

**CAROLINA DEPARTMENT OF LABOR
OFFICE OF OCCUPATIONAL SAFETY AND HEALTH
RALEIGH, NORTH CAROLINA**

Standards Notice 37

TO: All Supervisors, Consultants, Safety Officers, Industrial Hygienists, and Staff.

SUBJECT: Transportation of Explosives, Personnel and Blasting Caps

29 CFR 1910.109(b)(1) - 29 CFR 1910.109(d)(1)(iv)
29 CFR 1910.109(d)(2)(i) - 29 CFR 1926.902(a)
29 CFR 1926.902(d) - 29 CFR 1926.902(f) and
29 CFR 1926.902(g)

a. Standards

1. 29 CFR 1910.109(b)(1). General Hazard. No person shall store, handle, or transport explosives or blasting agents when such storage, handling, and transportation of explosives or blasting agents constitutes an undue hazard to life and property.
2. 29 CFR 1910.109(d)(1)(iv). Blasting caps or electric blasting caps shall not be transported over the highways on the same vehicles with other explosives.
3. 29 CFR 1910.109(d)(2)(i). Vehicles used for transporting explosives shall be strong enough to carry the load without difficulty and be in good mechanical condition. If vehicles do not have a closed body, the body shall be covered with a flame-proof and moisture-proof tarpaulin or other effective protection against moisture and sparks. All vehicles used for the transportation of explosives shall have tight floors and any spark-producing metal on the inside of the body shall be covered with wood or other nonsparking materials to prevent contact with packages of explosives. Packages of explosives shall not be loaded above the sides of an open body vehicle.
4. 29 CFR 1926.902(a). Transportation of explosives shall meet the provisions of the Department of Transportation regulations contained in . . . 49 CFR Parts 171-179, Highways and Railways, . . .
5. 29 CFR 1926.902(d). Explosives, blasting agents, and blasting supplies shall not be transported with other materials or cargos. Blasting caps (including electric) shall not be transported in the same vehicle with other explosives.

6. 29 CFR 1926.902(f). When explosives are transported by a vehicle with an open body, a Class II magazine or original manufacturer's container shall be securely mounted on the bed to contain the cargo.
7. 29 CFR 1926.902(g). All vehicles used for the transportation of explosives shall have tight floors and any exposed spark-producing metal on the inside of the body shall be covered with wood, or other nonsparking material, to prevent contact with containers of explosives.

b. Discussion

Due to apparent conflicts among Occupational Safety and Health, Department of Transportation, and Bureau of Mines regulations concerning explosives and the transportation thereof; inspectors, consultants, employers, and employees have expressed concern and confusion as to what constitutes proper transportation procedures. The authority on this subject, accepted by all agencies involved, is the Institute of Makers of Explosives (IME), the trade association representing the producers of commercial explosives, blasting agents, supplies, and accessories in the United States, and the agency on whose guidelines most standards are based. The, questions most commonly asked are:

1. Can employees, equipment, and explosives be transported on the-same vehicle?
2. Can dynamite and blasting caps be transported together in the same vehicle?
3. Can dynamite and/or blasting caps be transported in a trailer attached to the rear of a personnel transport truck?

c. Interpretation

1. As implied in 29 CFR 1910.109(b) (1) and specifically stated in IME Publications Numbers 3 and 4, and in State and Federal mine safety regulations only authorized persons qualified in explosive handling and/or blasting operations. shall be in or around motor vehicles transporting explosive materials. Also, as implied by 29 CFR 1910, 109(b)(1) and stated in 29 CFR 1926.902(d); IMEE Publications Numbers 3, 4, 5, and 17, State and Federal mine safety regulations and specifically described in Department of Transportation regulations; explosives, blasting caps, and blasting agents shall not be transported with tools, equipment, materials, or other cargos. Tools, equipment, and/or materials of non-hazardous nature may be carried in separate compartments as long as they cannot in any way. increase, the hazards associated with handling and transporting the explosives, or increase the likelihood of employee injury. No loose cargo shall be permitted in the cargo shall be permitted in the compartment with the explosives.

2. 29 CFR 1910.109(d) (1)(iv) and 29 CFR 1926.902(d) prohibit the transportation of electric blasting caps and other explosives on the same vehicle. However, if both item are packed in their original containers, properly labeled, and deposited in approved containers or compartments under IME Safety Library Publication Number 22; then same vehicle transportation is permissible.. The location and construction of such containers are described below:

- A. A portable approved container placed within and readily removable from the cargo-carrying space of the vehicle.
- B. A container securely attached to the vehicle as shown in [Appendix A](#), below.
- C. A compartment built into the cargo spade of the vehicle as shown in [Appendix B](#), below.

NOTE: The construction of the container or compartment shall be as shown in [Appendices C](#) and [D](#), below. For detail construction requirements refer to IME Safety Library Publication 22.

The cab of the vehicle is not acceptable as the compartment or "container" in which the electric caps shall be placed. If an approved magazine is not used for the explosive then the metal surface of the cargo compartment shall be lined with wood, and open body Vehicles covered with a fire and moisture resistant tarpaulin or equivalent. Explosives shall not be piled higher than the sides or tailgate of the transporting vehicle.

3. Explosives and/or blasting caps shall not be transported on trailers unless the trailer is specifically designed and/or equipped for explosives hauling or storage, including approved Type 2 or 3 magazines. Pole trailers are not acceptable for such uses. Situations contrary to these guidelines shall be recommended for citation under 29 CFR 1910.109(b)(1) for general industry and 29 CFR 1926.902(a) for construction.
 4. Close attention shall be given to strict adherence to: all requirements of 29 CFR 1910.109 and 29 CFR 1926.900 through explosives operations to insure maximum safety and understanding of potential hazards.
- d. Inquiries
1. Questions on the content or application of this Standards Notice should be directed to the Safety and Health Engineering Section Office of Occupational Safety North Carolina Department of Labor.
 2. Questions regarding special hazards or conditions in explosives operations may be referred to:

Institute of Makers of Explosives
420 Lexington Avenue
New York, New York 10017

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Signed on original

MRP/JEH:ah

Appendix A

Appendix B

Appendix C

Appendix D