



August 5, 2026

Assistant Administrator William Quade
Pipeline and Hazardous Materials Safety Administration
US Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Request for Letter of Interpretation; 49 CFR 177.835(g)

Dear Assistant Administrator Quade,

IME is requesting a Letter of Interpretation (LOI) concerning the above-captioned regulation. We have reviewed the regulation in response to several inquiries IME has received questioning whether, under 49 CFR 177.835(g) and Safety Library Publication 22 (SLP-22)¹, certain explosives products may be transported together on the same vehicle.

We have reached our own conclusion regarding the correct interpretation of the existing regulation, but we are seeking confirmation from PHMSA.

INTEREST OF IME

IME is a nonprofit association founded in 1913 to provide accurate information and comprehensive recommendations concerning the safety and security of commercial explosive materials. Our mission is to promote safety and the protection of employees, users, the public and the environment; and to encourage the adoption of uniform rules and regulations in the manufacture, transportation, storage, handling, use and disposal of explosive materials used in blasting and other essential operations.

IME represents U.S. manufacturers and distributors of commercial explosive materials and oxidizers as well as other companies that provide related services. Millions of metric tons of high explosives, blasting agents, and oxidizers are consumed annually in the U.S. Of this, IME member companies produce over 98 percent of the high explosives and a great majority of the blasting agents and oxidizers. These products are used in every state and are distributed worldwide.

Manufacturers of commercial explosives directly contribute \$7.5 billion annually to the U.S. economy and employ more than 15,000 workers. When supplier and induced economic

¹ SLP-22, *Recommendations for the Safe Transportation of Detonators in a Vehicle with Certain Other Explosive Materials*, (2019).

impacts are considered, the industry has a total economic impact of \$19.1 billion and affects 60,329 U.S. jobs. Commercial explosives are essential to energy production, communications, technology manufacturing, highway and building construction, the health care delivery system, agriculture, and the production of nearly all metals and mineral products. These industries rely on the timely and uninterrupted production and delivery of explosive materials critical to their own operations.

SLP-22 AND INTERPRETATION OF 49 CFR 177.835(g)

As alluded to above, IME has been asked whether it is permissible to transport 1.1D UN0081 (Blasting type A Packaged dynamite or blasting gelatin), 1.1D UN0241 (Type E Blasting Explosive – e.g., packaged emulsion), 1.4B UN0361 (NONEL Detonator assemblies, non-electric, for blasting), and/or 1.1B UN0360 (Detonator assemblies, non-electric for blasting), on the same delivery truck.²

The following analysis concerns SLP-22 and the interpretation of 49 CFR 177.835(g) as referenced in SLP-22.

SLP-22

SLP-22 includes a list of Class 1 materials that can be transported together in certain combinations on the same motor vehicle under the SLP.³ This list does not include 1.1B UN0360. However, applicability of the SLP is not strictly limited to materials in the list. Specifically, in the same section, the SLP provides that “applicable materials” also includes “[e]xplosive materials in other compatibility groups, as described in Table 1 . . . and 49 CFR 177.848.”⁴

49 CFR 177.848 and Table 1

49 CFR 177.848 includes the “Segregation Table for Hazardous Materials” at 177.848(d) and, relevant to this inquiry, the “Compatibility Table for Class 1 (Explosive) Materials” at 177.848(f). Under 177.848(f), explosive materials, “shall not be loaded, transported, or stored together, except as provided in this section and in accordance with the [Compatibility Table].”⁵

The Compatibility Table at 177.848(f) was abbreviated and simplified by IME for inclusion in SLP-22 to focus specifically on materials transported by the commercial explosives industry.

² The question does not concern multi-purpose bulk trucks (MBTs) covered by SLP-23.

³ SLP-22 at Specifications, Subsection A.1.

⁴ Id.

⁵ 49 CFR 177.848(f).

Table 1 is reproduced below.

Compatibility Group	A	B	C	D	E	G	S
A	-	No	No	No	No	No	No
B	No	-	No	No ⁴	No	No	Yes ^{4,5}
C	No	No	-	Yes	Yes	Yes ⁶	Yes ^{4,5}
D	No	No ⁴	Yes	-	Yes	Yes ⁶	Yes ^{4,5}
E	No	No	Yes	Yes	-	Yes ⁶	Yes ^{4,5}
G	No	No	Yes ⁶	Yes ⁶	Yes ⁶	-	Yes ^{4,5}
S	No	Yes	Yes ^{4,5}	Yes ^{4,5}	Yes ^{4,5}	Yes ^{4,5}	-

4 Allowed if SLP-22 or other DOT criteria at 49 CFR 177.835(g) are met.

In accordance with Table 1 (and consistent with 177.848(f)), explosives in compatibility group B cannot be transported on the same vehicle with materials in compatibility group D. However, footnote 4 in the Table provides an exception to this general prohibition, i.e., group B and group D materials may be transported together under two conditions; (i) if permitted by SLP-22, or (ii) if other DOT criteria at 49 CFR 177.835(g) are met.⁶

SLP-22 does not specifically allow the co-transport of 1.1B UN0360 and group D materials.⁷ Accordingly, 49 CFR 177.835(g) must be consulted to determine if 1.1B UN0360 can be transported in combination with any compatibility group D materials.

