



FOG: Fats, Oils, and Grease in Tacoma

City of Tacoma | Environmental Services

**Environmental Services Commission Meeting
January 9, 2025**





What is FOG?

Fats Oils and Grease: FOG

- Meat Drippings and Food Scraps
- Gravy & Salad Dressings
- Milk & Cream
- Cooking Oil
- Butter & Margarine
- High fat foods



● ● ● Why is Tacoma's FOG program needed?

- Prevent sanitary sewer overflows (SSOs)
- Prevent sewer line blockages & backups
 - Reduce potential for costly sewer claims & liability
- Reduce sewer maintenance and associated costs
- Reduce sewer corrosion (acidic compounds in FOG degrade pipe)
- Reduce sewer odor complaints



Tacoma's FOG Program



- Legal Authority
- Control Mechanisms
- Plan Review and Sizing Criteria
- Inspections & Monitoring
- Education and Outreach
- Compliance Strategy



Legal Authority



40 CFR Part 403.5(b)(3) identifies specific prohibitions which include
(3) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;

Tacoma Municipal Code Subchapter 12.08C.100 (B) Specific Prohibitions
(3) Solid or viscous pollutants or substances in amounts which cause obstruction to the flow in the POTW or other interference;

Tacoma Municipal Code Subchapter 12.08C.500(2) Requirements for food service establishments.

(2.) Food service establishments shall not discharge or cause to be discharged any wastewater in violation of 12.08C.100.



