



Hydrogen Tube Trailer Guideline

Introduction

This Plan Review Checklist comprises the subsequent sections, designed to facilitate a comprehensive understanding and compliance with regulations by both TSSA and applicants, with the paramount aim of ensuring public safety.

Checklist instructions

The Checklist contains a summary of the key requirements to obtain a license to operate and handle compressed gas tube trailer in a Checklist format. The Checklist is intended to demonstrate basic site-specific compliance. The TSSA may choose to include additional requirements adhering to the public safety in which the tube trailer would be located.

No.	Content	Recommendation	Remark
1	Documentation		
1.1	Vehicle Certificate of Registration		e.g. VIN number, make, model, year, plate number
1.2	Authorization for transporting of tubes	TSSA may consider cylinders with equivalency of safety approvals from Transport Canada and/or US department of transportation	e.g. Transport Canada equivalent certificate to CSA B339 or B340
1.4	Manufacturer's documentation	Operational manuals and emergency response plan.	The trailer manufacturer is responsible to provide documentations and certificates
2	Manuals, Diagrams, and Instruction		
2.1	Tube Trailer operation manual	To verify that the operation of the trailer is in line with the requirements specified in the operation instructions for loading and unloading compressed gas	Copy of this has to be on site
2.3	Tube Trailer maintenance manual	Proper procedures and recommendation on maintenance intervals, qualification of personnel and records	Copy of this has to be on site
2.4	PI&D, PFD diagrams	Drawing shall be available at all times	Copy of this has to be on site
	Emergency response plan	Approved emergency response plan and training manual clearly defining steps to respond to an emergency related to a release of gas during loading/ unloading at user location	Copy of this has to be on site
	Trailer annual inspection	Valid trailer annual inspection document showing that the trailer has been inspected and any repairs are recorded	Copy of this has to be on site
3	On-site test/inspection		
3.1	Markings	Container markings and markings securely affixed to a vehicle or frame, where applicable, shall not be altered, removed, or added as per CSA B339/B340	Verified during inspection
3.2	Test Tag and certificate	Valid Test tag should be visible and include markings for test date, retest date, retest pressure and serial number	Verified during inspection
3.4	Breaking system	Electric braking system or air brakes should be in working conditions when trailer is at user location.	Verified during inspection
3.6	Operator logbook	Logbook should identify mechanisms to record and date loading and unloading of hydrogen	Verified during inspection
	Gas transfer hose	Flex hose connected to trailer load/unload coupling should be certified to CSA/ HGV 4.2 for compressed hydrogen and leak tested during inspection	Verified during inspection
	Grounding and bonding	trailers shall be electrically bonded to the system before discharging or filling with compressed gas. Appropriate grounding for trailers shall be available.	Verified during inspection

Note: Any modification performed on the tube trailer other than the original authorization as per Transport Canada will not be accepted under the licensing regime. Please contact the TSSA for further information or inquiry.