49 CFR 177.835(g)

Subsection (g) of section 177.835 consists of two operative sentences. The first applies to “detonator assembl[ies], and booster[s] with detonators,” and the second to “detonators.”⁸ The distinction is meaningful to the analysis. The first sentence reads as follows:

(g) No detonator assembly or booster with detonator may be transported on the same **motor vehicle** with any **Division 1.1, 1.2 or 1.3 material** (except other detonator assemblies, **boosters** with **detonators** or detonators), detonating cord **Division 1.4 material** or **Division 1.5 material**.⁹

As previously noted, 1.1B UN0360 is a detonator assembly. Accordingly, under this first sentence of section 177.835(g), UN0360 cannot be transported with any 1.1, 1.2, or 1.3 explosive materials unless those materials are “other detonator assemblies, boosters with detonators or detonators.”¹⁰ Considering the list of materials included in the questioners’ inquiry to IME, only 1.1D UN0361, a detonator assembly, is covered by this exception.¹¹ The other two materials, i.e., 1.1D UN0081 (Blasting type A Packaged dynamite or blasting gelatin), and 1.1D UN0241 (Type E Blasting

⁶ SLP-22 at Fn. 4. The Compatibility Table in 177.848(f) also includes a “footnote 4” directing users to 177.835(g).

⁷ In contrast, and by way of example, SLP-22 includes 1.4B UN0361 detonator assemblies in the Applicable Products list and in Table 2, the Generic Loading and Packaging Guide.

⁸ 49 CFR 177.835(g).

⁹ Id.

¹⁰ Id.

¹¹ As previously noted, UN0361 is also included in the “Applicable Products” list in SLP-22 at p. 2.

Explosive – e.g., packaged emulsion), do not fit the exception and therefore cannot be transported on the same vehicle with UN0360.

The second sentence of section 177.835(g) is similar to the first, but applies specifically to “detonators.” The sentence is followed by a subsection outlining certain qualifying criteria. These criteria are also applicable to “detonators” specifically. The second sentence and attendant proviso reads as follows:

No detonator may be transported on the same motor vehicle with any Division 1.1, 1.2 or 1.3 material (except other detonators, detonator assemblies or boosters with detonators), detonating cord Division 1.4 material or Division 1.5 material unless—

- (1) It is packed in a specification MC 201 (§ 178.318 of this subchapter) container; or
- (2) The package conforms with requirements prescribed in § 173.62 of this subchapter, and its use is restricted to instances when—
 - (i) There is no Division 1.1, 1.2, 1.3 or 1.5 material loaded on the motor vehicle; and
 - (ii) A separation of 61 cm (24 inches) is maintained between each package of detonators and each package of detonating cord; or
- (3) It is packed and loaded in accordance with a method approved by the Associate Administrator. One approved method requires that—
 - (i) The detonators are in packagings as prescribed in § 173.63 of this subchapter which in turn are loaded into suitable containers or separate compartments; and
 - (ii) That both the detonators and the container or compartment meet the requirements of the IME Standard 22 (IBR, see § 171.7 of this subchapter).¹²

Given its simplest reading, this second sentence is intended to apply solely to detonators and the circumstances under which they may be transported on the same vehicle with 1.1, 1.2. and 1.3 products. It is not intended to include and is therefore inapplicable to “detonator assemblies” such as UN0360.

Stated differently, the qualifications set out at 177.835(g)(1) – (3) allowing “detonators” to be co-transported with certain other explosive materials cannot be applied to UN0360 since UN0360 is classified as a detonator assembly, not a detonator.

CONCLUSION

In response to the queries posed to IME, UN0360 cannot be transported on the same vehicle with 1.1D UN0081 (Blasting type A Packaged dynamite or blasting gelatin) or 1.1D UN0241 (Type E Blasting Explosive – e.g., packaged emulsion) under SLP-22 or 49 CFR 177.835(g).

IME appreciates your consideration of this matter.

¹² 49 CFR 177.835(g)(1) – (3). Emphasis added.

A handwritten signature in black ink, appearing to read "Susan JP Flanagan". The signature is fluid and cursive, with a large loop at the end.

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