Control Mechanisms

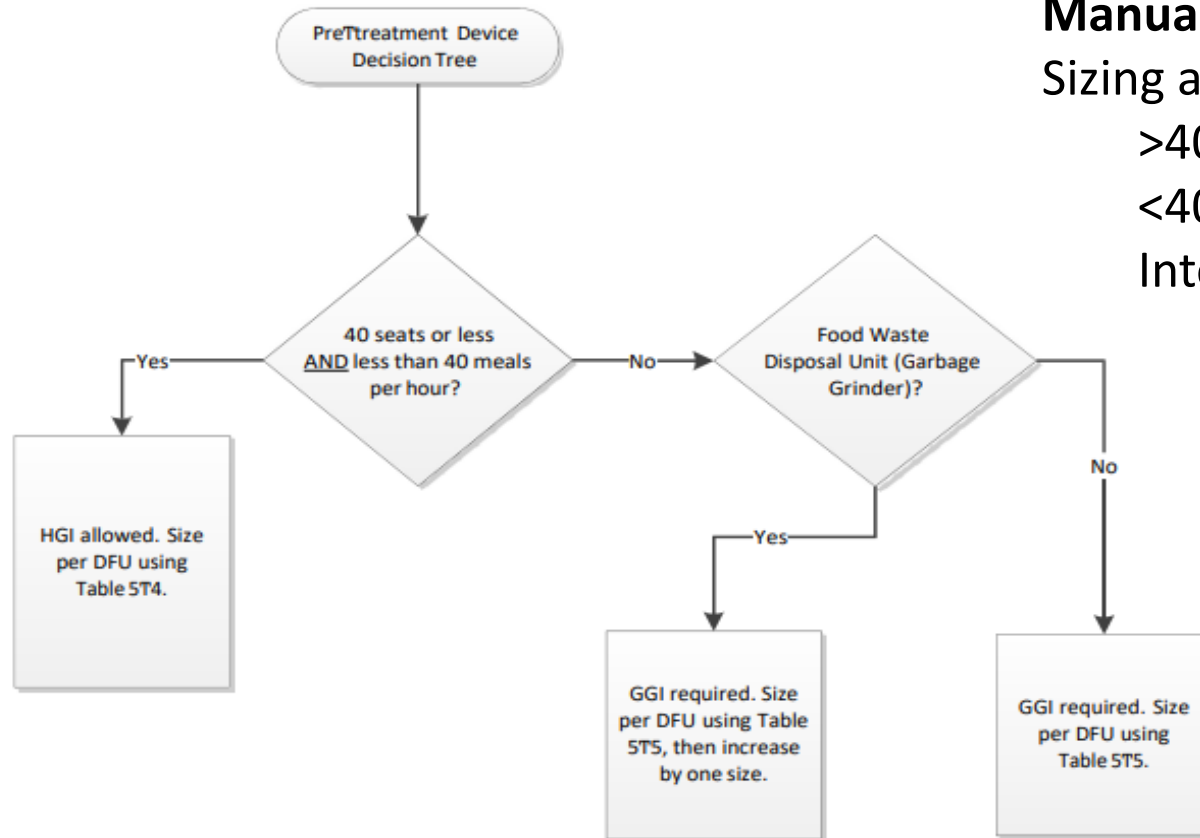
Subchapter 12.08C.500A.1

Unless otherwise approved by the Control Authority, food service establishments shall install, and properly operate and maintain, a grease removal device in compliance with the requirements as set forth in this chapter, the Uniform Plumbing Code and the City's Side Sewer and Sanitary Sewer Availability Manual, as adopted and amended by the City.

Plan Review and Sizing Criteria



**Pre-treatment Device Decision Tree
Fats, Oils, and Grease (FOG)**

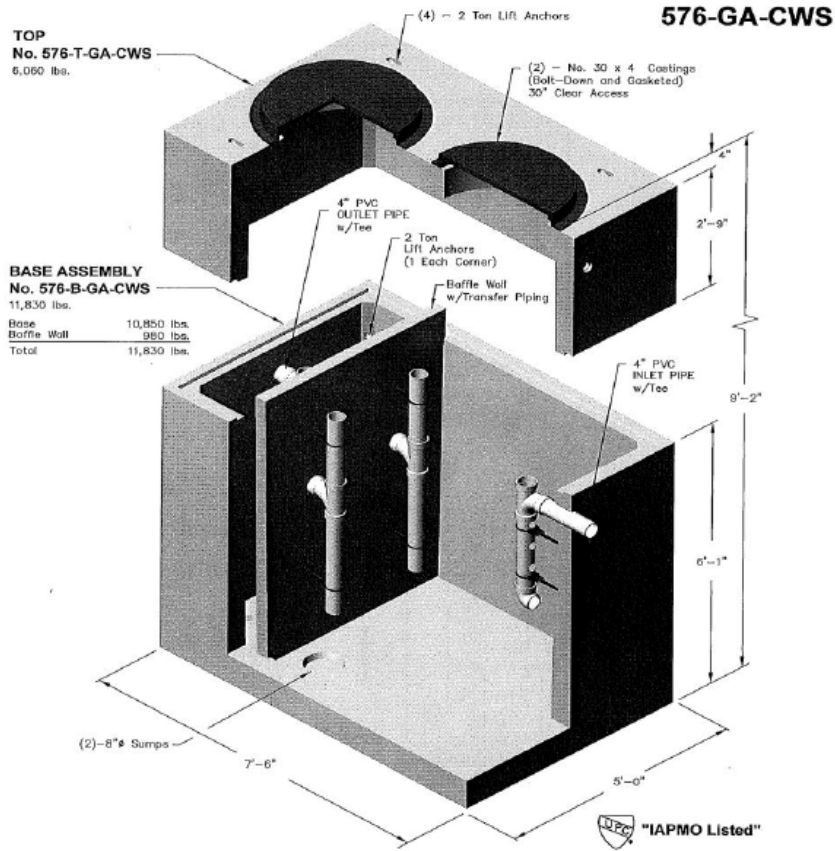


Tacoma's Side Sewer and Sanitary Sewer Availability Manual, Chapter 5 Pretreatment.

