

# UN/SCETDG/16/INF.15

## COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Sub-Committee of Experts on the  
Transport of Dangerous Goods  
(Geneva, 5-16 July 1999,  
agenda item 5 (a) (ii))

### MISCELLANEOUS DRAFT AMENDMENTS TO THE MODEL REGULATIONS

#### Listing and classification

#### Review of Ammonium Nitrate Entries Comments on EFMA's Document ST/SG/AC.10/C.3/1999/40

#### Transmitted by the Experts from the United States of America

As the Sub-Committee prepares to discuss the streamlining of shipping descriptions and classification procedures for ammonium nitrate fertilizers during the 1999-2000 sessions and in response to comments provided by EFMA, the expert from the U.S. offers the following thoughts and recommendations related to this task:

1. The entry UN 0223 Ammonium nitrate fertilizer, assigned to division 1.1D should be deleted for the following reasons:

The descriptive text for this entry creates problems. Any mixture of ammonium nitrate and combustible substances meeting the criteria of Class 1 (explosives) should be classified as in Class 1. The assignment of the UN number should not be based on a comparison of explosive properties with ammonium nitrate mixtures assigned to UN 0222. UN 0222 or appropriate generic entries should be used for mixtures of ammonium nitrate that meet the criteria of Class 1 irrespective of whether the substance is intended to be used as a fertilizer or for other purposes.

2. To safeguard that ammonium nitrate fertilizers which have explosive properties are classified in Class 1, a new provision shall be added to the special provision assigned to UN 1942. (See the proposed text provided in paragraph 5.2 below.)
3. The need to distinguish between ammonium nitrate that is used as a fertilizer and ammonium nitrate that is used for other purposes through the shipping name needs to be considered:

The word "fertilizer" relates to the use of the substance and is not of value from a standpoint of emergency response. The use of the word fertilizer in each of the division 5.1 entries precludes ammonium nitrate mixtures meeting the criteria for Division 5.1 from being transported under the available entries and forces these mixtures to be transported under an NOS entry. It is recognized that commercially there may be some benefit to allowing the word fertilizer to be used in the shipping name. This could be accomplished by allowing an alternative proper shipping name or with a special provision authorizing the use of the word "fertilizer" to be included in the shipping name.

4. There is no apparent need to maintain five entries for ammonium nitrate fertilizer in Division 5.1 and a separate entry for ammonium nitrate that is not used as a fertilizer.

There are two general categories of fertilizers - substantially pure ammonium nitrate and ammonium nitrate mixtures. Existing entries of ammonium nitrate fertilizers establish compositional boundaries for different formulations. Emergency response procedures for each of these entries is the same. UN 1942, 2067, 2068, 2069, 2070, 2072 could be grouped together into two entries.

Based on experience in testing of higher concentration ammonium nitrate mixtures, the expert from the United States does not believe ammonium nitrate compositions containing less than 70% ammonium nitrate meet the criteria for Division 5.1.

Ammonium nitrate formulations not specifically named should be classified according to the classification procedures and if appropriate transported under a generic shipping description.

5. Specific proposals based on the above comments are:

- 5.1 Revise UN 1942 to allow the use of the word fertilizer in the shipping name as follows:

“AMMONIUM NITRATE with not less than 90% ammonium nitrate and not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance.”

Add a new Special Provision XXX to read:

“XXX The word “Fertilizer” may be used as a part of the proper shipping name for a product marketed as a fertilizer.”

- 5.2 To preclude ammonium nitrate formulations meeting explosives criteria from being transported as Division 5.1 substances, add a new Special provision YYY to UN 1942 to read:

“YYY This entry may only be used for ammonium nitrate that does not exhibit explosive properties when tested according to Test Series 1 and 2 of Class 1.”

- 5.3 Delete UN 2067, 2068, 2069, 2070 and 2072.

- 5.4 Create a new entry of UN XXXX (with Div. 5.1 and Packing Group III classification) to read:

“Ammonium Nitrate Mixed Fertilizer with more than 70% ammonium nitrate but not more than 90% ammonium nitrate, with substances not meeting the criteria of Division 5.1, and not more than 0.4% of added combustible material”

- 5.5 Revise the beginning of SP 193 to read:

“Ammonium nitrate formulations within these composition limits are only subject to these Regulations when transported by air or sea and are not subject to these Regulations if.....”

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