

# Fact Sheet



## Restaurant & Commercial Kitchen Inspection & Cleaning II

All commercial cooking food service establishments are subject to a hidden and illusive safety concern that, if not addressed may impact the financial survival of the kitchen. With this follow-up fact sheet remember, cooking equipment is responsible for 57 percent of disastrous restaurant fires. May this Fact Sheet help to engender action and help prevent burning and distasteful outcomes in the commercial kitchen where you work.

### WHERE DOES YOUR RESTAURANT GREASE GO?



**Waste cooking grease can take one of three routes out of a commercial kitchen.**

Cooking can be a greasy business. Whether you run a fast-food joint with to-die-for French fries or an upscale restaurant known for grilling up succulent steaks, you're going to produce a certain amount of waste grease as you work.

So where does all this grease go, and what problems can it pose? Read on to find out.

#### **Up In The Air**

The first place that grease goes during cooking is up in the air. As food is cooked, a certain amount of the grease released from the food or the oil it's cooking in becomes vaporized. In a properly designed commercial kitchen, the greasy air will automatically get sucked up into the exhaust hood. Some of the grease will accumulate on the hood itself, and some on the grease filters as the air passes through. But not all grease will be captured by the filters. Any grease that escapes the filter will end up inside the kitchen exhaust ducts and then pass through the fan blades as a fine greasy fog residue falling upon the building's roof.

This normal cooking process presents a major concern when residue grease deposits attach to the hood or metal ductwork. Hot grease attaches to cold ductwork naturally. This greasy residue can be toxic and is always highly flammable. To clean these greasy deposits off the ductwork, it often requires hand scraping to remove crusted exhaust duct grease and steam cleaning to help remove grease from deep inside the ductwork. Bare-metal clean (removing all flammable material from the system.) is the industry standard. Daily grease filter washing or a filter exchange service can reduce up-in-the-air grease and allow cleaner airflow through the duct and fan. When regular filter changes and bare-metal cleaning happens throughout the kitchen exhaust system, oozing or dripping contaminants cannot form and disastrous fires in the ductwork cannot occur.

## Down the Drain

Grease that doesn't get hot enough to vaporize can end up getting washed down the drain when the kitchen crew does the dishes or cleans the floor. This also presents a serious problem, both for the restaurant and for the community, because excess grease can clog pipes as well as damage water treatment equipment.

Grease traps (oil/water separators) should be professionally cleaned regularly. The ability for oil water separators to function properly depends upon the timely performance of required service and maintenance. To insure grease and gray-water spills do not occur due to lack of maintenance, frequent inspections should be made of the system.

## Out for Recycling

The last way that grease leaves a commercial kitchen is as part of a recycling program. Many different organizations now offer collection services, often for free. Due to the high combustibility and acidic nature of cooking oils and grease, often the waste grease can be used for a variety of purposes including biodiesel/ethanol production for powering vehicles, heating homes and shops, industrial uses, commercial heating, sanitizing water and farming/ranching equipment support.



Jay Leno's Biodiesel-powered Concept car.

## Cooking Grease & Oil Safety Tips

1. If a pan of hot oil catches on fire, turn off the stove or simply remove the source of flame. Turning off the gas or electric stove is always a good idea, as long as you can do it safely.
2. If the oil starts fire (*665° to 700° Fahrenheit*), leave the pan in place. (Never move, walk or run with the pan on fire.)
3. Always have a lid handy. If an oil fire starts in the pan, slip the lid onto the pan from the front to the back. That should extinguish the fire very quickly. *The key is not to panic and to act quickly.* You may have read to throw baking soda on the fire, this works, but is ineffective and dangerous. Once the fire has spread beyond the pan, it is best to pull the suppression pull station or use a fire extinguisher.
4. Never pour water on an oil or grease fire! Hot oil and water will erupt, exploding out of the pan and scattering on everyone near, in all directions. (*Pull the automatic fire suppression system pull station.*)
5. Do not overfill pots or pans and never add froze fruits, vegetables or meats to hot grease or oil. (*Water or ice can erupt, explode causing serious hot oil splatters.*)
6. Always have a good ABC fire extinguisher, Class K fire extinguisher and fire blanket close. Kitchen staff should have proper third party fire protection systems training annually.
7. If cooking oil or grease has overheated or overflowed from the pan and catches fire engulfing the cook-top and hood with fire, 1. Get everyone out of the Kitchen. 2. Pull the pull-station alarm, 3. Get out of the kitchen, 4. Call 911, 5. Keep staff and patrons a safe distance from the building and off the street.

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