



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

MAY 5 2005

Ms. Amy Dean
1161 Alter Way
Broomfield, CO 80020

Ref. No. 05-0080

Dear Ms. Dean:

This is in response to your April 4, 2005 letter regarding the appropriate shipping description for various fertilizer blends under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask about the appropriate shipping descriptions for two fertilizer blends. The first blend consists of 81% ammonium nitrate, 0-2% talc or conditioning agent, and 19% mono ammonium phosphate. The second fertilizer blend consists of 66% ammonium nitrate, 19% mono ammonium phosphate, and 15% potash.

Section 173.22 specifies that it is the shipper's responsibility to properly class and describe a material in accordance with the HMR. This office does not perform that function. However, based on the information provided, it is our opinion that the first fertilizer blend specified should be described as "Ammonium nitrate based fertilizer, 5.1, UN2067" and the second fertilizer blend should be described as "Ammonium nitrate based fertilizer, 9, UN2071."

I hope this information is helpful.

Sincerely,

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



050080

172.101

Satterthwaite
§172.101
Applicability
05-0080

April 4, 2005

By fax 202-366-3012

Mr. Edward Mazzullo
Director, Office of Hazardous Materials Standards
U.S. DOT/RSPA (DHM-10)
400 7th Street, S.W.
Washington, DC 20590-0001

Re: Letter of Interpretation (172.101 HAZARDOUS MATERIALS TABLE)

Dear Mr. Mazzullo:

I have a client who blends and then transports (by truck) a fertilizer blend of 81% NH₄NO₃ (ammonium nitrate) with 0 to 2 percent talc or conditioning agent and 19% 11-52-0 (mono ammonium phosphate). They also blend and transport 66% NH₄NO₃, 19% 11-52-0 and 15% 0-0-60 (potash). They were told by the DOT that over 1000 pounds of ammonium nitrate requires a placard no matter if it is blended with another fertilizer. Other transporters (typically fertilizer suppliers) of blended ammonium nitrate indicate they don't placard any of their ammonium nitrate blends but can't provide me with any exemptions, etc. of why it is exempt.

I found a letter of interpretation from the USDOT RSPA (Ref. No. 02-2039) where they agree that a blend of 31.25% ammonium nitrate, 20.83% phosphate and 47.91% potash did not require a placard because it should be classified as Class 9, UN2071, III. According to the special provisions, this entry may only be used for uniform, ammonium nitrate-base fertilizer mixtures, containing nitrogen, phosphate or potash, meeting the following criteria: (1) Contains not more than 70% ammonium nitrate; and (2) Contains not more than 0.4% total combustible, organic material calculated as carbon or with not more than 45% ammonium nitrate and unrestricted combustible material. Fertilizers within these composition limits are only subject to the requirements of this subchapter when transported by aircraft or vessel, and are not subject to the requirements of this subchapter if shown by a trough test, as specified in the UN Manual of Tests and Criteria, Part III, Sub-section 38.2 (IBR, see §171.7 of this subchapter), not to be liable to self-sustaining decomposition.

The only other appropriate classification for ammonium nitrate based fertilizer appears to be a Class 5.1. The special provision for Class 5.1 is as follows: This description may be

used only for uniform mixtures of fertilizers containing ammonium nitrate as the main ingredient within the following composition limits: a. Not less than 90% ammonium nitrate with not more than 0.2% total combustible, organic material calculated as carbon, and with added matter, if any, that is inorganic and inert when in contact with ammonium nitrate; or b. Less than 90% but more than 70% ammonium nitrate with other inorganic materials, or more than 80% but less than 90% ammonium nitrate mixed with calcium carbonate and/or dolomite, and not more than 0.4% total combustible, organic material calculated as carbon; or c. Ammonium nitrate-based fertilizers containing mixtures of ammonium nitrate and ammonium sulphate with more than 45% but less than 70% ammonium nitrate, and not more than 0.4% total combustible, organic material calculated as carbon such that the sum of the percentage of compositions of ammonium nitrate and ammonium sulphate exceeds 70%.

Is it basically correct that the special provisions for a Class 9 pertain only to blends with less than 70% ammonium nitrate and blends greater than 70% would have a Class 5.1 placard? So the 66% blend would fall under Class 9 and the 81% blend would have to be a Class 5.1?

Thank you in advance for your assistance.

Sincerely,

A handwritten signature in cursive script that reads "Amy Dean".

Amy Dean
1161 Alter Way
Broomfield, CO 80020