



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

FEB 4 2000

Reference Nos. 99-0319
99-0303

Mr. David B. Terry
Assistant Deputy Chief of Staff
for Operations
Department of the Army
Headquarters, Military Traffic Management Command
5611 Columbia Pike
Falls Church, VA 22041-5050

Dear Mr. Terry:

This is in response to your letter requesting clarification of the requirements in The Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) regarding certain explosive definitions and the required placarding for Class 1 materials when compatibility groups G, C, D and E are transported together by aircraft or vessel. Your questions are paraphrased and answered below.

Q1. What is the meaning of the term "fireworks" as used in §§ 174.8(g)(3)(vi) and 177.848(g)(3)(vi)?

A1. The term "fireworks" refers to Class 1 (explosive) materials that have been assigned the proper shipping name "Fireworks" from the Hazardous Materials Table. Also, the definition of the term "fireworks" is defined in § 173.59 as "pyrotechnic articles designed for entertainment."

Q2. What is the meaning of the terminology "special stowage" in § 177.848(g)(3)(vi)?

A2. The term "special stowage" is a term used for the stowage of hazardous materials aboard vessels. The term was inadvertently taken from the vessel language of the 49 CFR and does not refer to any stowage requirements in rail or highway transportation. This will be corrected in an upcoming rulemaking.



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174.81

Q3. What is the meaning of the terminology "explosive article" and "explosive substance" and where in the HMR are they defined?

A3. The terms "explosive article" and "explosive substance" are not defined in the HMR. It is the opinion of this Office that the term "explosive article" refers to an article that contains one or more explosive substances. The term "explosive substance" refers to a solid or liquid substance (or a mixture of substances) which is in itself capable by chemical reaction of producing gas at such temperatures and pressure and at such speed as to cause damage to the surroundings. Although there are no specific definitions in the HMR for "explosive article" or "explosive substance," numerous examples of each are described in 49 CFR 173.59. For example, bombs, detonators and flares are explosive articles and smokeless powder and solid propellant are explosive substances.

Q4. When shipping by aircraft or vessel, what are the placarding requirements when transporting explosive articles of compatibility group G with articles of compatibility groups C, D and E?

A4. As prescribed in § 172.504(g), Class 1 materials transported by aircraft or vessel must be placarded with the appropriate Class 1 placards (see § 172.522). Each placard must display the applicable compatibility group.

Q5. Section 172.522(b) states that the symbol "*" shall be replaced with the appropriate compatibility group letter. Does this mean that multiple letters, such as compatibility groups G, C, D and E may be placed on one placard when shipped together?

A5. No. Presently, the HMR requires compatibility groups G, C, D and E to be placed on separate placards. (Also, see A7.)

Q6. Section 172.504(f)(1) states, "When more than one division placard is required for Class 1 materials on a transport vehicle, rail car, freight container or unit load device, only the placard representing the lowest division number must be displayed." Does this apply when more than one compatibility group placard is required for Class 1 materials?

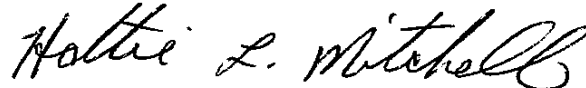
A6. No. Section 172.504 does not address compatibility groups. (Also, see A7.)

Q7. If the answer is no, will you allow this letter to serve as a "petition" to use one placard versus several placards when compatibility group G is shipped together with compatibility groups C, D, and E?

A7. It is not clear what you mean by "petition." A petition for rulemaking (a request to change a requirement in the 49 CFR) must be filed in accordance with § 106.31. An exemption (a request for an exemption from a requirement in the 49 CFR) must be filed in accordance with § 107.105. Your letter does not provide the required information and, therefore, may not be used to serve as either a petition for rulemaking or an exemption. However, we recognize the inconsistency in the compatibility group placarding requirements and are planning to propose this change in an upcoming rulemaking.

I hope this information is helpful. Please contact us if you need additional assistance.

Sincerely,

A handwritten signature in cursive script that reads "Hattie L. Mitchell".

