

UNDERGROUND COMPRESSED AIR REGULATION LAW
Act of Jul. 19, 1917, P.L. 1088, No. 364
AN ACT

CL. 43

Relating to and regulating the employment of persons in
compressed-air work.

TABLE OF CONTENTS

Section 1.	Definitions.
Section 2.	Safety of Employes.
Section 3.	Equipment for Work in Compressed Air.
Section 4.	Suspension of Caissons.
Section 5.	Inspection.
Section 6.	Medical Attendants and Nurses.
Section 7.	Employment of Certain Persons Prohibited.
Section 8.	Physical Examiners.
Section 9.	Record of Physical Examinations.
Section 10.	Hours of Labor.
Section 11.	Rate and Time of Decompression.
Section 12.	Enforcement.
Section 13.	Penalties.

Definitions.

Section 1. The term "pressure" when used in this act means "gage pressure in pounds per square inch."

The term "employer" when used in this act includes individuals, copartnerships, associations, and corporations.

Safety of Employes.

Section 2. Every tunnel, caisson, compartment, or place to which this act applies shall be so constructed, equipped, arranged, operated, and conducted as to provide such protection to the lives, health, and safety of all persons employed therein as the nature of the employment will reasonably permit.

Equipment for Work in Compressed Air.

Section 3. Every employer carrying on any work in the prosecution of which persons are employed in compressed air shall:

(1) Provide and instal gages in each tunnel, for showing the air pressure to which the persons so employed therein are subjected. Such gages shall be accessible at all times during working-hours to all employes in the tunnels.

(2) Provide and attach gages to each caisson, for showing the air pressure to which the persons so employed therein are subjected, and employ a competent person, who may be the lock-tender, to take charge of such gages and of the instruments required under subdivision three of this section. The person so employed shall not be permitted to work more than eight hours in any twenty-four hours.

(3) Provide and attach an air-gage and a timepiece to each airlock. Such gage and timepiece shall be accessible to the lock-tender at all times.

(4) Keep at least two air-pipes or -lines connected with each tunnel, caisson, compartment, or place in which persons are so employed.

(5) Provide a suitable iron ladder for the entire length of every shaft used in connection with such work.

(6) Keep every passageway used in connection with such work clear and properly lighted.

(7) Provide sufficient electric lights for all lighting purposes, and provide a wire for lighting the shaft, which wire shall be separated from the wire used for lighting the place where the employees are at work in compressed air; all electric wires shall be properly insulated.

(8) Provide, for the use of all persons so employed, dressing-rooms, which shall be kept open and accessible during working-hours and during the intervals between working-periods, and also a separate room for drying clothes. The dressing-rooms shall contain benches and individual lockers, shower-baths, with hot and cold water, and sanitary water-closets, and shall be kept properly heated, lighted, and ventilated.

(9) If the maximum air pressure in such work exceeds seventeen pounds, provide and maintain at least one double compartment hospital-lock; such lock shall be at least six feet high inside measurement, and be suitably floored; it shall be equipped with inside and outside air-gages and timepieces, and a telephone with proper connections, and shall contain benches and proper surgical and medical equipment; it shall be properly heated, lighted, and ventilated.

Suspension of Caissons.

Section 4. No caisson in which persons are employed in compressed air shall, while work is in progress therein, be suspended or hung so that the bottom of the excavation is more than four feet below the cutting edge of the caisson.

Inspection.

Section 5. Every employer carrying on any work in the prosecution of which persons are employed in compressed air shall cause all engines, boilers, steam-pipes, steam-gages, drills, caissons, air-pipes, air-gages, air-locks, dynamos, electric wiring, signal apparatus, brakes, buckets, hoists, cables, chains, ropes, ladders, ways, tracks, sides, roofs, timbers, supports, and all other equipment, apparatus and appliances used in connection with such work to be inspected at least once every working day by a competent person especially designated for that purpose; and if any defect in such equipment, apparatus or appliances is found, a report thereof in writing shall forthwith be made by the inspector to the employer and the defect shall be immediately repaired.

Medical Attendants and Nurses.

Section 6. Every employer carrying on any work in the prosecution of which persons are employed in compressed air shall:

(1) Employ one or more licensed physicians as medical officers who shall be present to render medical assistance at all necessary times at the place where such work is in progress, and who shall perform such other duties as are imposed on them by this act.

(2) If the maximum air pressure in such work exceeds seventeen pounds, employ one or more registered nurses or one or more competent persons, which persons shall be selected by the medical officer and be certified by him to be competent by actual experience to handle cases of compressed-air illness.

The nurses or persons so employed shall have charge of the

hospital-lock provided for in this act, and may also have other duties of a clerical nature, exclusive of timekeeping, such as will not require their presence elsewhere than at the hospital-lock and such as they may leave at any time their service at the lock is necessary.

Employment of Certain Persons Prohibited.

Section 7. No person known to be addicted to the excessive use of intoxicants shall be employed or permitted to work in compressed air.

