

## Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

3 December 2020

### Sub-Committee of Experts on the Transport of Dangerous Goods

#### Fifty-seventh session

Geneva, 30 November-8 December 2020

Item 6 (c) of the provisional agenda

#### Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods: fibre-reinforced plastics (FRP) portable tanks

### Draft statement

#### Transmitted by the Australian Explosives Industry and Safety Group Inc. (AEISG)

Dear Mr Chairman and members of the Sub-committee of Experts.

AEISG are active participants of the FRP working group. This message is very important. There are a number of key points on FRP portable tanks and the proposed text for the plenary to be aware of.

Overall, AEISG supports the proposed chapter on FRP portable tanks, and believes that it is ready for inclusion in the orange book. This chapter will result in safe tanks, with design principles and testing shaped by world's best practice, proven over many years.

The FRP working group has considered and responded to the points raised by the UK and Netherlands in a number of our regular meetings. We have examined the text, made modification and additions where deemed necessary, and concluded the proposed FRP portable tank chapter is satisfactory in the presented form.

AEISG strongly supports adoption of the proposed chapter on FRP portable tanks for the following reasons:

- **Point 1: Technical expertise.** The FRP working group members are world experts in composite materials and dangerous goods transport;
- **Point 2: Practical experience.** There is about 40 years' service experience with FRP tanks in Europe, United States (through Special Permits) and Australia, and other locations worldwide. The proposed chapter represents the culmination of all that experience. Like many technologies FRP has evolved significantly over time, growing in sophistication and safety;
- **Point 3: High factors of safety.** We are not talking about domestic road tankers. FRP portable tanks have very high factors of safety, greatly exceeding those prescribed for steel portable tanks, and these factor of safety are set out in the proposed chapter. The FRP Portable Tanks will be contained in a protective metallic frame, in a similar manner to steel portable tanks, thereby providing a marked increase in safety in roll over and impact scenarios compared to domestic road tankers;
- **Point 4: Safer regular transport operations.** FRP tanks are highly suited to transport of certain chemicals, owing to their broad chemical resistance. With aggressive corrosive chemicals, FRP tanks are safer than lined steel because FRP is intrinsically resistant to these chemicals. These safer tank solutions should be available for the market to use globally.
- **Point 5: World's best practice.** The proposed text represents worldwide best practice, assembled by the world experts in composites and transport.

And one final thought for consideration: ADR Chapter 6.9 approved FRP tank containers, which can be almost identical in form and function to the proposed FRP portable tanks within the UN Model Regulations, are currently in operation throughout the EU, and can be used in all other jurisdictions that accept the ADR convention. Similarly these tank containers are used in regions such as North America and Australia.

To summarise, FRP tank containers:

- Are currently in service in Europe and the USA;
- They are not new;
- FRP tanks have been around for a long time.

We have an opportunity now to create a globally harmonised standard for the construction of FRP Portable Tanks according to world's best practice.

Opposing or deferring the adoption of this standard, will result in the continued manufacture and usage of FRP tank containers without a harmonised standard, and continued use of differing regional standards, rather than world's best practice.

For these reasons, we support adoption of the proposed chapter on FRP portable tanks and its inclusion in the orange book.

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