Sizing and Installation Policy

>40 Meals/Hour = Gravity Grease Interceptor

<40 Meals/Hour = Hydromechanical Grease Interceptor is allowed



**BASE ASSEMBLY
No. 576-B-GA-CWS**
11,830 lbs.
Base 10,850 lbs.
Baffle Wall 980 lbs.
Total 11,830 lbs.

"IAPMO Listed"
- The Oregon State Plumbing Specialty Code, under 918-770-0050, requires that plumbing products sold in Oregon must be listed by an organization approved by the Board to certify plumbing products for conformance with product standards approved by the Board. IAPMO (Int'l. Assoc. of Plumbing & Mech. Officials) is a listed organization.

<p>PO Box 323, Wilsonville, Oregon 97070-0323 Tel: (503) 682-2844 Fax: (503) 682-2857</p>	<p>576-GA-CWS</p>	<p>576-GA-CWS CLEAN WATER SERVICES 1000 GALLON</p>
	<p>File Name: 020EGG576GA-CWS</p>	
	<p>Issue Date: Revised 2-17-12 oldcastleprecast.com/wilsonville</p>	

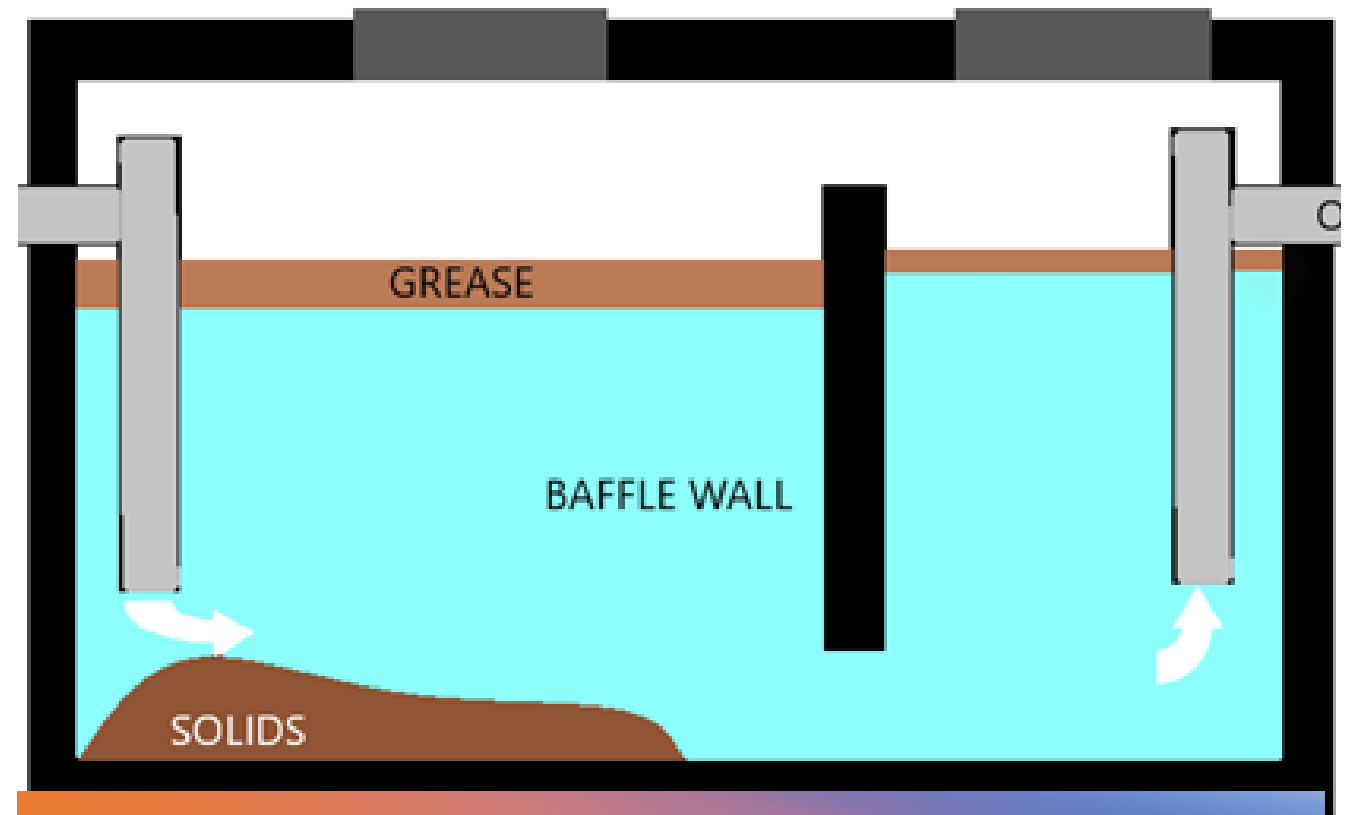
Grease Device Plan Review and Site Evaluations

