

 Building Division	<h1>GREASE, SAND AND OIL INTERCEPTORS</h1> <p>City of Palo Alto Building Inspection Division (CPA) 285 Hamilton Ave. Inspection Request: 650 329-2496</p>	<p>Draft: 10/16/07 Rev.:01/10/13</p> <p>General Requirements/Checklist for: Commercial</p> <p>Codes Enforced: 2010 CBC, CPC, CMC, CEC/NEC Palo Alto Municipal Code(PAMC)</p>
<p>The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate. Ultimately, the Contractor is responsible for work to be Code compliant as set forth in the California Code of Regulations Title 24 and PAMC.</p>		

WARNING

- Failure to complete items below prior to inspection may result in a re-inspection fee.

APPLICATION

- Newly Constructed, Tenant Improvement and Remodeled Food Service Establishments (FSE) Projects. *CPC 1014.1*
- **Newly constructed, remodeled, or converted** commercial or industrial facility with one or more grease generating activities, including food services facilities with new or replacement kitchens, for which a building permit is issued shall install or cause to be installed a grease interceptor for each grease generating activity, and sized per *CPC table h-1. PAMC 16.09.1003*
- **Sand interceptors** are required when ever the authority having jurisdiction deems it advisable to have a sand interceptor to protect the drainage system. *CPC 1016.1.2*

PAMC 16.09.032.b.16 AMENDMENTS

- Food service facilities shall have a sink for cleaning floor mats, containers, and equipment, which is connected to grease interceptors and the sanitary sewer.
- A grease collection device is required for all food service facilities.
- Food waste grinders/disposers are prohibited.

CPA ENVIRONMENTAL COMPLIANCE DIVISION REQUIREMENTS

- Please call the Environmental Compliance Division of Public Works Department at (650) 329-2598 for assistance, co-inspections or dye testing of drainage fixtures and maintenance requirements.

REQUIRED CPA INSPECTIONS

- Rough interceptor inspection: Placement and sizing of GCDs, Water test, Piping connections and sizing.
- Final: Manhole cover installed to grade, paving, Provide inspector with a copy of the "Cooking Equipment Maintenance Agreement" contract for all cooking equipment that collects grease. *CMC 515.3.2*

CPA BUILDING INSPECTION General Requirements

- See attached illustration and decision tree.
- Approved plans** shall indicate the load capacity, size, type, and location of each interceptor or separator. *CBC 1009.2*
- Location:** Each interceptor or trap shall be installed so that it is readily accessible for inspection, cleaning and removal of grease and other materials. Interceptors or traps installed outside of the building shall be constructed in such a manner so as to exclude the entrance of surface and storm water. *CPC 1009.5*
- Relief vent** is required on industrial interceptors and separators. *CPC 1004.4*
- No trap** shall be installed without a vent. *CPC 1002.2, 1004*
- Each fixture** discharging into a grease trap shall be individually trapped and vented. *CPC 1014.5*
- Waste discharges from fixtures**, including but not limited to, scullery sinks, pots and pan sinks, mop sinks, soup kettles and floor drains, shall be drained into the sanitary sewer through an interceptor/trap. Toilets, urinals and other similar fixtures shall not drain through the interceptor/trap. *CPC 1014.1*
- Interceptors and traps shall be maintained** in efficient operating condition. At a minimum, grease traps must be cleaned monthly or as deemed necessary by the industrial waste inspector. *CPC 1009.6*
- The use of chemicals**, bacteria or other agents to dissolve grease or otherwise clean grease interceptors/traps is specifically prohibited. No such grease shall be introduced into any drainage piping or public or private sewer. *CPA*
- Large capacity concrete type interceptors shall have a suitable **sample box** to provide access for collection of wastewater samples.
- Each appliance connected to a pre-cast under sink type grease trap shall have a **flow device** installed. No dishwasher may be connected to these types of grease traps. *CPC 1014.3*
- Verify GCDs installed in **vehicle traffic** areas are rated according to approved plans.

Grease Control Device (GCD) Requirements, PAMC Section 16.09.103(a) & cited Bldg/Plumbing Codes

- The plans shall specify the manufacturer details and installation details of all proposed GCDs. (CBC 1009.2)
- GCD(s) shall be installed with a minimum capacity of 500 gallons.
- The size of all GCDs installed shall be equal to or larger than what is specified on the plans.
- GCDs larger than 50 gallons (100 pounds) shall not be installed in food preparation and storage areas. Santa Clara County Department of Environmental Health prefers GCDs to be installed outside. GCDs shall be installed such that all access points or manholes are readily accessible for inspection, cleaning and removal of all contents. GCDs located outdoors shall be installed in such a manner so as to exclude the entrance of surface and storm water. (CPC 1009.5)

- All large, in-ground interceptors shall have a minimum of three manholes to allow visibility of each inlet piping, baffle (divider) wall, baffle piping and outlet piping. The plans shall clearly indicate the number of proposed manholes on the GCD. The Environmental Compliance Division of Public Works Department may authorize variances which allow GCDs with less than three manholes due to manufacture available options or adequate visibility.
- Sample boxes shall be installed downstream of all GCDs.
- All GCDs shall be fitted with relief vent(s). (CPC 1002.2 & 1004)
- GCD(s) installed in vehicle traffic areas shall be rated and indicated on plans.

