

Reducing the “FOG”

By Mike Lucas, Wastewater Technician

Fats, Oils and Grease, FOG, introduced into the waste stream can cause, or at least contribute to, collection system problems resulting in restricted flow and possible sanitary system overflows (SSO's). FOG in a warm liquid form appears to be harmless. However, as it cools it separates from the liquid waste stream and congeals on the piping walls with any root intrusions into the collection system further restricting flow. I've seen FOG completely block service lines especially when there is a low spot (belly) in the line. One customer's solution was to tap a hot water line into his service to prevent the grease from causing problems with their private-owned line by simply moving the problem to the public-owned main piping. Grease buildup on the float switches are one of, if not the #1 cause of nuisance trouble calls from lift stations, usually, however, only on nights, weekends and holidays. Ultimately it can inhibit the treatment process once it reaches the treatment plant.

Problems caused by FOG have resulted in ordinances and regulations governing the discharge of grease into sanitary sewer systems. Grease traps or interceptor vaults may be required based on the volume of flow and the number of connected fixtures. The size and type will usually also determine the required maintenance schedule **w/documentation provided to the system**. This results in the costs and responsibilities being appropriately assessed to the major contributors. Suspects often times are food service establishments, such as schools, cafeterias, hospitals, fast food locations, bars, etc. Residential locations with turkey/fish fryers are not exempt, however. I've even seen grease dumped down a convenient storm sewer inlet.

Enzymes and some chemicals may initiate FOG treatment in the collection system. However, catching the grease at the source by the responsible parties may be the most economical.

We will make examples of Grease and Oil Control Ordinance templates, Best Management Practices (BMP's) Checklists and Maintenance logs available for you to download from the NeRWA website, www.nerwa.org

Always consult with your attorney regarding any ordinances and regulations that you are considering for enforcement.