- New Construction/Remodels
- Tenant Improvements
- Change of Ownership
- Menu Updates
- Commissaries
- Coordination with TPCHD Food Safety for Compliant Sewer System



Inspections and Monitoring

- Inspect 20% of grease devices per year
- Inspect 20% of Food Service Establishments (FSEs) per year
- Review online maintenance records for deficiencies
- Coordinate with Sewer Transmission for known problem areas (Task force inspections)
 - Many commercial districts have regular preventative maintenance schedules related to FOG
 - TV inspections



GREASE INTERCEPTOR



Education and Outreach



- Tacoma's Website
 - TPCHD website
- Inspection Handouts
 - Best Management Practices (BMPs) discussed during FSE and Grease Trap inspections
- Proposed Council Ordinance
 - Establish grease interceptor educational flyer at time of leasing/purchasing property that will be occupied by food & beverage related business.



Education & Compliance

- Educational approach – Technical assistance
- Escalating enforcement
 - Letter or field inspection sheet requesting maintenance
 - Warning letter
 - Civil Enforcement
- Involve TPCHD with non-conforming sewer (rare)





Restaurant 101

- Well attended by Tacoma food service community
- Discussed challenges of opening a restaurant.
- Researching regulatory landscape (City & TPCHD).
- Importance of a strong business plan
 - Needed for loans and grants



Continuous Improvement Project



- Collaborative process with Environment Compliance, PDS, & TPCHD & External Stakeholders.
- Targeted outcomes include:
 - Rightsized regulations to balance stakeholder needs
 - Pilot with a few FSEs (Inspections, Maintenance & BMPs)
 - Transparent process where all stakeholders are aware and understand the City/TPCHD regulations
 - Improved educational materials and modernized website
 - Clearly define policy for maintenance requirements

Key Takeaways



- We know FOG causes problems in Tacoma's sewer system
- Figuring out the right size grease device can be difficult
- City has existing FOG program & continues to improve upon it

- Executive Leadership
- Urban Forestry** - The program facilitates tree planting and preservation on both municipal and private construction projects. Provides public incentive programs to support community tree planting and tree healthcare. Supports the public with technical assistance, education, and opportunities to engage with the community. Advises long-range planning, current planning, code, and policy development. Communication & Engagement.
- EnviroChallenger**
- Equity Consultant Program**
- Strategic Planning**
- Rates & Budget**

Director's Office



- TAGRO** - Biosolids distribution. Products include: Potting Soil, Topsoil, Aged Black Bark, & Mix.
- Billing & Technical Services** - Consists of Wasterwater, Stormwater, and Solid Waste Billing & Customer Field Support. These groups perform billing & technical services for both internal & external customers of Solid Waste, Stormwater, & Wastewater. Group also includes Key Account Relationships.
- Environmental Compliance** - Protects the local waterways by conducting business inspections, regulating industrial users, responding to emergency spill response. Programs include Industrial Pretreatment, Business Inspections, & Program Support.
- Systems & Performance Management** - Training & procedures, and Environmental & Sustainability Management System (ESMS).

