Anhydrous ammonia and propane cylinders

SAFETY ALERT From NPGA

INTRODUCTION: Readers of this bulletin should consult the law of their individual jurisdictions for codes, standards and legal requirements applicable to them. This bulletin merely suggests methods which the reader may find useful in implementing applicable codes, standards and legal requirements. This material is not intended nor should it be construed (1) to set forth procedures which are the general custom or practice in the propane industry; (2) to establish the legal standards of care owed by propane distributors to their customers; or (3) to prevent the reader from using different methods to implement applicable codes, standards or legal requirements. The National Propane Gas Association assumes no liability for reliance on the contents of this bulletin. It is offered as a guide only to assist expert and experienced teachers and managers in training in service personnel in their organizations.

Caution!

The brass valve in a propane cylinder will be damaged if it comes in contact with anhydrous ammonia. This deterioration will lead to cracking of the valve body or its components and can ultimately result in a violent, unexpected expulsion of the valve from the cylinder, causing personal injury or death.

Background and Recommended Action

It has come to the attention of the National Propane Gas Association that propane cylinders are being used in the manufacturing of Methamphetamines. This drug is commonly referred to as 'crank'. Manufacturers of this illegal substance are using propane cylinders for the storage and the use of anhydrous ammonia. These cylinders have been found in many states at cylinder exchange and refilling locations as well as in hotel rooms and mobile laboratories, where the manufacturing of this illegal substance takes place.

As observed in the illustrations, a blue-green stain on any brass portion of a service valve is evidence that it may have been in contact with anhydrous ammonia*. The pungent odor of ammonia on or near the cylinder is also an indication. If you suspect that a propane cylinder contains or has contained anhydrous ammonia, exercise extreme caution and restrict access to the area.

It can be dangerous to move the cylinder due to the unknown integrity of the cylinder's service valve. If you determine that it must be moved, keep in mind that hazards due to valve expulsion can be reduced by pointing the end of the container in which the valve is placed away from yourself and others and towards the most safe direction.

Immediately contact your Fire Department, Hazardous Materials Emergency Response Unit or the nearest office of the United States Department of Justice's Drug Enforcement Administration (DEA) for information on properly disposing of the cylinder. If these respondents are not sure what to do, for assistance call 1-800-728-2482, which is the contact number for PERS, an independent hazardous materials information resource.

*Note: Sherwood valves contain a green coated valve stem. Additionally, a green thread sealing compound is used on some valves. These valves should not be confused with those that have been exposed to anhydrous ammonia.