

# **The OPD: A Short History**

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## **Introduction**

Over the years, the liquefied petroleum gas (LPG) industry has been very active in promoting and implementing goals that address safety practices in the handling, storage, transportation and application of its primary commodity, propane. Historically, the National Propane Gas Association (NPGA), engaging in the discipline of safety as one of its prominent cornerstones, has been the leading organization in accomplishing these efforts.

Accordingly, the overfilling prevention device (OPD) has been conceived and developed to advance safety in a manner that complements LPG cylinder filling education and training programs. It must be recognized that during the 1990's, circumstances regarding this new LPG hardware forged ahead and its use was impending, irreversibly. Forces were surfacing that threatened to create a firestorm of immediate and disorganized implementation of the OPD. A drive was also engaged to create more unnecessary, ineffective and unenforceable regulation onto the marketers of LPG. Before this nightmare peaked, NPGA begun a process to deal with the issue and was ready to fill a void of guidance and reason. The following is intended to provide a better understanding among consumers and members of the LPG industry about the influences that have been a part of bringing this safety device to its current status.

## **Some Background Is Helpful...**

The documentary should begin by recalling the interest in propane motor fuel that gained a new impetus in the late seventies and early eighties. From the restored status of propane as a clean-burning, environmentally sound alternative engine fuel, some new safety conditions were adopted for carburetion applications. One of these advances became mandatory in the *National Fire Protection Association's (NFPA) Propane Code (Code)*, which called for an "automatic means to prevent filling in excess of the maximum permitted filling density". This applied to all engine fuel containers manufactured after January 1, 1984. Initially, some problems in the field were experienced with these devices. But in time, greatly reducing the potential for overfills in engine fuel containers, they have become a positive contribution to safety.

Fostered by the engine fuel experience throughout the 1980's, OPD's for small propane cylinders continued to be a subject deliberated by a task force of the NPGA's Technology and Standards Committee (T&S). It proved to be a formidable challenge for the task force and T&S to arrive at a consensus, as the science for the OPD had to employ a different set of conditions from engine fuel containers to portable cylinders.

Paralleling the T&S work, through statistical research and historical incident investigation, the U.S. Consumer Product Safety Commission (CPSC) published the results of a study. Conclusions drawn from the work included a recommendation to determine how best to reduce the number of incidents attributed to propane in the ever-growing and popular gas grill market. The potential for overfilled cylinders, an ongoing concern for NPGA and the industry, was now a focus of the CPSC. A section of the study dealt with high temperature cut-off devices, quick disconnects with automatic shutoff features, and stop-fill devices, all for small LPG cylinders.

## And Then There Were Diversions...

Coincidentally, on the litigation scene in 1994, a class action suit in the Superior Court for the State of California for the County of Marin issued a settlement order in Case No. 157907 to several major manufacturers of propane gas barbecue grills and cylinders. *As ordered by the court*, the defendants were directed to comply with conditions that included the use of stop-fill devices, *when they became commercially available*, on propane gas grill cylinders.

By the year 1996, OPD's in their early configuration were marketed in the U.S. Hence, literally thousands of 20 lb propane gas cylinders were then fitted with these devices. Many of these valves had restricted flow capacities that precluded their use in some traditional applications and increased the time to purge a cylinder. Understandably, OPD's immediately received severe and deserved criticism. However, competition in the marketplace with new generation OPD's is progressively eliminating the earlier problems. Even so, users should be aware of the early valve's existence in the field, estimated to number in excess of 30,000. Although employing the OPD feature, they do not have the readily identifiable trilobular handwheel nor are they even subtly tamperproof. Eventually, these older units will become the victims of attrition.

On another front, in January and March of 1996, U.S. Representative Richard Burr (NC) submitted to the U.S. Department of Transportation a petition for rulemaking from the Barbecue Industry Association (BIA). The petition was forwarded to the Research and Special Programs Administration (RSPA), which published an Advanced Notice of Proposed Rulemaking (HM-220C) on Friday, August 23, 1996 in the federal Register, pp 43515-43517. BIA requested that the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) be amended to require: registration and training of persons who fill propane cylinders having a water capacity less than 200 lbs., which come under the jurisdiction of the DOT; certification of filling equipment; and proof of financial responsibility. The request stated that "RSPA may issue this registration based on an application and an inspection report of the facility used by the applicant and of the applicant's qualifications performed by an independent inspection agency approved pursuant to 173.300a, and any other information available to RSPA."