Physical Examiners.

Section 8. (1) No person shall be employed or permitted to work in compressed air until he has been examined by the medical officer and found to be physically qualified therefor.

(2) No person who has not previously worked in compressed air shall, during the first twenty-four hours of his employment, be permitted to work therein longer than one working-period, as provided in section ten, and he shall not be permitted to resume such work, if the air pressure exceeds fifteen pounds, until he has been re-examined by the medical officer and found to be physically qualified therefor.

(3) No person who is employed in compressed air, but who has been absent therefrom for ten or more consecutive days for any cause, shall be permitted to resume such work until he has been re-examined by the medical officer and found to be physically qualified therefor.

(4) No person who has been employed regularly in compressed air for three months shall be permitted to continue such work until he has been re-examined by the medical officer and found to be physically qualified therefor.

Record of Physical Examinations.

Section 9. The medical officer shall keep a record of all physical examinations made in accord with section eight, which record shall be kept at the place where the work is in progress, and shall contain the name, age, address, and full description of each person examined, the date on which each examination was made and the physical condition on that date of the person examined, and the total time such person has worked in compressed air, including time in previous employments. The employer shall also be responsible for the observance of this section.

Hours of Labor.

Section 10. When the air pressure in any tunnel, caisson, compartment, or place in which persons are employed exceeds normal, but does not exceed fifty pounds, the maximum number of hours which, in any twenty-four hours, a person may be employed or permitted to work or remain therein, shall be as hereinafter stated. In every case the maximum number of hours shall be divided into two working-periods of equal length, and the minimum time interval which shall elapse between such working-periods shall be as hereafter stated.

When the air pressure exceeds normal, but does not exceed twenty-one pounds, number of hours in twenty-four, eight; interval between working-periods, thirty minutes.

When the air pressure exceeds twenty-one but does not exceed thirty pounds, number of hours in twenty-four, six; interval between working-periods one hour.

When the air pressure exceeds thirty but does not exceed thirty-five pounds, number of hours in twenty-four, four; interval between working-periods, two hours.

When the air pressure exceeds thirty-five but does not exceed forty pounds, number of hours in twenty-four, three; interval between periods, three hours.

When the air pressure exceeds forty but does not exceed forty-five pounds, number of hours in twenty-four, two; interval between working-periods, four hours.

When the air pressure exceeds forty-five but does not exceed fifty pounds, number of hours in twenty-four, one and one-half; interval between working-periods, five hours.

Except in cases of emergency, no person shall be employed, or permitted to work or remain, in any tunnel, caisson, compartment, or place where air pressure exceeds fifty pounds.

Rate and Time of Decompression.

Section 11. No person shall be permitted to pass from any tunnel, caisson, compartment, or place where he has been employed in compressed air to atmosphere of normal pressure, without passing through an intermediate lock or stage of decompression. When the employe is passing from a tunnel to atmosphere of normal pressure, the rate of decompression shall be three pounds every two minutes, except when the air pressure in the tunnel exceeds thirty-six pounds, in which case the rate of decompression shall be one pound every minute. When the employe is passing from a caisson, compartment, or place to atmosphere of normal pressure, the time of decompression shall be as follows:

When the pressure in a caisson, compartment, or place exceeds normal, but does not exceed ten pounds, time of decompression one minute.

When the pressure in a caisson, compartment, or place exceeds ten but does not exceed fifteen pounds, time of decompression two minutes.

When the pressure in a caisson, compartment, or place exceeds fifteen but does not exceed twenty pounds, time of decompression five minutes.

When the pressure in a caisson, compartment, or place exceeds twenty pounds but does not exceed twenty-five pounds, time of decompression ten minutes.

When the pressure in a caisson, compartment, or place exceeds twenty-five pounds but does not exceed thirty pounds, time of decompression twelve minutes.

When the pressure in a caisson, compartment, or place exceeds thirty but does not exceed thirty-six pounds, time of decompression fifteen minutes.

When the pressure in a caisson, compartment, or place exceeds thirty-six but does not exceed forty pounds, time of decompression twenty minutes.

When the pressure in a caisson, compartment, or place exceeds forty but does not exceed fifty pounds, time of decompression twenty-five minutes.

Enforcement.

Section 12. The Commissioner of Labor and Industry shall enforce this act. In enforcing this act any employe or agent

of the Department of Labor and Industry, specially authorized in writing, may at any time enter any place of employment covered by this act for purposes of inspection. It shall be unlawful to hinder or prevent such employe or agent in the performance of his duties under this act.

Penalties.

Section 13. Every person who, directly or indirectly, violates or fails to comply with any provisions of this act is liable to a penalty of fifty dollars for the first offense, one hundred dollars for the second offense, and three hundred dollars for the third and each subsequent offense. Such penalties shall be recovered as debts of like amount are recoverable, in action to be brought for the use of the Commonwealth by or under the directions of the Commissioner of Labor and Industry.