Questions about the explanation of ADN provisions regarding Transport of Palm kernel expeller UN 1386

Transmitted by the European Barge Union (EBU), ERSTU (European River Sea Transport Union) and the European Skipper Organisation (ESO) in cooperation with the Loading Industry Associations

Statement of facts

1. On an annual basis, in the sea ports of the ADN member states, over 1 M. tons of Palm Kernel Expeller („PKE“) are transferred from sea ships into inland barges and further transported over the inland waterways to inland destinations.

2. PKE is classified as dangerous good, during the seatransport. When raising the question whether under the ADN, PKE must be considered as a dangerous good, uncertainties have arised.

3. PKE are live stock feeds, that fall under the generic entry „Seed cake“. Under the name Seed cake comparable products are also included, which come from other vegetation, such as rapeseed or sun flowers.

4. Seed cakes are classified under Class 4.2 and depending on the Oil content categorised under UN 1386 (with more than 1,5 % Oil) or under UN 2217 (with a maximum of 1,5% Oil). Special provision 142, which is applicable to UN 2217, excludes solvent extracted soya bean meal, from the dangerous goods provisions.

5. Other seed cakes can be excluded from the dangerous goods provisions, if an N-4 test proves that the substance does not meet the criteria of Class 4.2

6. The following questions, test results and conclusions, only apply for PKE and not for other products.

Question 1

The loading and carrying industries share the opinion that Seed cake with characteristics out of the range of the specification (f.e. with > 11% moisture) should be considered as not falling under the scope of the ADN dangerous goods provisions.
Self heating can only take place in case of the combination of Oil and Moisture, together being >18.4 %, which has been stipulated by recent N-4 test results (the IMSBC-code indicates even >20%).

How should Seed cakes be considered in cases where the substance exceeds the range limits; more than 1,5% Oil and more than 11% moisture?

**Question 2**

The ADN prescribes in ADN 2.2.42.1.7 that it may also be determined by a N-4-test whether the nature of a substance, mentioned by name, is such, that the substance is not subject to the provisions for this Class.

In certain situations, N-4-tests have been performed on PKE with more than 1,5% Oil and maximum 11% moisture. In none of the tested substances, the in the test procedure determined maximum temperature has been reached. The loading and carrying industries conclude from these test results, that at least for the tested cases the provisions of the ADN were not applicable.

**Question 3**

In relation to the discussion about these facts, different opinions have been noticed about the meaning of the ADN article 2.2.42.1.7.

7. One opinion is the statement, that the proof whether a substance falls under the ADN provision or not, has to be performed for each case. This would mean that for any specific situation the test should take place. This would mean that for each sea vessel cargo or for each barge cargo such a proof has to be presented.

8. The loading and carrying industries fully disagree with this opinion. From the perspective of time and costs, such requirements would influence these transports in a very negative and disproportional way.

9. Instead of this perspective, the loading and carrying industries assume the following:
   - The loading industry has been testing several PKE cargoes by performing the N-4-test. In none of the tests, the prescribed maximum temperature has been reached.
   - The loading industry concludes from that perspective, that any other cargo samples of PKE, of which the oil and moisture content is lower than that of the N-4-tested cargoes, will not lead to different results. This presumes that Oil and Moisture % are determined for every cargo. Performing a new N-4-test however, is considered as unnessecary as long as the limits are below the tested values, where it already has been proven by the performed N-4-tests, that PKE is not a dangerous substance.
   - From this perspective the loading industry relies on the fact that PKE, as long as the values of oil and moisture are below the tested maximum values, the ADN provisions are not applicable.
   - It is the responsibility of the loading industry; the consignor according to ADN 1.4.2.1, to respect and to assure these limits of each cargo.

10. The UNECE ADN Safety Committee is asked for a position regarding the above mentioned issue.

11. Extensive Information about Palmkernexpeller has been provided by the inland waterway barge associations to the UNECE ADN Safety Committee in the 31st Session (INF.28 of the 31st session).