Hattie L. Mitchell, Chief
Regulatory Review and Reinvention
Office of Hazardous Materials Standards

cc: Mr. Thomas Heitzmann
Dept. of the Navy



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, MILITARY TRAFFIC MANAGEMENT COMMAND
5611 COLUMBIA PIKE
FALLS CHURCH VA 22041-5050

30 NOV 1999

§ 174.81
177.848

Safety Branch

Mr. Ed Mazzulla
Director, Office of Hazardous Materials Standards
Research and Special Programs Administration
U.S. Department of Transportation
400 Seventh Street, SW.
Washington, DC 20590-001

Dear Sir,

On behalf of the United States Department of Defense (DOD), we are requesting written clarification and interpretation of new federal regulatory rule in Title 49 CFR Parts 174.81(g)(3)(vi) and 177.848(g)(3)(vi). These parts provide instructional notes for using the Compatibility Table for Class 1 (Explosive) Materials and read as follows:

“(vi) ‘6’ means explosive articles in compatibility group G, other than fireworks and those requiring special stowage, may be stowed with articles of compatibility groups C, D and E, provided no explosive substances are carried in the same [rail car] vehicle.”

Since publication of this instructional note, we have received inquiries from DOD activities requesting clarification of the wording of this text. Therefore, we request official interpretation of this text so that we may provide accurate and consistent ordnance transportation policy guidance to DOD activities. Answers to the following questions would greatly assist us in this effort:

- (1) What is the meaning of the word “fireworks”? Does this only refer to items with UN Proper Shipping Name (PSN) of fireworks as listed in reference ©, Part 172.101? Or, does it include military items that do not contain the term “fireworks” in their PSN, but have similar effects? For instance, these items include PSNs such as ammunition illuminating, cartridges, signal, etc.
- (2) How is the terminology “special stowage” to be interpreted? This term is used in the International Maritime dangerous Goods Code (IMDG) for vessel stowage and not for shipments by public highway and rail. In the context of this instructional note, does “special stowage” also refer to shipments transported by public highway and rail?
- (3) How are “article” and “explosive substances” defined? Where is this cited in Title 49 CFR?

Additionally, please assist us in clarifying the placarding requirements for air and sea transport. Specifically, placarding requirements when ARTICLES of compatibility group G with ARTICLES of compatibility groups, C, D and E -- are shipped together. 172.522(b) states that when required (air and sea) * shall be replaced with the appropriate compatibility letter. Does this mean that multiple letters (G, C, D, and E) must be placed on the placard when shipped together?

- (1) Does this mean that all compatibility group letters must appear on each of the placards as required by section 172.504(g)?
- (2) Does this mean multiple placards must be used for each explosive "G" is shipped with "C, D, and E"?
- (3) Is also correct to assume that due to the change in the requirements, it is possible to have numerous placards?

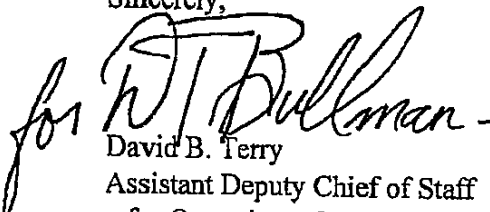
Section 172.504(f) states:

"When more than one division placard is required for Class 1 materials on a transport vehicle, rail car, freight container or unit load device, only the placard representing the lowest division number must be displayed"

Does this the same rule applicable for compatibility group letters on placards for aircraft and vessel? Further, if not can this letter serve as DOD's petition for use of one placard vs. several when "G" is shipped together with "C, D, and E"? *→ pd. for submarking or exception?*

This clarification request is submitted by Ms. Jameelah T. Shareef, Office of Assistant Deputy Chief of Staff for Operations; Force Protection Division; Headquarters, Military Traffic Management Command; 5611 Columbia Pike; Falls Church, VA 22041-5050.

Sincerely,

for 
David B. Terry
Assistant Deputy Chief of Staff
for Operations, Operations