

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods.

(Bonn, 13-17 October 2003)

Harmonization with the United Nations Recommendations on the Transport of Dangerous Goods-Model Regulation

Introduction of RID/ADR tank requirements for UN 3375 Ammonium Nitrate Emulsions

Transmitted by the Government of Norway

SUMMARY

Executive Summary:	Document TRANS/WP.15/AC.1/2003/57 from Norway introducing provisions for transport of UN 3375 Ammonium Nitrate Emulsion, Suspension or Gel (ANE) in RID/ADR tanks was discussed at September session. The Joint Meeting, although largely agreeing to the introduction of such provisions, wanted to have the provisions discussed in the Tank Working Group prior to taking any final decision.
Action to be taken:	Introduce tank provisions for ANE's in the relevant parts of RID/ADR.
Related documents:	TRANS/WP.15/AC.1/2003/57

1. Introduction

Document TRANS/WP.15/AC.1/2003/57 from Norway introducing provisions for transport of UN 3375 Ammonium Nitrate Emulsion, Suspension or Gel (ANE) in RID/ADR tanks was discussed at the 2003 September session of the Joint Meeting. The Joint Meeting, although largely agreeing to the introduction of such provisions, wanted to have the provisions discussed in the Tank Working Group prior to taking any final decision. The proposals in this document is adjusted to take into consideration the comments made by the Joint Meeting in its discussions in September.

2. Proposal

To introduce into RID/ADR provisions for transport of UN 3375 ANE in RID/ADR tanks, Norway proposes the following changes to Annex A and Annex B of RID/ADR:

1. In Chapter 3.2, Table A, for the entries for UN 3375:

in column (12), insert “LGAV(+)” for the liquid entry and “SGAV(+)” for the solid entry;
in column (13), insert “TE xy” “TU xz”;
in column (14), Insert “AT”;
in column (20), insert “50”.

3. In Chapter 4.3;

In 4.3.4.1.3 (d), add:

“UN No. 3375 ammonium nitrate emulsion, suspension or gel, liquid: code LGAV(+);
UN No. 3375 ammonium nitrate emulsion, suspension or gel, solid: code SGAV(+)”

In 4.3.5, add new “TU xz”:

“**TU xz** The suitability of the substance for carriage in tanks shall be demonstrated. One method to evaluate this suitability is test 8(d) in Test Series 8 (see *Manual of Tests and Criteria*, Part 1, sub-section 18.7)

Substances shall not be allowed to remain in the tank for any period that could result in caking. Appropriate measures shall be taken to avoid accumulation and packing of substances in the tank (e.g. cleaning etc.)”

4. In Chapter 6.8;

In 6.8.4 (b), add new TE xy:

“**TE xy** (a) To avoid unnecessary confinement, each portable tank constructed of metal shall be fitted with a pressure-relief device that may be of the reclosing spring loaded type, a frangible disc or a fusible element. The set to discharge or burst pressure, as applicable, shall not be greater than 2.65 bar for portable tanks with minimum test pressures greater than 4 bar;

(b) The shut-off devices of tanks shall be so designed as to preclude obstruction of the devices by solidified emulsion during carriage.

(b) Only inorganic non-combustible materials shall be used for any thermal insulation of the tank.”

3. Justification

As mentioned in the introduction, the contents of this proposal is based on the new provisions of the UNRTDG and the existing Multilateral agreement M130. The proposal deviates from M130 in, that instead of SGAN / LGAN, the tanks specified is LGAV(+) / SGAV(+).

The reason for this is that the main risk involved in transporting these substances is associated with heavy confinement under fire engulfment. This is in our opinion best controlled by using the “weakest” tank possible.

The introduction of the new “TUxz” and “TExy” is based on the need for introducing the contents of TP 32 for Portable tanks into the RID/ADR tank regime.

4. Safety implications

None. This will bring RID/ADR in line with the UN Recommendations, and reflect, as well as improve, the present situation for transport of these substances in Europe today.

5. Feasibility

The expert from Norway sees no extra costs or practical implications with the proposed change. The effect will rather be to the contrary, since the proposed new text reflects the actual situation for the transport of these articles in most RID/ADR countries.

6. Enforceability

The expert from Norway sees no problems in enforceability arising from the proposal.