Business Operations



- Collection Operations** - Commercial Collections – Garbage, Recycling, Organics; Residential Collections – Garbage, Recycling, Organics, Call2Haul; and Misc Collections – Container Maintenance, Long Haul Transport.
- Onsite Operations** - Public Receiving – self haul and commercial garbage and organics; Recycle Center/Household Hazardous Waste facility; and Facilities Maintenance.
- Tidy-Up Tacoma** - Litter Crews, Community Programs Support, Community Service Work Crews.
- Strategic Operations & Business Solutions** - Administrative Support, Call-2-Haul scheduling & Customer service, Data Analytics and Contract Management.

Solid Waste Management



- Plant Operations** - Central Wastewater Treatment (CTP) and North End Treatment Plant (NETP) Operations; NPDES and Air Permit Compliance.
- Plant Maintenance** - Pump Station operation & maintenance; cododian & building maintenance; and CTP and NETP mechanical maintenance.
- Electrical & Instrumentation** - Plant & Pump Station contols; CTP & NETP electrical & instrumentation maintenance installation & repair; Warehouse; and technical services/operational technology support for CTP, NETP, and Solid Waste.
- Sewer Transmission Maintenance** - Sewer maintenance, line cleaning, camera work, spot repairs; Surface water maintenance, line and catch basin cleaning, spot repairs; Street sweeping residential & arterial cleaning program; Grounds Maintenance for CTP, NETP, Pump Stations, & Solid Waste; and Storm structures, ponds, rain gardens, & ditch maintenance.

Operations & Maintenance



- Capital Delivery Group** - Works on the engineering planning, design, & construction management of significant capital improvement projects throughout Tacoma. These capital projects construct, replace, repair, or rehabilitate the City's sewers, green infrastructure streets, pump stations, stormwater and wastewater treatment facilities, and solid waste infrastructure.
- Environmental Programs Group** - Serves as a technical resource to help the City protect & restore natural resources from the effects of polluted stormwater & historically contaminated soils & sediments. Capital projects & ongoing operations & maintenance activities within Gather & analyze water & soil testing data & recommend best available science & watershed-scale solutions. Provide regulatory guidance & training to assist programs & projects; collaborate with regional partners to test pilot-scale water quality treatment projects; & work with community members on environmental stewardship actions.
- Field Operations** - Provides survey, construction inspection, & for ES capital projects.
- Laboratory** - Provides analytical lab services for the City & regional partners responding to environmental regulations, supporting research & developing solutions to environmental problems. Provides analytical services for compliance with our Super Fund sites, stormwater & wastewater NPDES permits.
- Special Programs Group** - Houses the Collection System Support Teams responsible for field investigations & support services for the wastewater & stormwater collection systems; drainage complaint investigations; & Sewer Emergency Operations Center coordination. Also responsible for managing the Center for Urban Waters building to ensure the daily operations of the building are effective & sustainable.

Science & Engineering



- Collection Systems Team** - Responsible for: Performing capacity analysis of the collection systems; Evaluating likelihood & consequence of failure to establish mitigation measures and/or projects; Managing the Capital Improvement Plan for the collection systems; and Providing engineering support to O&M and other staff.
- Facility Team** - Responsible for: Performing capacity analysis of the treatment plants and pump stations; Evaluating likelihood & consequence of failure to establish mitigation measures and/or projects; Managing the Capital Improvement Plan for the treatment plant and pump stations; and Providing engineering support to O&M and other staff.
- Application Development Team** - Responsible for: Developing and maintaining applications that support the business needs of the department; Integrating 3rd party applications and in-house applications; Developing map-based applications that interface with our GIS system; and Developing mobile applications that support data collection in the field.
- Application/Data Management Team** - Responsible for: Providing IT project management for ES applications (in-house and 3rd Party); Developing and maintaining facility drawings and GIS data; and Developing and maintaining predictive data models and other data analytic tools to support data driven decision making.

Asset Management & Technology

