CGA P-49—2014

PREVENTION OF TOW-AWAY INCIDENTS

FIRST EDITION

CGA
Compressed Gas Association
The Standard For Safety Since 1913

PREFACE

As part of a program of harmonization of industry standards, the Compressed Gas Association (CGA) has issued CGA P-49, *Prevention of Tow-Away Incidents* jointly produced by members of the International Harmonization Council and originally published by the European Industrial Gases Association (EIGA) as EIGA Doc 63, *Prevention of Tow-Away Incidents*.

This publication is intended as an international harmonized standard for the worldwide use and application of all members of the Asia Industrial Gases Association (AIGA), Compressed Gas Association (CGA), European Industrial Gases Association (EIGA), and Japan Industrial and Medical Gases Association (JIMGA). Each association's technical content is identical, except for regional regulatory requirements and minor changes in formatting and spelling.

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This document is subject to periodic review, and users are cautioned to obtain the latest edition. The Association invites comments and suggestions for consideration. In connection with such review, any such comments or suggestions will be fully reviewed by the Association after giving the party, upon request, a reasonable opportunity to be heard. Proposed changes may be submitted via the Internet at our web site, www.cganet.com.

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1 Introduction

Before moving a bulk delivery vehicle, the failure to disconnect the product delivery hose(s) that connect the vehicle to a storage tank or utilization point can lead to a serious incident.

A tow-away incident occurs when flexible hose(s) used to transfer product between a delivery vehicle and stationary equipment is not disconnected prior to moving the vehicle. When this occurs, flexible hoses and the interconnecting piping can be damaged or fail.

Moving the vehicle while delivery hose(s) is still connected to fixed equipment creates the potential for equipment damage and a hazardous atmosphere. Personal injury can be caused due to:

- a large quantity of gas or liquid under pressure being released by the ruptured hose(s) and the production of a potentially hazardous atmosphere (oxygen-enriched or -deficient) that can lead to cold burns, asphyxiation, fire or explosion; and
- if the hose(s) resists the pulling effort and does not break, the vehicle can, in certain cases, pull away part or the whole of the fixed equipment or damage the delivery vehicle pipework.

Such incidents can lead to disruption of service.

2 Scope and purpose

The primary objective of this publication is to recommend practical methods for preventing road vehicles being moved away while still connected to fixed equipment. It supports compliance with the relevant requirements of existing regulations and standards.

This publication is also applicable to vehicles carrying cryogenic receptacles that are filled or emptied into a fixed installation while on board the vehicle.

Prevention of tow-away incidents of rail transportation is *not* discussed in this publication. However, the principles discussed may be appropriate in some cases.

This publication also covers breakaway couplings, which minimize the consequences of tow-aways, should they occur. These devices may be considered for use for transfilling from both road vehicles and rail wagons.

3 Definitions

For the purpose of this publication, the following definitions apply.

3.1 Publication Terminology

3.1.1 Shall
Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

3.1.2 Should
Indicates that a procedure is recommended.

3.1.3 May
Indicates that the procedure is optional.

3.1.4 Will
Used only to indicate the future, not a degree of requirement.

3.1.5 Can
Indicates a possibility or ability.