NPGA reacted quickly by appointing a task force to deal with the BIA petition, planning for a meeting with Congressman Burr, arranging a dialogue with BIA representatives, and establishing an industry position for filing with RSPA before the deadline of November 21, 1996. These plans were fulfilled. Based on substantive comments, NPGA strongly opposed the tenants of the petition and requested that it be denied.

The NPGA publication, *Window On Washington (WOW)*, reported on 12/1/99, that the "Department of Transportation has announced that it will publish this month a notice ending its consideration of a petition submitted in 1996 by the BIA urging the registration and additional training of persons who fill propane cylinders." The notice of denial is expected to be published in 2000.

Even though out of calendar sequence, it should be noted here that during the course of the OPD activity, in 1997 the Recreational Vehicle Industry Association (RVIA) adopted a resolution requiring its members to use only cylinders equipped with OPD's. This association also submitted a proposed Tentative Interim Amendment to NFPA for the recreational vehicle standard *NFPA 501C*, that would mandate OPD's on all RV containers. Subsequently, the proposed TIA was rejected by NFPA.

So, in addition to the CPSC, the court system, Barbecue Industry Association (BIA), Recreational Vehicle Industry Association (RVIA), cylinder manufacturers and of course NPGA, the small cylinder safety issue had become a matter of examination by others. Included, were the Underwriters Laboratories, National Association of State Fire Marshals and the federal agency of the U.S. Department of Transportation.

### **A Time For "Getting On Board"...**

Meanwhile, T&S continued its deliberations to reach a satisfactory conclusion on the many aspects of the OPD. Then, at New Orleans in May of 1996, NPGA's Board of Directors (Board) approved a plan recommended by the T&S Committee to file an OPD proposal with the NFPA before the approaching *Propane Code* revision deadline. T&S was directed by the Board to process the proposal with the intention of later *formally commenting* on the submittal with several specified refinements. Subsequently, most of the Board's desired elements became a part of the OPD program.

It should also be noted that at the New Orleans Board meeting, it became apparent that the question of whether or not the propane industry should continue to work on the OPD concept was irrelevant. The answer to the question was fittingly expressed by a metaphoric phrase that circulated among meeting attendees; *"the train has already left the station!"* In other words, the time for the OPD had arrived, ready or not!

### **"Punching The Ticket": Or, Order Restored...**

In dealing with the unfolding events of the OPD story, NPGA was able to thwart attempts by other organizations to initiate requirements that were premature. With the impending arrival of OPD's, the association strove to organize implementation of this safety enhancement in the most acceptable, structured and organized manner, by:

- Countering an immanent and uncontrolled entry of the OPD into the marketplace, NPGA prevailed in effecting a realistic timetable to enhance safety with the new application. The OPD phase-in schedule was very controversial. Some desired to shorten, and others to extend the dates of implementation. Notwithstanding these differences of opinion, a phase-in schedule was finally resolved.
- Standardizing uniform types and designs of service valves for 4# - 40# cylinders was accomplished to assist in reducing any confusion on filling and service connections.
- A group was organized to develop a performance standard that applies a specific uniformity for the manufacture and performance of OPD's. A performance standard for an OPD assembly, heretofore non-existent, consisting of a service valve in combination with an OPD device, was published in 1999. Under the auspices of a special accommodation by Underwriters Laboratories, prior to the performance standard's publication, manufacturers were allowed to attach OPD's to listed service valves. Consisting of all components, OPD's are now classified as "listed assemblies".
- Requiring the OPD to be a safety back-up, rather than a primary filling device, with uniform identification, marking, a tamperproof feature, and interchangeability for use between the cylinders of different manufacturers, was attained.

- The fixed maximum liquid level outage gauge for filling cylinders by the volumetric method was retained, which provides a second method of confirming an OPD's integrity.
- Meetings were held between representatives of the LPG industry and the leadership of the weights and measures establishment. Consequently, the OPD's were favorably regarded by the weights and measures officials who were willing to work with marketers and provide assistance on the marking of LPG content when filling OPD equipped cylinders.

### **Finally, An Ongoing Conclusion...**

Throughout this endeavor, NPGA members worked diligently to apply reason in the face of adversity. But, have no misgivings, even though the OPD requirement has been published as text in the *NFPA 58 LP-Gas Code, 1998 Edition*<sup>1</sup>, the device's universal acceptance will undoubtedly be spasmodic as some states adopt new codes on different time schedules.

