

Food Service Industry

working for clean rivers

Handling Fats, Oils and Grease (FOG)

to Prevent Water Pollution



ENVIRONMENTAL SERVICES
CITY OF PORTLAND
working for clean rivers

Why is Water Pollution Prevention Important?

Reducing the amount of chemicals, hazardous substances, and food waste that flows into the sewer system is good for the earth, for our pocketbooks and for our communities.

Oregon's waterways are fragile environmental systems that need our care and protection. Over the last 50 years, local governments and businesses have made tremendous investments in sewage treatment to keep pollution out of lakes, streams, and rivers. But that doesn't mean we can ignore our responsibilities toward our waterways. It's critical that in homes and businesses we pay attention to the impact our actions have on water quality.

Even the best sewage treatment facility has limitations.

Sanitary Sewers

Oregon's sewage treatment facility systems are designed primarily to handle sanitary or domestic sewage.

We need to remember:

- Treatment facilities can't treat many chemicals and some chemicals may pass untouched into the environment threatening fish, wildlife, and vegetation, as well as people.
- Some chemicals can destroy beneficial bacteria used in the treatment process, leaving the facility useless. This endangers the environment and represents a tremendous expense to sewer ratepayers.
- If a treatment facility receives too much of one type of waste at a time, it won't be able to process it.
- Some chemicals that enter the sewage treatment system may pose a health risk to employees. Some substances may cause explosions and fires.

How the Food Service Industry can Affect Sanitary Sewer Systems

Every commercial cooking operation produces waste fats, oils, and grease. (FOG). Heated grease that congeals in kitchen pipes can block the

pipes and cause water to back up into your sink.

On a larger scale, the same thing can happen to sewer systems. Most blockages in sewer pipes can be traced to fats, oils and grease. The blockages often cause sewage spills, manhole overflows or backups into homes and businesses. Too much grease and oil also increases maintenance costs.

Restaurant personnel often use chemicals during cleanup that can impact the sewage treatment system, as well as rivers and streams. It's always best to reduce chemical use, and make sure those chemicals you do use are environmentally friendly.

Storm Sewers

Storm drains often flow directly into waterways without passing through a treatment plant. Anything in the storm drain - from leaves to motor oil - can pollute water.



How the Food Service Industry Can Affect the Storm Water Collection System

Whenever grease or oil receptacles are stored outside, there is a chance of spills or overflows to storm drains. Food products in rivers and streams can interfere with the nutrient balance and affect the health of vegetation and wildlife.

Cleaning chemicals and debris from outdoor eating areas washed into storm drains can pollute water. Leaves, grass, and motor oil from parking lots washed into storm drains have a negative impact on rivers and streams. Grease and oil escaping through the kitchen exhaust system will be collected in rain water and carried into the sewers and waterways.

How Can Pollution Prevention Help the Bottom Line?

Many businesses find that taking steps to prevent pollution - including keeping fats, oils and grease out of the sewer system - saves money.

- Keeping fats, oils and grease out of your drains will reduce plumbing problems.
- An establishment causing a fats, oils and grease spill to the storm sewer may be subject to fines.
- Fats, oils, and grease can often be recycled, reducing garbage costs.
- Some agencies will bill a business for excess sewer line maintenance if the agency can trace the source of the problem to that establishment.
- Ratepayers will pay more if we need to build more treat-



ment system capacity. We all save by keeping fats, oils and grease (FOG) out of the sewer system.

How to Keep FOG out of the Sewer System

- 1** Post "No Grease" signs above sinks and in front of dishwashers. Frequent reminders can help educate employees about the importance of keeping FOG out of sinks and drains.
- 2** Dry wipe pots, pans, and dishes. Get as much oil and grease as possible off the cookware before it hits the water. Put grease in the trash for disposal.
- 3** Recycle waste cooking oil and other food wastes. Call Metro Recycling at 503-234-3000 for information on grease recycling in your area.
- 4** Use lower water temperatures. Water over 140 degrees dissolves grease, sending it down the drain in wastewater. When it cools, grease congeals either in your pipes or in the public sewer system.

5 Use a three-sink dish-washing system. Design a series of sinks for washing, rinsing, and sanitizing with a 50-10 ppm bleach solution. This system allows you to use water temperatures below 140 degrees, lowering your water heating costs, and better controlling the amount of FOG and food wastes you wash down the drain.



50 percent full after one week, increase cleaning frequency. You may want to consider ways to reduce the amount of FOG reaching the sink drain.

✓ Clean interceptors at least twice a year or more often if necessary.

If more frequent cleanings are needed, consider installing a better trap or an interceptor with larger capacity or using other techniques to keep FOG out of the drains.

✓ Make sure maintenance is done correctly. At least one employee in each facility should be knowledgeable about cleaning procedures for traps and interceptors. That employee should observe maintenance contractors, haulers, and recyclers to make sure all procedures are carried out fully and effectively.

7 Cover any outdoor grease and oil storage containers. Open containers can collect rainwater and overflow, sending grease and oil into the stormwater system and polluting rivers and streams.

6 Install and properly maintain grease traps and interceptors. State and local laws require restaurants to install and maintain grease traps, interceptors or both, depending on the size and type of the food service. Call Environmental Services at 503-823-5320 to find out about requirements in the City of Portland and to make sure you are in compliance.

Some maintenance rules:

✓ Clean undersink grease traps weekly. If grease traps are more than

8 Keep grease dumpsters and storage containers away from storm drains. The farther away they are, the more time there will be to clean up a spill or leak before it reaches the sewer system.

9 Use absorbent pads inside storm drains to catch FOG that may leak into the catch basins. If grease dumpsters or containers are within 20 feet of the catch basin, or if you see signs of FOG near the basin, line the basin with an absorbent cloth or pad. Do not use kitty litter to absorb grease or oil because it can be washed into the sewer system. Use absorbent pads or cloths to clean up any spills or leaks.

10 Keep kitchen exhaust filters clean. Grease and oil escaping through the exhaust system can accumulate on the roof and be washed into storm sewers. Establish a routine schedule and a record-keeping system for cleaning exhaust filters. Make sure that wastewater from

washing is routed into the interceptor, where oil and grease can be collected before it reaches the sewer system.

11 Do not conduct cleaning activities outside where wastes can flow into storm drains.

12 Don't throw wastewater down storm drains. Train employees and contractors to dispose of wastewater appropriately. Water used for mopping, carpet cleaning, and washing hood filters should be disposed of through the sanitary sewer system, never in storm drains. To protect the treatment system, limit cleaning chemicals and use the least hazardous products available.

**For a copy of this booklet or for more information go online
www.cleanrivers-pdx.org
or call Environmental Services at 503-823-5320.**