

Water & Sewer Utilities: FOG Control

1500 Warburton Avenue Santa Clara, CA 95050 408.615.2000

FOOD SERVICE CHECKLIST	
Project Address:	
Project Name:	
Building Permit No: BLD	
Name:	
Phone Number:	
Applicant Email:	
Purpose:	
 The checklist provides steps to assist the project design an adequate proposal to contro and capture fats, oils and grease (FOG) at the source to comply with the California Plumbing Code (CPC) 1014 and Santa Clara City Code (SCCC). 	
 Applies to any facility conducting commercial cooking operations including dishwashing activities and equipment cleaning that generate grease-laden wastewater. 	
Plan Submittal Requirements:	
All plan submittals are be processed by the Permit Center of Community Development, 1500	
Warburton Ave, City Hall, 2nd Floor or call 408-615-2440. (santaclaraca.gov)	
Design Proposal Requirements and Steps:	
1. Provide the following on the design:	
a. Grease control device (GCD) sizing calculation: refer to Step 4.	
Located on Sheet No.:b. Proposed GCD model specifications and installation details: refer to Step 5.	
Located on Sheet No.: c. Proposed GCD location on the property.	
Located on Sheet No.:	
d. Sample boxes: Shall be installed downstream of GCDs and proposed device details.	
Located on Sheet No.:	
e. Plumbing diagram: Provide grease waste and sanitary sewer lines to proposed fixtur Located on Sheet No.:	es
f. Waste/recycling storage and plumbing: Refer to Step 6. Located on Sheet No.:	
Submit signed contract maintenance agreements:	
 Submit signed contract maintenance agreements. a. Grease hauler service contract agreement for future service depending which occurs 	,

- first: 25% accumulation, a timeframe depending on size and by code requirements. Contents of GCDs shall be removed by a licensed third-party contractor (SCCC 13.10.380(i)(1)).
- b. Tallow Hauler service contract agreement for future service. Tallow shall be removed by a licensed third-party contractor (SCCC 13.10.380(i)(2)).
- 3. Identify drain fixtures and equipment plumbed to the grease waste line. The list can be included in the sizing calculation, refer to Table 1.
 - a. Plumb all drain fixtures in areas of food preparations, dishwashing, and cooking activities.
 - b. Hot water and non-grease generating are not recommended.

- 4. Provide calculation for an adequately sized GCD.
 - a. Grease Interceptors (SCCC 13.10.380(a)) known as grease control devices (GCDs) shall be sized per CPC 1014 and 1015. All food service establishments must have a GCD sized equal to or greater than the minimum size set forth in the following sizing criteria (refer to CPC 1014.3.6, "Sizing Criteria"). A combination of a hydromechanical grease interceptors (HGI) and engineered systems are allowed in order to meet this code and other applicable requirements where space or existing physical constraints or buildings necessitate such installations (CPC 1014.1).
 - b. Options for calculation by sizing according to a preferred manufacturer.
 - 1) Gravity grease interceptors (GGI) require CPC sizing calculation, refer to Tables 1 & 2, page 3.
 - 2) Hydromechanical grease interceptors (HGI) require a two-step sizing process. Sizing by flow rate alone is not sufficient to ensure adequate FOG control. The second step requires an evaluation for potential grease accumulation for adequate capacity to meet City and the manufacturer's maintenance frequency.
 - 1. Step 1:
 - (1) Refer to CPC 1014.1: Size by flow rate of the grease waste line diameter or by total drain fixture volume. Size with a two-minute drainage period due to all three compartment sinks require an associated floor drain according to City Code. Note: use a one-minute drainage period, for interior installations, if the HGI be installed within 20 feet of developed length from the fixtures, otherwise use a two-minute drainage period. For exterior installations use a two-minute drainage period.
 - 2. Step 2:
 - 3. Calculate grease capacity steps
 - (1) Multiply the following:
 - i. Grease Factor (refer to Table 3, page 4)
 - ii. Meals or customers per day
 - iii. Days between maintenance pump outs
 - (2) Results provide grease capacity required in pounds
 - (3) Select a device by comparing the results to the desired GCD manufacturer's rating, if not adequate, select appropriate device.
 - (4) Select adequate device that meets the SCCC maintenance frequency requirements: 30 days for grease traps and 90 days for grease interceptor or once the GCD becomes 25% full of combined solids, whichever occurs first.
- 5. Identify the GCD proposed for the project. All GCDs installed shall be in a suitable location to allow easy access for inspection, cleaning, and maintenance. All in-ground GCDs shall select the option from a manufacturer with the most manholes or access ports; to allow visibility over inlet piping, baffle (divider) piping, and outlet piping to ensure accessibility for inspection, cleaning, and removal of all contents. If the existing GCD is proposed for future use, contact the Water & Sewer Utilities for required inspection of the device or provide a licensed contractor report of inspection.

a.	Proposed device model:
b.	Confirm device meets CPC 1014.1:
C.	Flow rate:
d.	Liquid capacity (gallons):
e.	Grease capacity (pounds):

6. Waste/Recycling Storage. Provide location and drainage details of the waste and recycling storage areas designed to store all grease/oil (tallow), garbage, recycle and compost containers for the intended operator of the food service establishment. (SCCC 13.10.200, 13.10.380(a))