*Nevertheless, in the interest of safety, the states should be encouraged to follow the precepts of the Code*<sup>2</sup>, which elevates consumer safety to a new and higher level, representing the corporate desire of the industry.

So, there we have it. For years to come, consumers and marketers alike will continue to be affected by the known and expected difficulties which result from perhaps the most significant attempt ever to improve safety in the filling of small propane cylinders. At times, it will be extremely difficult to comply with this requirement. However, the NPGA and the LPG industry can again be proud to have played a part in making propane a safer fuel for all.

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<sup>1</sup>NFPA 58-1998, §2-3.1.5 requires, with limited exceptions, that LPG cylinders in the 4# - 40# capacity range shall 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.

<sup>2</sup>It should be noted that the NFPA 58 Technical Committee has issued a formal interpretation on the application of the OPD, as follows: "Overfilling prevention devices shall be installed on 4 lb through 40 lb propane capacity cylinders for vapor service, other than those included in the 'Exception' following 2-3.1.5(d), after September 30, 1998, as they are requalified according to the U.S. DOT applicable requalification procedures, whether or not the cylinders are subject to the enforcement jurisdiction of the U.S. DOT."

# The OPD: A Legal Primer

Questions have arisen regarding the legal obligations of marketers attendant to the requirements for an overfilling prevention device (OPD) as found in the 1998 edition of NFPA 58, ¶2-3.1.5. Briefly, with respect to cylinders with propane capacities from 4 lbs. through 40 lbs. (except for cylinders used in industrial truck service and those used for industrial welding and cutting gases, as well as some used in the horizontal orientation) this paragraph requires:

- (a) Cylinders fabricated after September 30, 1998, shall include an OPD.
- (b) Cylinders requalified after September 30, 1998, shall be equipped with an OPD.
- (c) Effective April 1, 2002, no cylinder shall be filled unless it is equipped with an OPD.
- (d) Cylinders required to have an OPD shall be equipped with either a CGA connection No. 791 or No. 810.

Legal concerns will generally arise in a situation where a marketer has sold or exchanged a cylinder which was involved in an accident and a claim is made that the accident occurred because the cylinder was “overfilled”. As a general rule, a plaintiff’s claim in such a case will be based either on “product liability” or “negligence” law. Although state laws and court holdings differ widely, there are certain basic principles which apply.

*Product liability* law requires that the plaintiff prove that the product in question is defective and that the defect caused the injury. Traditionally, a defect has been defined to be that which would render the product “unreasonably dangerous”. This traditional definition has recently been expanded in order to provide clarity and better guidance for future court decisions. It now provides that a product is defective when the foreseeable risk of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller and the omission of the alternative design renders the product not reasonably safe.

*Negligence* law generally holds a party to be liable when he fails to use “reasonable care” under the circumstances; however, most states have held that propane is a “dangerous” or “hazardous” product and thus have held those who handle it to a higher standard of care.<sup>1</sup>

In both product liability and negligence law, the plaintiff must prove that the conduct of the marketer, either in supplying a defective product or in acting negligently, was a cause of the plaintiff’s injuries. Additionally, in negligence cases and in many instances in product liability cases, the actions of the plaintiff may be compared in some manner to the actions of the marketer and the plaintiff’s recovery can be reduced by his own percentage of negligence.

With this background, the key issue then becomes whether compliance or non-compliance with NFPA 58, ¶2-3.1.5, will result in a determination that a cylinder without an OPD is “defective” or that the marketer’s conduct in selling, exchanging or filling such a cylinder is “negligent”. In making this determination, the court must first decide, as a matter of law, whether NFPA 58—and, specifically, ¶2-3.1.5—is applicable.

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<sup>1</sup> Courts have required suppliers of propane to exercise an enhanced degree of care to prevent injury to others from its escape. *Parkinson v. California Co.*, 255 F.2d 265 (10<sup>th</sup> Cir. 1958).

Generally, a product's noncompliance with an applicable product safety statute or administrative regulation would render the product defective as a matter of law.<sup>2</sup> With this in mind, there are three separate regulatory situations to consider.

