In last month’s edition, we looked at food safety and protecting workers in the kitchen. This month, we will focus on kitchen fire safety, a major factor in protecting your resort.

According to the National Restaurant Association, kitchen fires account for 57% of restaurant fires. The kitchen is most likely the number one source of a fire loss at your resort. With this in mind, there are several things that need to be considered to minimize a kitchen fire. The design of the kitchen is dictated by what cooking equipment is used. Basic kitchens that provide heating of prepackaged food (corn dogs, nachos, hot chocolate, etc.) do not require a lot of fire safety precautions. Simple things, such as accumulation of crumbs, frayed cords, and faulty heating elements, can start a fire. Keeping equipment clean and operational, and following usage instructions can prevent serious problems.

Kitchens with cooking equipment, such as ranges, broilers, and fryers, require more consideration.

Commercial kitchens equipped with appliances that generate grease, heat, or steam usually require a ventilated exhaust hood. This is necessary to safely remove grease and steam from the kitchen. Grease-producing appliances, such as deep fat fryers, ranges, and broilers, require filtration and a wet chemical fire suppression system.

**Deep fat fryers**

Deep fat fryers are a major source of kitchen fires. When hot grease comes in contact with an open flame, it produces a flash fire. For this reason, fryers need to be separated from flame-producing appliances, such as stoves and broilers. NFPA 96 is the regulatory standard for commercial cooking operations. It states, “All deep fat fryers shall be installed with at least a 406-mm (16-in.) space between the fryer and surface flames from adjacent cooking equipment. Where a steel or tempered glass baffle plate is installed at a minimum 8 inch height between the fryer and surface flames of the adjacent appliance, the requirement for a 16 inch space shall not apply.” Check the setup of your equipment to make sure this requirement is met. If not, the steps above must be taken to prevent a fire. Check to see if your fryer has a high-temperature shut-off switch. If fryer oil gets too hot, it will self-ignite. The high-temperature shut-off switch should turn the fryer off if the oil reaches a temperature of 475 degrees Fahrenheit at 1 inch below the surface.

**Exhaust hoods**

Your exhaust hood may be equipped with a wet chemical fire suppression system, a special extinguishing agent that quickly suppresses a grease fire. Equipment is staged under a hood in a specific configuration. Spray nozzles are professionally positioned...
over the equipment. Moving appliances around can create a fire hazard, and compromise the wet chemical suppression system. Always consult a commercial kitchen installer for any changes you want to make to your equipment setup.

A Class K extinguisher should be located in an accessible area. This is a large, silver extinguisher that is specifically designed to fight grease fires. Don’t mistakenly install a red ABC extinguisher in your kitchen as it is not as effective at suppressing kitchen fires. Your exhaust hood will need periodic inspections and cleaning. The NFPA Fire Code calls for quarterly inspections of systems in high-volume operations and semiannual inspections in moderate-volume operations. Monthly inspections are required for exhaust systems serving solid-fuel cooking equipment, such as wood- or charcoal-burning ovens. The cleaning is performed by a licensed service provider who removes the filters and roof caps. Any grease accumulation in the hood and flue is removed to prevent a flash fire. The service provider also inspects the fan and exhaust system to ensure they are functioning properly.

Hood filters require regular cleaning. This can be performed using a strong degreaser by your staff or a service provider. Failure to clean hood filters can compromise the hood’s performance and put your kitchen at risk of a grease fire. Avoid storing combustible or flammable materials on top of the exhaust hood. Items, such as cardboard boxes, styrofoam, towels, or cleaning supplies, can be a fuel source for a fire and should be kept away from cooking equipment.

Electrical outlets

A common deficiency found in resort kitchens is outlets that do not have Ground Fault Circuit Interrupters (GFCIs) installed. The National Electric Code (NEC) requires GFCI outlets to be installed in commercial kitchens. These outlets are critical for preventing electrocution and equipment damage as they shut off power at the source more quickly than standard outlets. GFCIs are identified by a reset button located in between the outlets. Consult a licensed electrician to determine if the outlets are appropriate for your kitchen.

Maintaining a safe kitchen not only helps equipment last longer, but also reduces the likelihood of a loss. Losing good employees to injuries, risking food poisoning, or experiencing a kitchen fire can have costly and long-term effects on your business. Investing in safe kitchen-operating practices can help ensure a safe resort for years to come. Bon appetit!

For more information regarding this topic, contact your Safehold Special Risk sales executive.