Drainage Fixture Requirements, PAMC Section 16.09.106(c) & cited Bldg/Plumbing Codes

- Refer to GCD sizing calculation on the plans as a list indicating all drainage fixtures that shall connect to the GCD(s). Also the plumbing drawing shall include grease waste lines and sanitary lines for reference.
- Pots sinks, scullery sinks, Dishwashing sinks, silverware sinks, commercial dishwashing machines, silverware washing machines and similar fixtures shall be directly connected to a drainage system. A floor drain shall be provided adjacent to the fixture, and the fixture shall be connected on the sewer side of the floor trap drain trap, provided that no other drainage line is connected between the floor drain waste connection and the fixture drain. The fixture and floor drain shall be trapped and vented as required by this code CPC 704.3
- All grease generating drainage fixtures shall connect to a GCD. These include but are not limited to:
 - a. Pre-rinse (scullery) sinks (direct connection)
 - b. Three compartment sinks (pot sinks) (direct connection)
 - c. Drainage fixtures in dishwashing room except for dishwashers shall connect to a GCD (direct connection)
 - Examples: trough drains (small drains prior to entering a dishwasher), small drains on busing counters adjacent to pre-rinse sinks or silverware soaking sinks
 - d. Floor drains in dishwashing area and kitchens
 - e. Prep sinks (indirect connection)
 - f. Mop (janitor) sinks
 - g. Outside areas designated for equipment washing shall be covered and any drains contained therein shall connect to a GCD.
 - h. Drains in trash/recycling enclosures
 - i. Wok stoves, rotisserie ovens/broilers or other grease generating cooking equipment with drip lines (indirect connection)
 - j. Kettles and tilt/braising pans and associated floor drains/sinks

- The connection of any high temperature discharge lines and non-grease generating drainage fixtures to a GCD is prohibited. The following shall not be connected to a GCD:
 - k. Dishwashers (direct connection)
 - l. Steamers (indirect connection)
 - m. Pasta cookers (indirect connection)
 - n. Hot lines from buffet counters and kitchens (indirect connection)
 - o. Hand sinks (direct connection)
 - p. Ice machine drip lines (indirect connection)
 - q. Soda machine drip lines (indirect connection)
 - r. Drainage lines in bar areas (indirect connection)
- No garbage disposers (grinders) shall be installed in a FSE. (PAMC 16.09.103(e))
- Plumbing lines shall not be installed above any cooking, food preparation and storage areas.
- Each drainage fixture discharging into a GCD shall be individually trapped and vented. (CPC 1014.5)

Covered Dumpsters, Recycling and Tallow Bin Areas PAMC, 16.09.032b(16)

- New buildings constructed to house FSEs shall include a covered area for all dumpsters, bins, carts or container used for the collection of trash, recycling, food scraps and waste cooking fats, oils and grease (FOG) or tallow.
- The area shall be constructed to prevent water run-on to the area and runoff from the area.
- Drains that are installed within the enclosure for recycle and waste bins, dumpsters and tallow bins serving FSEs are optional. Any such drain installed shall be connected to a GCD.
- If tallow is to be stored outside then an adequately sized, segregated space for a tallow bin shall be included in the covered area.

Large Item Cleaning Sink, PAMC 16.09.032b(16)

- FSEs shall have a sink or other area drain which is connected to a GCD and large enough for cleaning the largest kitchen equipment such as floor mats, containers, carts, etc. Recommendation: Generally, sinks or cleaning areas larger than a typical mop/janitor sink are more useful.

Note:

- It is frequently to the FSE's advantage to install the next size larger GCD to allow for more efficient grease discharge prevention and may allow for longer times between cleaning. There are many manufacturers of GCDs which are available in different shapes, sizes and materials (plastic, reinforced fiberglass, reinforced concrete and metal)
- The requirements will assist FSEs with FOG discharge prevention to the sanitary sewer and storm drain pollution prevention. The FSE at all times shall comply with the Sewer Use Ordinance of the Palo Alto Municipal Code. The ordinances include requirements for GCDs, GCD maintenance, drainage fixtures, record keeping and construction projects.