1. In a state which has adopted ¶2-3.1.5, the product will be deemed to be defective as a matter of law if there is noncompliance with the provisions of this paragraph. The jury will still be required to determine whether the defect caused the accident.
2. In a state which has not adopted the latest version of NFPA 58, a court may allow evidence to be introduced that ¶2-3.1.5 constitutes the standard of the industry. Although this is not proof of a defect, it could be considered as evidence of a defect or negligence which should be considered within the context of the marketer's total conduct.
3. Finally, in a state which has adopted the latest edition of NFPA 58, but specifically opted out of or modified ¶2-3.1.5, failure to have an OPD would not be a defect. In addition, a strong argument could be made that the specific rejection of this provision by the legislature or regulatory authority having jurisdiction would establish that the OPD is not the "standard of the industry" and thus should not even be considered by a jury as evidence of a defect or negligence.

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<sup>2</sup> One cannot assume, however, that compliance will mean no finding of liability. Courts have held that compliance with an administrative regulation is merely a circumstance to be weighed with other factors. "Compliance with a legislative enactment or an administrative regulation does not prevent a finding of negligence where a reasonable man would take additional precautions." *Restatement (Second) of Torts* (1965), §288C.

# **The Overfilling Prevention Device**

**- For -**

## **Propane Marketers**

Although broad in scope, these Q&A's will not answer all questions that may arise, but are intended to provide a basic understanding for the application of overfilling prevention devices.

**Q:** What is an overfilling prevention device (OPD)?

**A:** As defined by the National Fire Protection Association's (NFPA) 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, with limited exceptions the *Code* requires 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 any cylinder is filled.

\*All references to cylinders applies to only those in the 4 lb. through 40 lb. propane capacity range. The exceptions to this rule are: 1) cylinders used in industrial truck service; 2) cylinders identified and used for industrial welding and cutting gases; and 3) as of the 2001 edition of NFPA 58, horizontal cylinders manufactured prior to 10/1/98 for which no OPD is available and which are labeled to indicate that an OPD is not installed. (See the *Code* for further details.)

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

**A:** Listed (e.g. Underwriters Laboratories) 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 of reducing the possibility of putting a user at risk by attempting to interchange an OPD handwheel on to a conventional non-OPD valve. It should be noted that the valve stems on non-OPD equipped cylinders are not easily matched with the 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.

*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 valves is not being questioned, cylinder refillers should be aware that many are still in service. In time, these valves will decline from use through normal attrition.*

**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 a cylinder. With an OPD equipped cylinder, the traditional procedures of filling by the weight or volumetric methods should be followed.

**Q:** Using a 20 lb. propane gas grill cylinder as an example, how does one know that the cylinder is equipped with an OPD that is operable?

**A:** Above 40 degrees F, listed OPD's are uniformly designed to prevent the continued filling of a (e.g.) 20# cylinder to a point slightly less than 20#. Correspondingly, at temperatures below 40

degrees F, a listed OPD is designed to allow minimally more than 20# of propane to be placed in the cylinder. Therefore, the integrity of an OPD can be confirmed by a trained operator either through the use of a weight scale or by action of the maximum liquid level gauge which is an integral part of the service valve.

**Q:** Is the requirement of OPD's a mercenary ploy by those in the propane industry to take advantage of consumers 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:** Am I violating rules by refilling a cylinder that is not equipped with an OPD.

**A:** The answer to this question depends on whether or not the authority having jurisdiction in your particular state is enforcing the provisions of the *Code*.

Your attention is drawn to both the OPD state enforcement listing and to the liability comments that accompany this advisory. In compliance with the Code since October 1, 1998, the predominant U.S. manufacturers claim to have fabricated and equipped no cylinders in the 4 lb. to 40 lb. range without OPD's. Eventually, it is expected that the use of these devices will be uniformly accepted.

In the final analysis, the decision to fill a cylinder, regardless of how it is equipped or maintained, is a judgment call of the dispenser operator.

**Q:** As a propane marketer, I'm frustrated. We're experiencing less than acceptable quality in some of the OPD's, particularly in the lack of adequate flow capacity for purging and use, plus poor handwheel durability. Inasmuch as manufacturers are not offering replacement parts for OPD's, I feel abused even though I may receive a replacement valve for a defective one at no charge, what about the time it takes to provide the consumer with a replacement cylinder while on my time I schedule the insertion of a new valve.

**A:** Like other things that are newly introduced into commerce, there are times when it appears that field trials are continuing even though the equipment is in the hands of the end-user. This is not good. No evidence has surfaced that propane marketers are being taken advantage of in the application of OPD's. Even so, manufacturers do take serious note of such reports and act accordingly, rather than face interrogation from federal agencies as to their marketing practices.

