

# **UNDERWRITING THE RESTAURANT RISK NFPA #96 AND THE UL300 STANDARD**

**You have received a quotation from us indicating a requirement for “Functional Automatic Fire Suppression System per NFPA #96 on all Cooking Equipment.”**

## **What does it mean?**

The NFPA (National Fire Protection Association) sets safety standards – NFPA #96 is the standard for Commercial Cooking operations. It covers requirements for the design, installation and use of extinguishing and exhaust systems. Since 1998, one of the requirements of NFPA #96 is that the system must meet the UL300 standard.

## **What is UL300?**

Underwriters Laboratories is a product-safety testing and certification organization. They have set the standards and tested products for public safety since 1894.

On November 21, 1994, UL introduced the UL 300 – Standard for the Testing of Fire Extinguishing Systems for the Protection of Restaurant Cooking Surfaces, based on upgraded testing results. A UL 300 compliant system is significantly more effective in controlling kitchen fires than systems designed to meet previous standards. Dry chemical systems and systems not meeting the UL 300 requirements may not provide effective fire control in today’s kitchens.

## **What prompted UL to develop this new standard?**

Over the years, the use of animal fats (lard) for frying foods has given way to the use of vegetable oils that help lower the fat and cholesterol content of food. Vegetable oil burns at a higher temperature than animal fats and creates fires that are more difficult to extinguish. Additionally, energy-efficient cooking appliances are now used extensively in restaurants. Highly insulated fryers help reduce fuel consumption and improve cooking times by maintaining a more consistent temperature. They also help keep cooking oils and metal appliances hotter longer and make fire extinguishing more difficult.

The tests that led to the new standard indicated that the only systems that would adequately extinguish a fire on a modern cooking surface were “Wet Chemical” systems. Similarly, fire extinguishers of a dry variety were found to be ineffective in extinguishing vegetable oil or fat fires, known as Class K fires. Therefore, Class K extinguishers are also a requirement of the new standard.

### **How can I tell if a Fire Protection System Meets the UL300 standards?**

- Check for the UL300 label on the system's extinguishing tank or verify with UL that the model number of the system is listed as UL300 compliant.
- Ask an expert – the service company that regularly services the equipment should be able to verify compliance. Check the service tag on the system for the name of the provider.
- Check the chemical discharge nozzle – if it is large – 2” or more in diameter – and uses a dry extinguishing agent, the system is NOT compliant.
- Systems installed prior to 1994 should be checked for upgrades.

### **Several things have happened since 1994:**

- Some manufacturers have set dates when they will no longer provide parts for older systems.
- Some state fire marshals have mandated compliance with UL 300 deadlines.
- Some service contractors have refused to service systems that are not UL 300 compliant.
- Per NFPA standards a UL 300 system is required when the suppression system is expanded, moved, revised or additional cooking equipment is installed.

Therefore, we expect most restaurants will be familiar with the UL300 standard and will understand and comply with our requirement.

### **What if the Fire Protection System is NOT compliant?**

It is our recommendation that the system be replaced by a UL300 compliant system by a competent and licensed contractor. We will not write risks using vegetable oil without a warranty that the extinguishing system is UL300 compliant.

We recognize that the owner will incur a cost to change the system – but the protection provided will be considerably improved based on UL testing. The costs to upgrade to a compliant system can range from \$300 to \$10,000 (a complete new system). The older the system is, the higher the costs tend to be.

### **What if the restaurant does not use vegetable oils?**

If the restaurant indicates that only animal fats are used, we will accept a dry chemical extinguishing system. We will require a warranty that no vegetable oil is used. However, we will NOT write more than \$200,000 TIV in such an instance and we will adjust our rates upward to reflect the increased exposure.

**If you have further questions or comments regarding this topic, please contact your underwriter or Doug Ditter at 1-888-523-5545 ext 512 or [dditter@usli.com](mailto:dditter@usli.com)**