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Dangerous Goods Tank Design Approval Application - AS 2809.2:2023 Compliance Report

#### AS 2809.2:2023 – Requirements for vehicles transporting flammable liquids

You must explain how the tank vehicle will comply with each of the clauses in the standard listed below. It is not sufficient to state that the vehicle complies, you must explain how the vehicle complies with the relevant requirements contained in the standard, with reference to evidence where necessary. This ensures the reviewer can confirm whether the vehicle is compliant.

If there are any items that are not compliant, contact the EPA to discuss these non-compliances before submitting the application. While in some circumstances, the EPA may approve a tank vehicle that does not comply with a particular requirement, you will need to explain:

* why the variation from the standard is necessary?
* what alternative criteria the variation should be assessed against?
* why the design does not result in greater risk than one that complies with the requirement?

This document must be submitted along with an application for a dangerous goods tank design and the other relevant compliance reports.

| Clause | Comment/Explanation | Reference(specs / drawings) | Compliant(Y, N, N/A) |  |
| --- | --- | --- | --- | --- |
| 1.6.1 | Spillage control  |  |  |  |  |
| 1.6.2 | Propulsion / engine exhaust |  |  |  |  |
| 1.6.3 | Combustion cabin heaters |  |  |  |  |
| 1.6.4 | Hazardous area classification |  |  |  |  |
| 2.1.1 | Materials – Standards |  |  |  |  |
| 2.1.2 | Material grades |  |  |  |  |
| 2.1.3 | Material compatibility |  |  |  |  |
| 2.2.1  | Tank type (refer AS2809.1)  |  |  |  |  |
| 2.2.2.1 | Design criteria – General |  |  |  |  |
| 2.2.2.2 | Design criteria – Loads |  |  |  |  |
| 2.2.2.3 | Design criteria – Pressure |  |  |  |  |
| 2.2.3.1 | Design methods – General |  |  |  |  |
| 2.2.3.2 | Design methods – Calculation |  |  |  |  |
| 2.2.3.3 | Design Methods - FEA |  |  |  |  |
| 2.2.4 | Corrosion |  |  |  |  |
| 2.2.5 | Distribution of loads |  |  |  |  |
| 2.2.6 | Small compartment tanks |  |  |  |  |
| 2.2.7.1 | Large compartment tanksShell, heads, bulkhead and baffles |  |  |  |  |
| 2.2.7.2 | Large compartment tanksSide plates |  |  |  |  |
| 2.2.7.3 | Large compartment tanksMinimum allowable side pate thickness calculation  |  |  |  |  |
| TABLE 2.2.12(A) [[1]](#footnote-1)NOTE | Rated capacity per metre |  |  |  |  |
| Maximum shell radius |  |  |  |  |
| Unreinforced length of shell & material |  |  |  |  |
| Compliance with minimum thickness |  |  |  |  |
| 2.2.8 | Baffles |  |  |  |  |
| 2.2.9 | Access through baffles |  |  |  |  |
| 2.2.10 | Capacity centre |  |  |  |  |
| 2.2.11 | Stiffening of heads, bulkheads, etc |  |  |  |  |
| 2.2.12 | Shell reinforcement |  |  |  |  |
| 2.2.13 | Separation of liquids |  |  |  |  |
| 2.2.14 | Enclosed air spaces |  |  |  |  |
| 2.2.15 | Component attachment |  |  |  |  |
| 2.2.16 | Roll-over protection  |  |  |  |  |
| 2.2.17 | Welding |  |  |  |  |
| 2.2.18 | Weld conformance |  |  |  |  |
| 2.3.1 | Openings, etc. ­– General |  |  |  |  |
| 2.3.2 | Compartment Openings – Access  |  |  |  |  |
| 2.3.3.1 | Valves – General |  |  |  |  |
| 2.3.3.2 | Valves – Internal shut-off valve |  |  |  |  |
| 2.3.3.3 | Valves – External shut-off valve |  |  |  |  |
| 2.3.4 | Vents |  |  |  |  |
| 2.3.5 | Normal venting |  |  |  |  |
| 2.3.6 | Emergency venting |  |  |  |  |
| 2.3.7 | Loading protection |  |  |  |  |
| 2.4.1 | Filling tube |  |  |  |  |
| 2.4.2 | Dip stick |  |  |  |  |
| 2.5.1 | Pipework, etc. – Suitability |  |  |  |  |
| 2.5.2 | Pipework, etc. – Strength of piping |  |  |  |  |
| 2.5.3 | Pipework, etc. – Movement |  |  |  |  |
| 2.5.4 | Pipework, etc. – Hoses |  |  |  |  |
| 2.6 | Electrical bonding |  |  |  |  |
| 2.7 | Earthing point |  |  |  |  |
| 2.8.1 | Pressure testing – Tanks |  |  |  |  |
| 2.8.2 | Pressure testing – Piping |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Vehicle description: | enter text. | Manufacturer: | enter text. |
| Capacity: | enter text. | Number of compartments: | enter text. |
| I declare the information I have supplied in this application is not false or misleading and is an accurate assessment of the design against the standard. |
| Name | enter text. |
| Position | enter text. |
| Email | enter text. |
| Signature |  | Date | enter text. |

1. NOTE TABLE 2.2.12(A): in order to ascertain which shell, head and baffle thickness requirements should apply to this design, the following information is required: tank type (small or large compartment) rated capacity per metre of tank length, maximum shell radius and maximum unreinforced length of shell. [↑](#footnote-ref-1)