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ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

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

Geneva, 23-26 March 2009
Item 4 of the provisional agenda

INTERPRETATION OF RID/ADR/ADN

Fuels in machinery and equipment

Transmitted by the Government of the United Kingdom

Background

1. RID and ADR (1.1.3.1(b)) exempts from their provisions "the carriage of machinery or equipment not specified in this Annex and which happen to contain dangerous goods in their internal or operational equipment, provided that measures have been taken to prevent any leakage of contents in normal conditions of carriage.".

2. It has become increasingly apparent that there are many different types of machinery and equipment which are being routinely transported, sometimes with extremely large quantities of fuel up to 3,000 litres in some cases. The most common type of equipment seen is mobile electricity generators, often used at outdoor sporting and entertainment events where there is no local source of supply. They are also used in emergencies when the electrical mains circuits (grids) break down and communities are left without an electricity supply. More recently mobile central heating and air conditioning units are being manufactured for use under similar circumstances to mobile generators. There may be other examples of such machinery or equipment that competent authorities are aware of.

3. All of these units depend on hydrocarbon fuels for their operation and can be found in transport with substantial amounts of fuel in their storage tanks. This is because the equipment can be used immediately upon delivery, rather than sourcing fuel locally. On return, of course, the equipment will still contain a quantity of unused fuel.

4. The United Kingdom does not believe that paragraph 1.1.3.1 (b) in RID/ADR was intended to exempt such large quantities of dangerous goods from all of the provisions of RID/ADR. Various construction requirements outside of RID/ADR provisions apply to such equipment and the United Kingdom believes that these will be sufficient to ensure prevention of any leakage of

contents in normal conditions of carriage. However we believe that some limited provisions should be applied to these units to indicate that there are dangerous goods contained in them. As can be seen from the photographs in Annex A, at first glance two of these items of equipment look like standard freight containers and there is nothing to immediately indicate that several thousand litres of fuel could be contained therein. It would seem appropriate that some form of hazard communication should be applied in order that emergency responders can react appropriately in the event of an incident involving such equipment.

5. One approach might be to amend 1.1.3.1"(b) to read:

"The carriage of machinery or equipment not specified in this Annex and which happen to contain dangerous goods in their internal or operational equipment, ***excluding liquid fuels (see 1.1.3.3)*** provided that measures have been taken to prevent any leakage of contents in normal conditions of carriage;".

A new paragraph 1.1.3.3(c). might then be added to read:

"1.1.3.1 (c) The fuel contained in the tanks of machinery or equipment which are carried as a load subject to the following conditions. Any valves or openings between the machinery or equipment and the tank within or attached to such machinery or equipment shall be closed during carriage. The machinery or equipment shall be loaded in an orientation to prevent inadvertent leakage of fuel and secured by suitable means capable of restraining the machinery or equipment in a manner that will prevent any movement during carriage which would change the orientation or cause it to be damaged. Where the fuel tank has a capacity greater than [*500L*] [*1000L*] [*1500L*] it shall be [*labelled*] [*placarded*] on [*two opposite sides*] [*four sides*] in accordance with [*5.2.1.4*] [*5.3.1.2*]. Vehicles shall be fitted with a fire extinguisher in accordance with 8.1.4.1(a) and the personnel shall have undertaken training in accordance with Chapter 1.3."

6. On a related matter, the attention of the United Kingdom competent authority has recently been drawn to an item of equipment as illustrated in Annex B. In this case a cylindrical receptacle containing 1000 litres of liquid nitrogen has been fitted to the chassis of a road vehicle. Connecting pipe work allows the liquid nitrogen through to a nozzle system within the load compartment of the vehicle in order to cool the (non-dangerous) cargo. The liquid nitrogen would thus appear to be outside the scope of ADR. However, given the quantity carried, it is questionable as to whether this too is the intent of the existing exemptions. It may be appropriate for the Joint Meeting to consult UNECE WP.29 to ask what provision is made in regard to the fitting of such equipment to road vehicles and determine whether hazard communication is appropriately addressed.

Proposal

7. The Joint Meeting is thus asked to consider these issues and determine whether such carriage should be subject to at least some of the provisions of RID/ADR. However, it is quite possible that such equipment could be

transported by ferry and that, therefore, such transport operations should be addressed in the wider context of multi-modal transport determined by the UN Sub-Committee of Experts on the Transport of Dangerous Goods. It is also possible that such equipment might be transported by air. It is thus the intention of the United Kingdom to submit a similar discussion paper to that body. Other competent authorities are invited to work with the representative of the United Kingdom to develop appropriate proposals either for the next session of the Joint Meeting or for the UNSCETDG.

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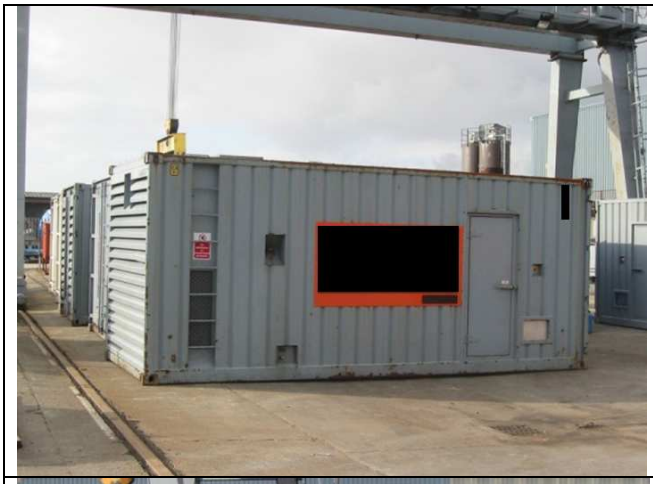
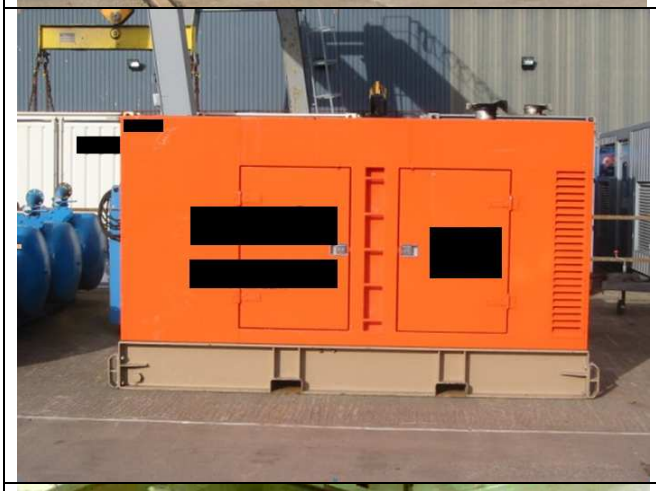
Annex A
Examples of machinery and equipment





Annex B

Liquid nitrogen equipment