Introduction

1. The United Kingdom welcomes the progress that has been made to develop alternative methods, for the periodic inspection of refillable pressure receptacles since the September 2016 Joint Meeting. However, in our opinion more work is needed on these proposals.

2. The United Kingdom’s position is to:

   (a) Support the use of sample testing of cylinders but only in very restricted and closely controlled circumstances. Sample testing must be supported by the maintenance of a database giving the history of every cylinder. The data shall be collected automatically by an electronic data handler such as provided by electronic tagging or bar coding such as that on over-moulded cylinders. There must also be a system in place to inspect a sample number of cylinders to destruction with appropriate third-party surveillance.

   (b) Strongly oppose the extension of sampling to other current cylinders. There is insufficient evidence to support the extension, and the United Kingdom believes that it risks reducing the safety margins that the current testing regime provides and certainly takes the industry into a form of risk management that is not widely understood. United Kingdom industry supports the United Kingdom position.

Proposals 1 and 2

3. The United Kingdom remains concerned that these proposals are still too general and could be open to abuse. Particularly the potential for this to be extended to all cylinders. There are still a number of unanswered questions, that in our view need to be answered before consideration is given to introducing general provisions:

   (a) 6.2.3.5.3.2.1 references an unidentified or non-existent standard. A European standard still needs to be developed, published and assessed for reference in RID/ADR. We cannot proceed until this is remedied.
(b) 6.2.3.5.3.2.1 is not clear about how the consequences shall be determined and how will they be taken into consideration, if there is an in-service failure of the pressure receptacle design type.

(c) Paragraph (c) of 6.2.3.5.3.2.3 of proposal 2 highlights how difficult it is to define population groups of cylinders. Such an approach is necessary, because what the cylinders have been used for and how well they have been looked after is key to defining a population group.

(d) Paragraph (d) of 6.2.3.5.3.2.3 of proposal 2 highlights the complexity of traceability. The process set out is in our opinion open to abuse. In our opinion the proposed solution contained within proposal 3, to include an electronic device to record the data is a more secure approach.

(e) Paragraphs (e) to (g) of 6.2.3.5.3.2.3 of proposal 2 are more encouraging, by setting out what you have to do. There is however an absence of guidance of how to do it.

(f) Paragraph (i) of 6.2.3.5.3.2.3 of proposal 2 is of concern. Notably, that if a sample fails, then the population from which the samples are taken should be removed from service. Whereas the paper argues that defined parts of the population might be given a reprieve. We are concerned that this represents a likely further dilution of safety.

Proposal 3

4. The United Kingdom cautiously accepts the proposals contained for over-moulded cylinders. Albeit with the following points for consideration:

(a) Arguably the quoted standards should be dated.

(b) Within proposed tables 1 and 2, it is not stated how the sub-population groups are decided. Are these the groupings described in (c) as “within the above defined basic population, over-moulded cylinders can be separated into population groups dedicated to one owner, if over-moulded cylinders from the same basic population have been purchased by different entities”? Perhaps it would read better if it read population sub-groups.

(c) We accept that all activities attract some risk, but by adopting this approach we are planning to allow a certain level of risk. We cannot think of anywhere else in our regime where such a calculated approach is taken. As we interpret it, the safety level assessment of the alternative method, is suggesting that we need to be 95% confident that fewer than 1 in a million cylinders will get through the net.

Is our understanding of this concept correct? If so, is this an agreeable margin of risk to the members of the Joint Meeting?

Proposed way forward

5. The United Kingdom proposes:

(a) That the text for over-moulded cylinders is further developed so that it is ready for adoption to RID/ADR. We understand that there is data from their use to support this proposed testing method for these cylinders. However, given that there is now viable text for the sampling of over-moulded cylinders, we believe that serious consideration should be given to running a pilot scheme based on this before it is formerly adopted into RID/ADR.
(b) We would strongly recommend that sample testing is not extended to other types of cylinders without full justification and evidence. As part of this it will be important to collect the necessary data on the efficacy of the sample method on over-moulded cylinders.