

Chapter Ind 6

TRENCH, EXCAVATION AND TUNNEL
CONSTRUCTION

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History: Chapter Ind 6 as it existed on December 31, 1962 was repealed and a new chapter Ind 6 created effective January 1, 1963.

Part I

GENERAL

Ind 6.01 Scope. These rules shall apply to all tunnels, caissons, accessory shafts and trenches while under construction with the exception of tunnel construction in connection with mines. The following types of construction are understood to be included: lateral trenches (house connections), water taps and connections, sanitary and storm sewers, welded pipe lines, water mains, basements, footings, dry well excavations, manholes, shafts, storage tunnels, and all other excavations.

History: Cr. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 6.02 Definitions. For the purpose of these rules the following items are defined.

(1) TUNNEL is a subterranean passage or chamber constructed without the removal of a superincumbent material.

(2) SHAFT is an excavation made from the surface of the ground, the longer axis of which is steeper than 45 degrees. Widening of a trench to accommodate a manhole shall be considered a trench.

(3) TRENCH means a longitudinal excavation made from the surface of the ground.

(4) **CONSTRUCTOR** means a person, firm or body corporate in immediate control of the construction of any excavation and subsequent construction and as such responsible for the condition and management thereof.

(5) **SUPERINTENDENT** means a person resident on the work having general supervision and responsibility.

(6) **FOREMAN** means a person in charge of a subdivision of the work or of the entire work at any one time and under the instructions of the superintendent or constructor.

(7) **WORKS** or **WORKINGS** means any or all parts of any project excavated or being excavated as well as shafts and approaches, power houses, lumber yards, storage yards and structures of all kinds, which are in the immediate vicinity of and used in connection with the excavation or the immediate disposal of excavated material or in connection with any phase of the construction project.

(8) **PERSON** means a firm or body corporate as well as natural persons.

(9) **UNDERGROUND** means within the limits of any shaft or tunnel.

(10) **EMPLOYEES** or **PERSONS EMPLOYED** means all persons receiving compensation from the constructor or others for labor or services performed on the works.

(11) **APPROVED** (unless otherwise specified) means approval by the industrial commission.

(12) **PRESSURE** means gauge pressure in pounds per square inch.

(13) **OPEN AIR** shall be defined as well ventilated under normal atmospheric pressure.

(14) **TIGHT SHEATHING** means planks shall be abutting.

(15) **SAFETY SCREEN** is an air-tight diaphragm placed across the upper part of the tunnel between the shield and the emergency air lock. The function of the safety screen is to prevent flooding of the upper part of the tunnel between the screen and the lock by forming in effect a diving bell in which the air is retained, preventing the water from rising above a certain level. The lower edge of the screen should be placed at a horizontal plane below the entrance to the emergency lock.

(16) **TIMBER SIZES**. Timber sizes required in this code are stated as nominal sizes.

History: Cr. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 6.03 Inspections. (1) The authorized inspectors of the department, upon presenting appropriate credentials to the owner, operator, or agent in charge, are authorized—

(a) To enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employee of an employer; and

(b) To inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a

reasonable manner, any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein, and to question privately any such employer, owner, operator, agent or employee.

(2) The inspector before making his inspection shall contact a representative of the employer and a representative authorized by his employees who shall be given an opportunity to accompany the inspector during the physical inspection of any workplace under subsection (1) for the purpose of aiding such inspection.

(a) Where there is no authorized employee representative, the inspector shall consult with a reasonable number of employees concerning matters of health and safety in the workplace.

Note: The department policy is not to give advance notice, but in the scheduling and in the act of inspecting it may not always be possible to avoid advance notice or to obtain accompaniment as, for example, inside boilers or in precarious locations of elevator installations, but otherwise these rules will be diligently observed.

(3) All excavations, timbering and equipment shall be inspected daily. All dangerous conditions or defects shall be made safe. The constructor or his representative shall be responsible for these inspections and the safety of all workmen at all times.

(4) Frequent inspections of rock excavations, including tunnels, shafts and trenches shall be made by the constructor or his representative and loose rock which may fall shall be removed.

(5) After a blast is fired these requirements for inspection and removal of loose rock shall be complied with before proceeding with the work.

History: Cr. Register, December, 1962, No. 84, eff. 1-1-63; renum. (1), (2), (3) to be (3), (4), and (5) and cr. (1) and (2), Register, April, 1973, No. 208, eff. 5-1-73