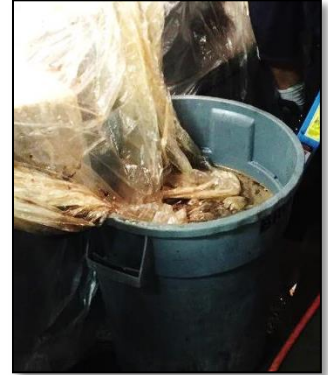




Kitchen Exhaust Hood Cleaning Guidance for Food Service Establishments

This guidance document has been created to inform food service establishments of the potential environmental impacts from kitchen exhaust hood cleaning, and to provide best management practices to prevent those impacts.

Kitchen exhaust hoods are designed to vent heat, smoke and grease from ovens, stoves, grills and fryers. Over time, grease builds up on the hood, fan and exhaust ductwork. Grease can also accumulate in the fan's grease collection system located on the roof. Regular cleaning and maintenance is required to keep the system working properly and to prevent fire hazards. Cleaning, which involves using water, special scrapers, and a caustic chemical cleaner, is often performed by commercial hood cleaning companies that must adhere to the National Fire Protection Association standards.



Legal Responsibility

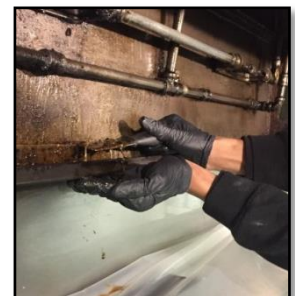
Environmental regulations apply to the management of wastewater generated during the cleaning process. Grease and cleaning chemicals are considered pollutants and proper disposal is required. It is **illegal**, and **punishable by law**, to discharge pollutants either directly to, or indirectly into an area that could drain to a stormwater system. A stormwater system includes roof drains, storm drains, catch basins, roads, ditches, culverts, or parking lots that are designed to transport clean/unpolluted stormwater to waterbodies of the state.

As a food service establishment, it is imperative that you or the hood cleaning company you hire adhere to these standards and laws.

Best Management Practices

The following are best management practices to prevent illegal discharges and reduce pipe blockages associated with hood cleaning:

- Remove as much grease as possible by mechanical means (scraping) prior to treatment with cleaning chemicals and rinse water. This scraped off grease can be disposed of in the trash.
- Collect the wastewater generated from the cleaning process. Whenever possible, use a licensed hauler to dispose of the wastewater properly. If not feasible, the wastewater may also be discharged to drains that are connected to a working grease interceptor. However, many food service establishments only have grease interceptors that are sized for normal day-to-day use, and as such may not be able to handle the large volume of grease generated during the hood cleaning process. Excessive fats, oils and grease can cause major problems by



clogging sewer pipes. Talk with your local pre-treatment coordinator or wastewater superintendent from the Publicly Owned Treatment Works (POTW – local waste water treatment facility) to reduce the impact of this process.*

- The chemical cleaner used to remove the grease can cause the wastewater to reach corrosive levels (high pH). The pH of wastewater must typically remain between 5.0 and 12.5 (check with your POTW for specific limits). Recent tests have shown that some wastewater can have a pH of 12 or greater. A pH greater than 12.5 is considered hazardous and is not allowed to be discharged to any drain – it must be managed as hazardous waste. Using a simple pH test strip will determine the pH level.

Alternatively, steam and hot water pressure washers can eliminate or reduce the use of harmful cleaners and the associated pH spikes. In any case, no wastewater can be discharged to a storm drain. Dilution is not an acceptable method of treatment.

- The rooftop section of the exhaust system must also be cleaned. Any greasy or caustic wastewater generated on the roof must not be allowed to enter the roof drain. These drains are usually connected to stormwater systems or discharge to the ground. It is illegal to discharge this wastewater directly or indirectly into the stormwater system.
- The rooftop section of the grease hood should have a covered grease collector to capture excess grease. These collectors should be emptied (to solid waste or rendering) and cleaned on a regular basis, otherwise grease may overflow onto the roof and eventually end up in the roof drain. Grease is considered a pollutant and cannot be discharged via the roof drain. The waste grease can be disposed of in the trash.
- Filters should be cleaned frequently. This should be done in an area where the wastewater is drained to a sink with a grease interceptor.
- Require the hood cleaning company to send a service report to the POTW.
- Food service establishment owners or managers should oversee the hood cleaning process.
- Train staff in proper grease disposal.
- Spill kits – most kitchens have floor drains that go directly to the sewer. Prevent grease from entering the drain by using an appropriate spill kit.



As a food service establishment owner or manager, you should be aware of the practices used by your hood cleaning company. Some cleaning companies may not be aware that it is illegal and punishable by law to dispose of grease and related wastewater to a storm drain. Ask them how they manage the wastewater to be sure they are disposing of it properly. Hire a reputable company that has the appropriate certifications and is knowledgeable about environmental regulations regarding disposal of grease and wastewater.

*If your facility's wastewater is sent to a septic system, it is imperative that grease is managed properly to preserve the life of the septic system.

For more information, contact the New Hampshire Pollution Prevention Program at (603) 271-6460 or nhppp@des.nh.gov.