

# **Guidance**

# **In-service Inspection Procedures**

Application of the Pressure System Safety Regulations in relation to Intermediate Bulk Containers (IBC)

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#### 1. SCOPE

There are situations where intermediate Bulk Containers (IBC) as defined in Chapter 6.5 of ADR can be connected to a pressure system to discharge the contents on site at a pressure greater than 0.5 barg, and hence comes under PSSR.



#### 2. Situation

Exception under Pressure Systems Safety Regulations 2000 (PSSR)

HSE ACOP L122 defines "relevant fluid" as -

- (b) any fluid or mixture of fluids which is at a pressure greater than 0.5 bar above atmospheric pressure, and which fluid or mixture of fluids is-
- (i) a gas, or
- (ii) a liquid which would have a vapor pressure greater than 0.5 bar above atmospheric pressure when in equilibrium with its vapor at either the actual temperature of the liquid or 17.5 degrees Celsius;

Schedule 1 Part 1 of PSSR includes Pressure systems excepted from all Regulations:

Exception 9: A tank to which the Carriage of Dangerous Goods By Rail Regulations 1996 or the Carriage of Dangerous Goods by Road Regulations 1996 apply.



#### (2. Situation Continued)

This is expanded upon in Guidance within HSE ACOP L122:

198 A road tanker or tank container is exempt from the provisions of these Regulations while the Carriage of Dangerous Goods by Road Regulations 1996\* apply. This should prevent overlapping requirements. However, if the tank or tank container ceases to be subject to those Regulations, PSSR will apply when a relevant fluid is carried. But examinations of vessels carried out under the Carriage of Dangerous Goods by Road Regulations 1996\* will be acceptable as providing compliance with the relevant requirements in PSSR (see also paragraph 214).

199 It should be noted that certain pressurised tankers containing non-hazardous materials which are not subject to the Carriage of Dangerous Goods by Road Regulations 1996\* will be mobile systems under PSSR and must be examined accordingly.

There has always been an understanding that IBCs have to be discharged at a pressure under 0.5barg otherwise they would be subject to PSSR (as it is then classed within the definition of relevant fluid). This practice becomes superfluous in the light of the exception 9 (paragraph 198). It clearly advises that examination under CDG will be acceptable, as it would provide compliance with PSSR.

Any container carrying dangerous goods will be marked in accordance with the UN packaging marking which can be identified by the symbol.



This may initially be identified in part by the United Nations Packaging symbol shown above. Full details of the marking requirements for IBC's can be found in Section 6.5.2 of ADR. This is available from the UNECE (United Nations Economic Commission for Europe) website <u>Dangerous Goods Publications | UNECE</u>

#### 3. Guidance

When it is unambiguous that the risks of failure are covered under the ADR/CDG inspection regime and formal examination are carried out under these regulations there is no value in also creating a WSE and carrying out an examination under PSSR