Fats, Oil, and Grease (FOG)

Fats, oil, and grease, also known as FOG, have two primary sources. Many food service providers handle and produce FOG while preparing food in the course of their regular operations. FOG is harmful because it can clog sanitary sewer system pipes and cause harmful overflows of sewage to the environment. Other types of oils and grease commonly associated with vehicles, equipment, or machinery can also cause harm to the environment.

**Potential Sources of FOG**

- Food service operations
  - Preparing fried foods using oils
  - Generation of fat from cooking meat
  - Disposal of other cooking or edible oil products
  - Leaking dumpsters
- Commercial and industrial oils and greases
  - Washing buildings, vehicles, equipment, or paved surfaces
  - Greasing rail switches
  - Handling oils as bulk materials

**Best Management Practices**

- Food service operations
  - Avoid clogging sanitary lines through careful handling and proper disposal of FOG.
  - Contract with an oil and grease recycler to ensure proper disposal.
  - Regularly maintain vaults and grease traps.
  - Maintain an adequately sized grease vat for disposal and maintain it in a covered area. Keep area surrounding the grease vat and dumpster tidy and check for leaks.
Commercial and industrial oils and greases

- Develop and implement a spill clean-up plan.
- Maintain spill clean-up materials on-site; use a trained spill contractor to ensure spills are properly cleaned up.
- Install and use mobile spill containment measures.
- Only perform vehicle maintenance under cover.
- Use drip pans or other measures to collect spilled oil during maintenance.
- Follow manufacturer’s instructions for proper application of oils and grease.
- Perform preventative maintenance on oil/water separators to ensure proper function.
- Use only non-emulsifying cleaners in oil/water separators. Emulsifiers will allow trapped oil to be discharged from the system into the sanitary or storm system.
- Contract with an oil and grease recycler.

**What do clogged sanitary system pipes have to do with the stormwater system and adjacent waterways?**

If FOG clogs a pipe in the sanitary system, the pipe could back up and overflow to the storm system and end up in downstream waterways. Spills caused by clogged sanitary pipes can be costly and may trigger involvement by spill cleanup contractors and regulatory agencies. Cleanup would likely involve maintenance of the sanitary system to fully remove the accumulated FOG and cleanup may extend to the stormwater system or adjacent receiving waters.

**Additional Resources**

- *Prevent FOG From Entering Creeks and Streams Through Storm Drains*, City of Portland, Bureau of Environmental Services
- *Quick Tips: What Food Service Establishments and Commercial Buildings Can Do*, City of Portland, Bureau of Environmental Services
- *Cut Through the FOG to Protect Property, Water Quality and Public Health*, City of Portland, Bureau of Environmental Services