

# HYDROMECHANICAL GREASE INTERCEPTORS

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## KITCHEN GREASE

#### THE PROBLEM

Kitchen grease, commonly referred to as FOG (fats, oils and grease) is a major problem in municipal /public sanitary systems. The grease floats initially on the surface of the water as it flows through the drainage system. Often it is after the grease enters the public sanitary system that the grease clings to the pipes at the flowing water level. The grease will continue to accumulate until the flow in the drainage system is restricted enough to cause sewer back ups and overflows. These overflows often discharge directly into wet lands, lakes, rivers, streams or the ocean or indirectly to them through storm drains. The resulting Sanitary Sewer Overflows, "SSO", are a violation of the Federal Clean Water Act. These SSOs have resulted in millions of dollars in fines by the EPA against cities, towns, and sanitary sewer districts.

#### **LA Sewage Agency Fined Millions for Spill**

#### January 9, 2007

The Sanitation Districts of Los Angeles County has agreed to pay over \$2.5 million to settle a dispute over a large spill earlier this year where more than 800,000 gallons of sewage spilled into the Pacific Ocean and coastal groundwater supplies.



After the incident, sanitation district officials vowed to make sure that other pumping stations didn't have similar problems. As a part of the settlement, the Sanitation Districts would be released from liability for the 93 sewage spills in the last five years.

It has been acknowledged by several sources that the majority of SSO "Sanitary Sewer Overflows" are related to the build up and blockages associated with FOG.

The FOG in kitchens is an unavoidable by-product from food preparation and food serving areas. However, by using Best Management Practices these problematic quantities of FOG that can discharge to the sanitary sewer system will be virtually eliminated. Restaurant owners and operators are the first line of defense in protecting against the threat of "Sanitary Sewer Overflows." What goes down the drain from each plate or pan may seem minor and unimportant, but it is not! The facts are well substantiated; FOG all too often does not reach the treatment plant but accumulates in the municipal waste drainage system.

The large "Sanitary Sewer Overflows" and the associated EPA fine may be getting the most attention but not all the problems associated with FOG results in "SSO." FOG clogs in pipes result in many sewer backups. These backups too often result in sewerage in someone's basement or causing an overflowing toilet. Just one FOG clog can result in thousands of dollars in damage and clean up. Imagine the inconvenience and cost of just one sewer overflow in a restaurant. The best solutions are generally the simplest. This is true in the case of FOG. The best solutions for FOG is to capture it as close to the source as possible and as soon as possible. Remember kitchen grease FOG is food waste and should be disposed of first like all food waste, in the trash! The following are some simple overall guidelines for restaurants and food preparation businesses to achieve maximum success in capturing kitchen grease.

# BEST MANAGEMENT PRACTICE

- \* Train kitchen staff on Grease handling practices.
- \* Hang Grease handling posters in the kitchen.
- \* Food waste should be disposed of in the trash not the sanitary sewer system.
- \* Identify Grease recycling containers.
- \* Provide ample paper towel dispensers for dry wiping grease from spills, pots, frying and grilling equipment.
- \* Contract with Grease haulers/recyclers.
- \* Use strainer baskets in sinks to catch food waste.
- \* Direct all drains from Grease producing sources to a properly sized grease interceptor.
- \* Avoid food grinders. If grinders are approved discharge them to a solids interceptor upstream of a grease interceptor.
- \* Schedule regular maintenance and cleaning of grease interceptors, keep a log.
- \* Have a copy of the recommended grease interceptor cleaning procedures on site.

In your area the waste water treatment facility may be either public or privately owned. In either case they should have a pre-treatment coordinator. This is the person responsible to monitor what is discharged from a private source into the public waste distribution. The pre-treatment coordinator must be sure that what they allow in the waste water drainage system can be treated or removed at the treatment plant before the waste water is returned into the environment. The EPA has jurisdiction and sets the limits on what can be discharged and the treatment facility has the responsibility to comply. The EPA has encouraged local jurisdictions to adopt "FOG Ordinances" to give them clear jurisdiction on the waste water discharge from restaurants and like facilities. Once you have isolated the FOG at your location, your local treatment facility can advise you on proper disposal.

Restaurants and similar establishments create two classes of FOG. Yellow grease is the grease collected from fryers and similar equipment. Yellow grease can be recycled for uses such as cosmetics, glycerin products, bio-diesel and some animal feed supplements. The second grease, brown grease is any grease that has touched water. Brown grease is commonly from sources such as grease interceptors, water wash exhaust hoods, lift stations and waste water treatment facilities. Brown grease cannot be recycled for any use involving contact with or consumption by animals or humans. Acceptable recycle uses of brown grease include paints, polymers, incinerator co-fuel, and compost.

Remember you can drastically reduce your FOG discharge down the drain with simple good grease handling procedures, but once it goes down the drain only a properly installed and maintained grease interceptor will prevent unwanted FOG from entering the public waste water system.

#### **Certified Grease Interceptors**

#### Ashland PolyTraps

P.O. Box 218
Williston, Ohio 43468
E-Mail: polytraps@amplex.net

#### Bio-Microbics, Inc.

8450 Cole Parkway Shawnee, KS 66227 www.biomicrobics.com

#### Canplas Industries, Ltd.

500 Veterans Drive Box 1800 Barrie, Ontario Canada L4M 4V3 www.endurainterceptor.com

#### Green Turtle Americas Ltd.

2709 Water Ridge Parkway Suite 400 Charlotte, NC 28217 www.greenturtletech.com

#### Highland Tank/Lowe Engineering

1510 Stoyston Road Friedens, PA 15541 www.highland tank.com

#### Jay R. Smith Mfg. Co.

2781 Gunter Drive East Montgomery, AL 36109-0237 www.jrsmith.com

#### Josam

525 W. US Highway 20 Michigan City, IN 46360-0360 www.josam.com

#### Mifab Inc.

1321 West 119<sup>th</sup> Street Chicago, IL 60643 www.mifab.com

#### **Rockford Separators**

5159 28<sup>th</sup> Avenue Rockford, IL 61109 www.rkfdseparators.com

#### Thermaco

646 Greensboro Street Asheboro, NC 27203-2548 www.big-dipper.com

# Wade Specification Drainage Products/Wade Hydromax®

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#### **Watts Water Technologies**

815 Chestnut Street North Andover, MA 01845 www.watts.com

#### Zurn Industries, Inc

1801 Pittsburgh Ave. Erie, PA 16502 www.zurn.com

#### **AB Restaurant Equipment LLC**

P.O. Box 388 Morganville, NJ 07751 www.abreq.com



#### BK Resources. Inc.

120 Frontage Road Altamont, IL 62411 www.bk-resources.com

#### John Boos & Co.

315 South First St. Effingham, IL 62401 www.johnboos.com

#### Klinger's Trading

3009-B Bankers Industrial Drive Atlanta, GA 30360 www.klingerstrading.com

# L&J Restaurant Manufacturing Import Inc.

94 Bowery New York, NY 10013

## Prima Supply LLC/Atlantic Metalworks

4603 Poplar Level Road Louisville, KY 40213

#### Town & Country Plastics Inc.

P.O. Box 269 Morganville, NJ 07751

#### Triton Metals, Inc.

43979 Airport View Drive Hollywood, MD 20636

#### **Wentworth Company**

918 W 21st Street Chicago, Il 60608 www.wentworthco.com