



Best practices for defueling, decommissioning, and disposal of compressed hydrogen gas vehicle fuel containers



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Preface

This is the first edition of CSA SPE-2.1.3, *Best practices for defueling, decommissioning, and disposal of compressed hydrogen gas vehicle fuel containers*.

This Document is part of the CSA SPE-2.1 Series. It is planned to be published under the same cover as the CSA SPE-2.1 Series in a subsequent edition.

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This Document was prepared and reviewed by the Task Force on Cylinder Defueling, Decommissioning, and Disposal of Compressed Natural Gas Vehicle Fuel Containers.

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Document is stated in its Scope, it is important to note that it remains the responsibility of the users of the Document to judge its suitability for their particular purpose.*
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0 Introduction

The best practices outlined in this Document are intended to be used by industry personnel having training in high-pressure gas safety to safely and effectively remove containers from service. The following guidelines directed the development of the content of this Document:

- a) Defueling, decommissioning, and disposing of CHG containers should only be done by a qualified person or agency, in a safe and compliant manner following the manufacturer-specific procedures.
- b) CHG containers that have been damaged or have reached their end of life should be permanently removed from service in a safe and compliant manner following the manufacturer-specific procedures.
- c) CHG containers should be destroyed or irrevocably rendered inoperable prior to being disposed, in a safe and compliant manner following the manufacturer-specific procedures or type-specific applicable methods.

This Document focuses on compressed hydrogen gas vehicle fuel containers, since there is an immediate need of industry to safely dispose of damaged containers or containers that have reached their end of life.

1 Scope

1.1 General

This Document contains requirements for the safe removal and disposal of compressed hydrogen gas (CHG) containers from hydrogen gas vehicle (HGV) service when the container

- a) has reached its end of life as indicated by the date on the container label;
- b) has been condemned in accordance with visual inspection guidelines;
- c) is no longer of value to an owner; or
- d) has been deemed a public nuisance or imminent hazard by the local authority (abandoned, confiscated, or seized containers).

It is the owner's responsibility to ensure that the CHG containers on the vehicle are defueled and removed by a qualified agency at the end of the container life (EOL). Once the container has been removed, the custodian of the container is responsible to dispose of the container safely.

Note: Owners should obtain paperwork to document transfer of custody.