) Stringers of ample strength shall be installed to support the flooring planks, and the ends of such stringers shall be supported by floor beams or girders, and not by floor arches alone.

(e) Planks shall be laid together over solid bearings with the ends overlapping at least 1 foot.

(f) When floor arches are being removed, employees shall not be allowed in the area directly underneath, and such an area shall be barricaded to prevent access to it.

(g) Demolition of floor arches shall not be started until they, and the surrounding floor area for a distance of 20 feet, have been cleared of debris and any other unnecessary materials.

§ 1926.856 Removal of walls, floors, and material with equipment.

(a) Mechanical equipment shall not be used on floors or working surfaces unless such floors or surfaces are of sufficient strength to support the imposed load.

(b) Floor openings shall have curbs or stop-logs to prevent equipment from running over the edge.

(c) Mechanical equipment used shall meet the requirements specified in subparts N and O of this part.

§1926.857 Storage.

(a) The storage of waste material and debris on any floor shall not exceed the allowable floor loads.

(b) In buildings having wooden floor construction, the flooring boards may be removed from not more than one floor above grade to provide storage space for debris, provided falling material is not permitted to endanger the stability of the structure.

(c) When wood floor beams serve to brace interior walls or free-standing exterior walls, such beams shall be left in place until other equivalent support can be installed to replace them.

(d) Floor arches, to an elevation of not more than 25 feet above grade, may be removed to provide storage area for debris: *Provided*, That such removal 29 CFR Ch. XVII (7-1-06 Edition)

does not endanger the stability of the structure.

(e) Storage space into which material is dumped shall be blocked off, except for openings necessary for the removal of material. Such openings shall be kept closed at all times when material is not being removed.

§ 1926.858 Removal of steel construction.

(a) When floor arches have been removed, planking in accordance with §1926.855(b) shall be provided for the workers engaged in razing the steel framing.

(b) Cranes, derricks, and other hoisting equipment used shall meet the requirements specified in subpart N of this part.

(c) Steel construction shall be dismantled column length by column length, and tier by tier (columns may be in two-story lengths).

(d) Any structural member being dismembered shall not be overstressed.

§1926.859 Mechanical demolition.

(a) No workers shall be permitted in any area, which can be adversely affected by demolition operations, when balling or clamming is being performed. Only those workers necessary for the performance of the operations shall be permitted in this area at any other time.

(b) The weight of the demolition ball shall not exceed 50 percent of the crane's rated load, based on the length of the boom and the maximum angle of operation at which the demolition ball will be used, or it shall not exceed 25 percent of the nominal breaking strength of the line by which it is suspended, whichever results in a lesser value.

(c) The crane boom and loadline shall be as short as possible.

(d) The ball shall be attached to the loadline with a swivel-type connection to prevent twisting of the loadline, and shall be attached by positive means in such manner that the weight cannot become accidentally disconnected.

(e) When pulling over walls or portions thereof, all steel members affected shall have been previously cut free.

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(f) All roof cornices or other such ornamental stonework shall be removed prior to pulling walls over.

(g) During demoliton, continuing inspections by a competent person shall be made as the work progresses to detect hazards resulting from weakened or deteriorated floors, or walls, or loosened material. No employee shall be permitted to work where such hazards exist until they are corrected by shoring, bracing, or other effective means.

§1926.860 Selective demolition by explosives.

Selective demolition by explosives shall be conducted in accordance with the applicable sections of subpart U of this part.

Subpart U—Blasting and the Use of Explosives

AUTHORITY: Sec. 107, Contract Work Hours and Safety Standards Act (40 U.S.C. 333); secs. 4, 6, 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), or 6-96 (62 FR 111), as applicable; and 29 CFR part 1911.

§1926.900 General provisions.

(a) The employer shall permit only authorized and qualified persons to handle and use explosives.

(b) Smoking, firearms, matches, open flame lamps, and other fires, flame or heat producing devices and sparks shall be prohibited in or near explosive magazines or while explosives are being handled, transported or used.

(c) No person shall be allowed to handle or use explosives while under the influence of intoxicating liquors, narcotics, or other dangerous drugs.

(d) All explosives shall be accounted for at all times. Explosives not being used shall be kept in a locked magazine, unavailable to persons not authorized to handle them. The employer shall maintain an inventory and use record of all explosives. Appropriate authorities shall be notified of any loss, theft, or unauthorized entry into a magazine.

(e) No explosives or blasting agents shall be abandoned.

(f) No fire shall be fought where the fire is in imminent danger of contact

with explosives. All employees shall be removed to a safe area and the fire area guarded against intruders.

(g) Original containers, or Class II magazines, shall be used for taking detonators and other explosives from storage magazines to the blasting area.

(h) When blasting is done in congested areas or in proximity to a structure, railway, or highway, or any other installation that may be damaged, the blaster shall take special precautions in the loading, delaying, initiation, and confinement of each blast with mats or other methods so as to control the throw of fragments, and thus prevent bodily injury to employees.

(i) Employees authorized to prepare explosive charges or conduct blasting operations shall use every reasonable precaution including, but not limited to, visual and audible warning signals, flags, or barricades, to ensure employee safety.

(j) Insofar as possible, blasting operations above ground shall be conducted between sunup and sundown.

(k) Due precautions shall be taken to prevent accidental discharge of electric blasting caps from current induced by radar, radio transmitters, lightning, adjacent powerlines, dust storms, or other sources of extraneous electricity. These precautions shall include:

(1) Detonators shall be shortcircuited in holes which have been primed and shunted until wired into the blasting circuit.

(2) The suspension of all blasting operations and removal of persons from the blasting area during the approach and progress of an electric storm;

(3) (i) The prominent display of adequate signs, warning against the use of mobile radio transmitters, on all roads within 1,000 feet of blasting operations. Whenever adherence to the 1,000-foot distance would create an operational handicap, a competent person shall be consulted to evaluate the particular situation, and alternative provisions may be made which are adequately designed to prevent any premature firing of electric blasting caps. A description of any such alternatives shall be reduced to writing and shall be certified