EXPLOSIVES AND BLASTING AGENTS INDUSTRIAL COMMISSION

Chapter Ind 5

PART I

GENERAL

Ind 5.001 Ind 5.01	Scope Inspections	Ind 5.42 Ind 5.43	Explosives unfit for use Blasters
Ind 5.02	Construction of rules	Ind 5.44	Detonators, primers, fuse
Ind 5.03	Definitions	Ind Diff	and detonating cord
Ind 5.04	Storage of explosives	Ind 5.45	Use of explosives under-
Ind olor	within communities		ground
Ind 5.05	Storage outside the limits	Ind 5.46	Firing blasts underground
	of cities and villages		with cap and fuse
Ind 5.06	Location of magazines	Ind 5.47	Firing blasts electrically
Ind 5.07	Construction and mainte-		underground
	nance of magazines. Stor-	Ind 5.48	Firing blasts underground ;
	age of explosives	~ ~ ~ ~ ~	general
Ind 5.08	Storage, daily supply	Ind 5.49	Precautions after under-
Ind 5.09	Portable magazines	T. J F 60	ground blasting
Ind 5.10	Explosives unfit for use	Ind 5.60	Mixing plant
Ind 5.11	Transportation of explo-	Ind 5.61	Liquid fuels
	sives	Ind 5.62	Storage
Ind 5.12	Blasters license	Ind 5.63	General requirements
Ind 5.13	Detonators, primers, fuse		(transportation of blasting
	and detonating cord	~ ~ ~ ~ ~	agents)
Ind 5.14	Use of explosives	Ind 5.64	Smoking and open flames
Ind 5.15	Firing blasts with cap and		(blasting operations, gen-
T T F 4 0	fuse	T 1 E 0 E	eral)
Ind 5.16	Firing blasts with elec-	Ind 5.65	Mixing at the borehole
T. J. F. 17	tricity		collar (blasting operations,
Ind 5.17	Firing blasts; general	T. J. F. 00	aboveground)
Ind 5.18	Precautions after blast	Ind 5.66	
Ind 5.40	General		ground mines)
Ind 5.41	Underground storage of		
	explosives		

History: Chapter Ind 5 as it existed on February 28, 1965 was repealed, and a new chapter Ind 5 was created effective March 1, 1965.

Ind 5.001 Scope. (1) These rules apply to the storage, handling and transportation of explosives, but do not apply to the interstate transportation of explosives. This code shall not apply to the military, naval forces, federal agencies, state militia, police or fire department of any community provided they are acting within their official capacity and in the proper performance of their normal or emergency duties.

(2) Whenever the term "explosives" is used in this code, it shall be construed as including blasting agents, unless a conflicting rule is contained in Part III or a specific exemption is made.

(3) When explosive or explosive items are for the United States military forces, whether they are in the process of being manufactured, handled, shipped, stored, etc., the safety rules as established herein *SHALL NOT* apply. In these cases, the safety and security requirements, rules and other regulating specifications of the participating military branch shall apply.

Note: Applicable special rules may be issued by the industrial commission when deemed necessary.

History: Cr. Register, February, 1965, No. 110, eff. 3-1-65; renumbered from Ind 5.01 to be Ind 5.001, Register, April, 1973, No. 208, eff. 5-1-73.

Ind 5.01 Inspections. (1) The authorized inspectors of the department, upon presenting appropriate credentials to the owner, operator, or agent in charge, are authorized—

> Register, April, 1973, No. 208 Explosives

General

(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 employes 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.

History: Cr. Register, April, 1973, No. 208, eff. 5-1-73.

Ind 5.02 Construction of rules. Failure on part of superintendents, foremen, bosses, and other persons having control of any place of employment or of any employee and of any operations, to carry out any duty prescribed in these rules is violation of such rule by the employer.

History: Cr. Register, February, 1965, No. 110, eff. 3-1-65.

Ind 5.03 Definitions. (1) AMMONIUM NITRATE. A chemical compound represented by the formula NH_4NO_3 .

(2) AN-FO. An abbreviation for ammonium nitrate and fuel oil mixture.

(3) APPROVED. The term "approved" shall be held to mean approved by the industrial commission.

(4) BARRICADE. The term "barricade" when used in these rules shall be held to mean natural features of the ground, such as hills, timber of sufficient density that the surrounding exposures can not be seen when the trees are bare of leaves, or an "efficient artificial barricade" consisting of an artificial mound or properly revetted wall of earth of a minimum thickness of 3 feet at the top.

(5) BLASTER. The term "blaster" shall mean any person or persons holding a license issued by the industrial commission.

(6) BLASTING. The term "blasting" shall denote a method of loosening, moving or shattering masses of solid matter by use of explosive compounds.

(7) BLASTING AGENT. The term "blasting agent" shall denote any material or mixture consisting of a fuel and oxidizer intended for blasting, not otherwise classified as an explosive and in which none of the ingredients is classified as an explosive (provided that the ma-

Register, April, 1973, No. 208 Explosives DEPT. OF INDUSTRY, LABOR & HUMAN RELATIONS 2a General

terial or mixture cannot be detonated by a No. 8 test blasting cap under the conditions specified for the cap sensitivity test).

(8) BLASTING CAP. The term "blasting cap" means a small metal tube or shell closed at one end, loaded with a detonating charge, whose minimum strength shall be equivalent to one gram of 80% mercury fulminate and 20% potassium chlorate mixture, used in detonating high explosives. One end of this tube shall be opened for the insertion of safety fuse.

(9) BLASTING MAT. The term "blasting mat" shall mean a heavy mat of woven rope, steel wire, or chain, or a mat improvised from timber, poles, brush or other materials, placed over loaded holes, tending to minimize the amount of rock and other debris that might be thrown into the air.

(10) BUILDING. The term "building" when used in the American Table of Distances shall mean and include only a building occupied in whole or in part as a habitation for human beings, or any church, schoolhouse, railroad station, airport terminal, mercantile building, garage, factory, or other building where people are accustomed to assemble, except operating buildings. (See Wis. Adm. Code section Ind 5.06 (6).)

(11) CAP SENSITIVITY TEST. The "cap sensitivity test" is a simple method of measuring the initiation sensitivity of a blasting agent. A one quart, cylindrical, cardboard carton of the type commonly used for bulk ice cream, is filled with the blasting agent to be tested and packed to the approximate shipping package density. A commercial No. 8 blasting cap is inserted into the center of the blasting agent through a hole in the top of the carton. The charge is then placed on soft ground in an isolated area with adequate protection for personnel and the blasting cap fired. If a crater is formed in the soft ground of sufficient size to indicate that any part of the blasting agent detonated, the material is cap-sensitive and must be treated as a high explosive.

> Register, April, 1973, No. 208 Explosives