

Overfilling Prevention Devices (OPD) For Consumers

What are they?

**How do they affect my
use of propane?**

**This is a folder that will not
only answer these questions,
it will provide some background
on this new historic safety
advancement in the use of
small propane cylinders.**

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Rev. 1/02, 5/02, 10/02

OPD's

An Avenue to Greater Safety in the Use of Propane (Last Revision 10/02)

This information has been developed to create a better understanding relative to the introduction of a new safety device designed to markedly increase the safe use of small propane cylinders. While an occasional inconvenience may occur during the transition to a higher level of propane safety for gas grill tanks, etc., it is the propane industry's desire that the OPD be recognized by consumers for what it really is.....a notable advancement for the safe use of the *Exceptional Energy, Propane!*

Here then, is a listing of answers to consumer's most commonly asked questions. The propane industry hopes that this information will be helpful relative to the purpose and use of the overfilling prevention device.

The OPD

Q: What is an overfilling prevention device?

A: As defined by the National Fire Protection Association's Pamphlet 58 - *LP-Gas Code, 1998 Edition (Code)*, it is..."A safety device that is designed to provide an automatic means to prevent the filling of a container in excess of the maximum permitted filling limit." Typically, the overfilling prevention device will appear as part of a cylinder valve that is installed as a complete unit into the cylinder. The cylinder valve will have either a CGA 791 (ACME threads) or a CGA 810 (push-pull, quick disconnect) connection device.

Q. What does the *Code* require?

A. For propane cylinders* in the 4 lb. through 40 lb. propane capacity range, the *Code* requires for them to be equipped with an OPD, as follows: New cylinders for vapor service which are fabricated after September 30, 1998; as cylinders are requalified after September 30, 1998 through March 31, 2002; effective April 1, 2002, before a cylinder is filled.

*All references to "cylinders" applies to only those in the 4 lb. through 40 lb. propane capacity range. Also, the last page of this document contains information on the service life and inspection of cylinders.

Q: How can an OPD be identified when it is installed in a cylinder?

A: Listed (e.g. Underwriters Laboratories, Inc.) OPD's are easily recognizable by observing their unique trilobular handwheel. The handwheel is connected to the valve stem in a tamperproof manner for the purpose reducing the possibility of putting a user at risk by an attempt to interchange an OPD handwheel on to a conventional non-OPD valve. It should be noticed that the valve stem on a non-OPD equipped cylinder is not easily matched with a standard trilobular OPD

handwheel. Those who fill cylinders should take care in observing whether or not a cylinder that appears to be equipped with an OPD, actually is.

Q: Is an OPD intended to be an aid in the filling of a cylinder?

A: **The device is designed to only be a backup in the filling of a cylinder. With an OPD equipped cylinder, the traditional procedures of filling by the weight or volumetric methods should be followed.**

Note - Prior to the *Code's* requirement for the use of OPD's, early non-uniform valves were introduced into the marketplace. Thousands of these valves had conventional handwheels and were not marked as now required by the UL listing. While the safety features of these early OPD valves is not being questioned, those who fill small propane cylinders should be aware of these valves still being in service. In time, through normal attrition, these first generation OPD valves will fade from use by attrition.

Q: Is the requirement for OPD's a mercenary ploy by those in the propane industry to take advantage of consumer's pocketbooks?

A: **This is a good question and deserves a direct answer which is.... no. Those marketers who fill propane cylinders for customers have had virtually nothing to do with the advent of the OPD. The term "virtually" is used as there were a few highly concerned and industry active propane marketers who became involved in resolving issues which surrounded the advent of OPD's, including a reasonable time frame for the introduction of these new safety devices into the marketplace.**

Q: I have a horizontal cylinder on my recreational vehicle. Are OPD's available for that kind of service?

A: **The 2001 edition of NFPA 58 (the LP-Gas Code) recognizes that horizontally oriented cylinders that were manufactured prior to October 1, 1998, are unable to be retrofitted with the OPD's. As a result of this fact, the Code now exempts these cylinders from having to be retrofit with OPD valves. Any such cylinder must have a label affixed to it to inform the user and the refiller that an OPD valve is not installed. (Note: This provision was not contained in the 1998 edition of NFPA 58.)**

Q: Why do some propane retail marketers fill cylinders that would normally be required to be requalified and have an OPD installed, whereas other marketers require the OPD to be retrofit on the cylinder before they refill it?

A: **Propane marketers of integrity are those that care about the handling and use of cylinders that they refill, knowing that the families of consumers deserve the best and safest service that can be offered. If a propane marketer elects to do otherwise, that choice speaks for itself. Also keep in mind that some states or jurisdictions have not adopted the 1998 or later editions of NFPA 58.**

Q: If the requirement for a cylinder to be equipped with an OPD is not a law in my state, then how can it be enforced by a propane marketer?

A: The Code is not adopted, state-by-state, on a uniform basis. In time, most states, if not all, will move to enforce the OPD criteria which was first published in the Code's 1998 edition.

Q: What happens if the float breaks off?

A: If an OPD is determined to inoperable, it should be replaced.

Q: In another state I recently had a cylinder filled for my deer hunting camp and they didn't mention anything about an OPD. Are there laws different from this state?

A. The Code is revised by the National Fire Protection Association every three years. Virtually all of the individual United States of America have adopted the Code as their rules for propane applications, but not necessarily on a uniform basis as to a particular edition. So, as the OPD requirements first appeared in the 1998 edition of the Code, not all states have updated their propane rules to that edition. Again, it is expected that all cylinders in the 4 lb. through 40 lb. capacity range will eventually be equipped with an OPD.

Q: Why don't they make one-time-use throw-away grill tanks?

A: Propane cylinders are manufactured to a comprehensive specification of the U.S. Department of Transportation. Because of these strict requirements, a throw-away grill tank service would increase consumer cost to a level that would be unreasonable and impractical.

Q: Where can I have my tank requalified and a new OPD valve installed? If you will not requalify my tank, then where can I buy a new one? Where can I dispose of my old tank?

A: The propane marketers serving your area should be a reliable source of information to answer questions regarding the OPD.

Q: Roofers and other commercial customers are trying to use OPD equipped tanks on torch applications and they are not getting an adequate flow through the valve. What can we do about this?

A: Some of the early OPD valves had an insufficient flow capacity for certain types of service such as high-pressure torch applications. Market competition has resulted in OPD's becoming available that have significantly greater rates of flow.

Propane Cylinders Have A Service Life Which Can Be Extended

According to the U.S. Department of Transportation regulations, small propane cylinders (e.g. grill cylinders) marketed in the United States, with normal wear, have a minimum useable life of twelve years from the date of manufacture.

Each cylinder is required to be clearly marked with specific information that includes the month and year it was made. Usually, this marking appears on the protective carry-collar of the cylinder. It may be illegal, either by federal regulations or administrative code in your states, to refill a small cylinder that is older than twelve years without being inspected according to strict procedures. Your local propane marketer should be able to provide you with information regarding the availability of this service.



This information has been provided
as a contribution to
the safe use of propane by:

The National Propane Gas Association
Lisle, IL

The Propane Education and Research Council
Washington, D.C.