

INDUSTRY, LABOR AND HUMAN RELATIONS

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Chapter Ind 12

WORK UNDER COMPRESSED AIR

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Article 1.

APPLICATION

Ind 12.01 Application of orders. The following rules shall apply whenever men are employed in compressed air, exclusive of diving work. Machines, equipment, processes, and operations not specifically covered by these rules, shall be governed by other applicable administrative codes.

(1) EXCEPTIONS. (a) In cases of practical difficulty and unnecessary hardship, the department of industry, labor and human relations may grant a *variance* to literal requirements of this code and may permit the use of alternate devices or methods provided the variance proposed is clearly equal to code requirements in purpose and intent. A petition for modification must be filed with the department of industry, labor and human relations for any code variance sought.

(b) In cases of practical difficulty and unnecessary hardship, the department of industry, labor and human relations may grant a *waiver* of certain rules in this code when the rules apply to work in progress under contracts existing prior to the effective date of this code. Such waivers shall remain in effect for not more than 6 months.

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Work Under Compressed Air

Cr. 1972 Reg. Class 1972

Article 2.

DEFINITIONS

Ind 12.04 Definitions. The following definitions shall apply in the application of these rules. The singular number includes the plural and the plural the singular.

(1) **AIR MASTER.** That competent individual designated by the employer and licensed by the department of industry, labor and human relations in immediate charge of the work.

(2) **BULKHEAD.** An airtight structure separating the working chamber from free air or from another chamber under a lesser pressure than the working pressure.

(3) **COMBINATION LOCK.** An air lock which serves both as materials and man lock.

(4) **COMPRESSED AIR CAISSON.** A vertical structure extended below the water or earth surface through which men may descend through a lock into an air pressure greater than atmospheric. The pressurized atmosphere opposes the water pressure and permits men to work at the bottom of the caisson.

(5) **DECANTING.** A method used for decompressing under certain circumstances. In this procedure the workers are brought to atmospheric pressure with a very high gas tension in the tissues and then immediately recompressed in a second and separate chamber or lock. The period of time that the workers spend at atmospheric pressure between the decompression following the shift and recompression must not exceed 5 minutes.

(6) **EMPLOYER.** The contractor, firm, corporation or other organization carrying out the work.

(7) **FREE AIR.** Normal atmospheric pressure.

(8) **HIGH AIR.** Air pressure used to supply power to pneumatic tools and devices.

(9) **LOW AIR.** Air supplied to pressurize working chambers and locks.

(10) **MAN LOCK.** A chamber through which men pass from one air pressure environment into another.

(11) **MATERIALS LOCK.** A chamber through which materials and equipment pass from one air pressure environment into another.

(12) **MEDICAL LOCK.** A special chamber in which men are treated for decompression illness. It may also be used in preemployment physical examinations to determine the adaptability of the prospective employe to changes in pressure.

(13) **PRESSURE.** A force acting on a unit area. Usually shown as pounds per square inch (psi).

(a) *Absolute pressure* (psia). The sum of the atmospheric pressure and gauge pressure (psig).

(b) *Atmospheric pressure.* The pressure of air at sea level, usually 14.7 psia (one atmosphere), or 0 psig.