Table 1

- 1. Plumb all drainage fixtures where Fats, Oils, or Grease (FOG) may be a source shall drain to a GCD. Such fixtures include, but are not limited to:
 - a. Pre-rinse (scullery) sinks
 - b. 3-compartment sinks (pot sinks)
 - c. Drainage in dishwashing room
 - d. Floor drains in dishwashing area and kitchens
 - e. Prep sinks
 - f. Mop (janitor) sinks
 - g. Handwashing sinks
 - h. Drains in outside areas designated for equipment washing
 - i. Drains in trash/recycling enclosures
 - j. Wok stoves, rotisserie ovens/broilers, or FOG equipment with drip lines
 - k. Kettles and tilt/braising pans and associated floor drains/sinks
- 2. The following drainage fixtures and equipment are not recommended to plumb to a **Low** Capacity GCD:
 - a. Dishwasher machines
 - b. Steamers
 - c. Pasta cookers
 - d. Soda machine drip lines
 - e. Bar area discharge lines

Table 2 GCD Sizing Calculation (Source CPC 1014 & 1015)

Drainage Fixture	DFU		Quantity		Product	Total DFUs	GCD (gal)
Pre-Rinse Sink	4	Х		=		8	500
3 Compartment Sink	3	Х		=		21	750
2 Compartment Sink	3	Х		=		35	1000
Mop Basin	3	Х		=		90	1250
Prep Sink	3	Х		=		172	1500
Floor Drain	2	Х		=		216	2000
Trench Drain	3	Х		=		307	2500
Floor Sink Draining (list equipment)	2	Х		=			A
		Х		=		Total DFUs 8	Sized to:

Table 3: Grease Factor Identification (Source IW Consulting Service. LLC.)

Туре	Menu Grease Factor ->	without fryer without flatware	without fryer with flatware	with fryer without flatware	with fryer with flatware
1	Bakery	0.035	0.0455	0.035	0.0455
2	Bar and Grille	0.005	0.0065	0.025	0.0325
3	Barbeque	0.035	0.0455	0.035	0.0455
4	Breakfast Bar - Hotel	0.005	0.0065	0.025	0.0325
5	Buffet	0.035	0.0455	0.058	0.0754
6	Burger and fries, fast food	0.035	0.0455	0.035	0.0455
7	Cafeteria	0.025	0.0325	0.035	0.0455
8	Caterer	0.005	0.0065	0.025	0.0325
9	Chinese	0.035	0.0455	0.058	0.0754
10	coffee shop	0.025	0.0325	0.035	0.0455
11	Convenience Store	0.005	0.0065	0.025	0.0325
12	Deep fried Chicken / seafood	0.035	0.0455	0.058	0.0754
13	Deli	0.005	0.0065	0.025	0.0325
14	Family Restaurant	0.035	0.0455	0.035	0.0455
15	Frozen Yogurt	0.005	0.0065	0.025	0.0325
16	Greek	0.025	0.0325	0.035	0.0455
17	Grocery Bakery	0.025	0.0325	0.035	0.0455
18	Grocery Deli	0.025	0.0325	0.035	0.0455
19	Grocery Meat Department	0.025	0.0325	0.025	0.0325
20	Ice Cream	0.025	0.0325	0.035	0.0455
21	Indian	0.025	0.0325	0.035	0.0455
22	Italian	0.035	0.0455	0.035	0.0455
23	Mexican, fast food	0.035	0.0455	0.035	0.0455
24	Mexican, full fare	0.035	0.0455	0.058	0.0754
25	Pizza	0.025	0.0325	0.035	0.0455
26	Religious Institution	0.005	0.0065	0.025	0.0325
27	Sandwich shop	0.005	0.0065	0.025	0.0325
28	Snack Bar	0.005	0.0065	0.025	0.0325
29	Steak and seafood	0.035	0.0455	0.058	0.0754
30	Sushi	0.005	0.0065	0.025	0.0325

Appendix

Prohibitions:

- 1. Dishwasher machines plumbed to GCD (CPC 1014.1.3).
- 2. Food service establishments shall not install food grinders (disposers), food scrap collectors, or pulpers (SCCC 13.10.370).
- 3. Addition of chemicals or products composed of enzymes, solvents, and surfactants into GCDs (SCCC 13.10.380(e)).

Operations & Maintenance:

- 1. Owners/operators are responsible for staff and contractors conducting work at the facility.
- 2. All GCDs shall be maintained by the time 25 percent combined solids have been accumulated inside a GCD, every 30 days for HGIs or grease traps and every 90 days for GGI or grease interceptors (SCCC 13.10.380(f)).
- 3. Sewer lines to and from GCDs and sanitary sewer pipes shall be kept in good repair and clear of any FOG accumulation or obstructions (SCCC 13.10.040).
- 4. No FOG that has accumulated in a GCD shall be allowed to pass into any sewer lateral, the sanitary sewer system, storm drain system, or public right-of-way during maintenance activities (SCCC 13.10.240).

Records:

Owners/operators are required to keep GCD maintenance and tallow service records on-site for three years and have available for inspections (SCCC 13.10.380(i)).

FOG Control Program, Santa Clara City Codes (SCCC):

13.10.170	Limitations on point of discharge.
13.10.200	Protection from accidental discharge.
13.10.210	Pretreatment by owner.
13.10.240	Obstructing or injurious substances.
13.10.260	Hot substances.
13.10.270	Grease, oils, fats.
13.10.280	Solid or viscous matter.
13.10.370	Garbage.
13.10.380	Oil and grease removal devices.
13.10.400	Screened industrial waste.
13.10.520	Record keeping.
13.10.530	Responsibility.
13.10.540	Federal pretreatment regulations.
13.10.550	Public nuisance.
13.10.560	Falsification of information.
13.10.570	Power to inspect.
13.10.610	Issuance of cease and desist orders.
13.10.620	Emergency corrections, remedial or preventative action.
13.10.640	Penalties.
13.10.650	Appeals.
15.35.010	Adoption of Plumbing Code.