**Q:** Our state has not yet adopted NFPA 58 -1998, so do we still have to abide by the *Code*?

**A:** Please refer to the information contained in "The OPD: A Legal Primer".

**Q:** The U. S. DOT (DOT) says we don't have to requalify cylinders not used in commerce so how can we enforce OPD requirements?

**A:** DOT's requalification jurisdiction applies only to those cylinders in commerce.

For example, cylinders that are privately owned and transported in a non-business mode, are not subject to DOT's rules. However in 1999, NFPA issued a formal interpretation stating that the *Code* requires cylinders of 4 lb. through 40 lb. propane capacity must be equipped with an OPD as "they are requalified after September 30, 1998 through March 31, 2002". In the 2001 edition of NFPA 58, a new requirement states that even those portable cylinders which are not within the jurisdiction of DOT are required to be requalified, which in effect adopts the formal interpretation into the Code. To repeat, effective April 1, 2002, the *Code* requires all cylinders to be equipped with an OPD before it can be filled.

**Q:** What happens when the float breaks off?

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

**Q:** What should we do with the old cylinders that we are accumulating?

**A:** In the future, these cylinders should be treated as they have been in the past. They can either be requalified and put back into service or salvaged-out in a safe manner.

**Q:** Was the OPD forced upon us by cylinder and valve manufacturers?

**A:** To confirm that this is not the case, please refer to: "The OPD: A Short History".

**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.

**Q:** I think these OPD valves are unsafe. Why can't we get this reversed like the U. S. Environmental Protection Agency's RMP?

**A:** No sufficient grounds for seeking third party scientific criteria has been developed in order to support an effort that would reverse acceptance of the OPD. On the other hand, the intent to advance a safer package for consumer use has been fulfilled with the OPD application.

# **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.**

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.**

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**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.**

## CURRENT STATE ADOPTIONS OF NFPA 58

As of 4/28/03

*This information is unofficial. Check with enforcement authority in each state.*

<u>State</u>	<u>Edition of NFPA 58</u>	<u>State</u>	<u>Edition of NFPA 58</u>	<u>State</u>	<u>Edition of NFPA 58</u>
Alabama	1998-OPD not enforced	Louisiana	1995- OPD req'd only for new and requalified cylinders	Ohio	1998-OPD is enforced
Alaska	1989-OPD not enforced	Maine	1998-OPD is enforced	Oklahoma	1998-OPD is enforced
Arizona	1989-OPD not enforced	Maryland	1998-OPD is enforced	Oregon	1998-OPD is enforced
Arkansas	1998-OPD not enforced	Massachusetts	1998-OPD is enforced	Pennsylvania	1992-OPD not enforced
California	1998-OPD is enforced	Michigan	1998-OPD is enforced	Rhode Island	1995-OPD not enforced
Colorado	1998- OPD is enforced	Minnesota	2001-OPD is enforced	South Carolina	1998- OPD not enforced
Connecticut	1995-OPD not enforced	Mississippi	1998-OPD is enforced	South Dakota	1998-OPD is enforced
Delaware	1995-OPD not enforced	Missouri	2001-OPD is enforced	Tennessee	1995-OPD not enforced
Florida	1998-OPD is enforced	Montana	1989-OPD not enforced	Texas	1998 – OPD is enforced
Georgia	1995-OPD not enforced	Nebraska	1998-OPD enforced	Utah	1998-OPD is enforced
Hawaii	1986-OPD not enforced	Nevada	2001-OPD is enforced	Vermont	1995-OPD not enforced
Idaho	1998-OPD is enforced	New Hampshire	1995-OPD not enforced	Virginia	1995, no OPD. State due to adopt in Sept. '03
Illinois	2001-OPD is enforced	New Jersey	1998-OPD is enforced	Washington	1972-OPD not enforced
Indiana	1998-OPD is enforced	New Mexico	1998-OPD is enforced	West Virginia	1995-OPD is being enforced
Iowa	2001-OPD is enforced	New York	1992-OPD not enforced	Wisconsin	1998-OPD is enforced
Kansas	1992-OPD not enforced	North Carolina	2001-OPD is enforced	Wyoming	1998-OPD is enforced
Kentucky	2001-OPD is enforced	North Dakota	1998-OPD is enforced		