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Description

This category includes:

- Restaurants
- Institutional cafeterias
- Grocery stores, bakeries, and delicatessens
- Any facility requiring a Health Department permit for food preparation

Pollutant Sources

The following are sources of pollutants:

- Cleaning of equipment
- Grease handling and disposal
- Spills
- Surface cleaning
- Cooling and refrigeration equipment maintenance
- Landscaping and grounds maintenance
- Dumpster and loading dock area
- Parking lots
- Illicit connections to storm drain system

Pollutants can include:

- Organic materials (food wastes)
- Oil and grease



■ Toxic chemicals in cleaning products, disinfectants, and pesticides

Approach

Minimize exposure of rain and runoff to outdoor cleaning and storage areas by using cover and containment. In and around these areas, use good housekeeping to minimize the generation of pollutants. Make stormwater pollution prevention BMPs a part of standard operating procedures and the employee training program. Provide employee education materials in the first language of employees.

Source Control BMPs

The best management practices are listed by activity or area.

Dumpster and Loading Dock Areas

- All solid and liquid wastes, such as tallow, must be stored and transferred in watertight covered containers.
- Keep litter from accumulating around loading docks by providing trash receptacles and encouraging employees to use them.
- Bag and seal food waste before putting it in the dumpster. Do not place uncontained liquids, or leaking containers or garbage bags into a dumpster.
- Keep dumpster lids closed to keep out rainwater and to prevent trash from spilling out.
- If the dumpster regularly overflows, get a bigger one or arrange for more frequent collection.
- Don't hose out dumpsters. Apply absorbent over any fluids spilled in dumpster. Absorbent will usually be knocked out when the dumpster is emptied.
- Have the dumpster leasing company repair or replace leaky dumpsters and compactors, and have them clean out dirty dumpsters.
- Have spill cleanup materials handy near the dumpster and loading dock areas.
- Post employee reminder signs such as "Keep lid closed" near tallow bins and dumpsters.
- Consider enclosing the dumpster in a roofed and bermed area to prevent exposure to rainwater, and draining the area to the sanitary sewer. Contact the local wastewater treatment plant or the county environmental health department for guidance.
- Keep dumpsters or the dumpster enclosure locked to prevent illegal dumping.
- For more information on cleaning dumpster areas see the Mobile Cleaning Food Service Business-related business guide sheet in this series.

Equipment and Outdoor Cleaning

- Make sure all discharges from cooling equipment go to the sanitary sewer and not the street, gutter, or storm drain.
- Clean floor mats, filters, and garbage cans in a mop sink, floor drain, or proper outside area connected to the sanitary sewer with an oil and water separator. Don't wash them in a parking lot, alley, sidewalk, or street.
- Consider installing anti-slip floors when you remodel.

- Consider cleaning filters in the dishwasher. Contact the local wastewater treatment plant or the county environmental health department for guidance.
- Pour wash water into a janitorial or mop sink. Don't pour it out onto a parking lot, alley, sidewalk, or street.
- For outdoor cleaning, have employees or contractors follow the instructions in the following business guide sheet in this series:
 - Mobile Cleaning Food Service Business-related
 - Mobile Cleaning Surface cleaning

For more information in general on cleaning floor mats, equipment, exhaust filters, and outdoor surfaces see the Mobile Cleaning - Food Service Business-related business guide sheet in this series.

Spill Cleanup

- Prepare a spill cleanup plan that includes:
 - Procedures for different types of spills
 - Schedule for initial and annual training of employees
 - Cleanup kits in well-marked, accessible areas
 - Designation of key employee who monitors cleanup
 - Posting the plan in the work area
- First, stop the spill at its source.
- Keep the spill from entering the street, gutter, or storm drain.
- Use dry methods for spill cleanup (sweeping, cat litter, etc.). Don't hose down spills.
- If wet cleaning (including high-temperature or high pressure washing) is required, dry clean first and then mop (or if it is absolutely necessary, wash) and collect the water. Dispose of water in sink or other indoor drain, not in the street, gutter, or storm drain.
- If a final rinse is necessary for health reasons, collect the rinsewater and dispose it to the sink or indoor floor drain. If outdoors, block the storm drain before applying water. Mop up or wet-vacuum water, and dispose it to a sink or indoor drain.
- Do not use bleach or disinfectants if there is a possibility that rinsewater could flow to a street, gutter, or storm drain.

For more information on cleaning outdoor surfaces see the Mobile Cleaning - Surface Cleaning business guide sheet in this series.

Recycling and Disposal

- Separate wastes. Keep your recyclable wastes in separate containers according to the type of material. They are easier to recycle if separated.
- Recycle the following materials:
 - Food waste (non-greasy, non-animal food waste can be composted). Donate leftover, edible food whenever possible to local food banks.
 - Paper and cardboard

- Container glass, aluminum, and tin
- Pallets and drums
- Dispose of toxic waste properly. Toxic waste includes used cleaners, and rags (soaked with solvents, floor cleaners, and detergents).

Grease Handling and Disposal

- Never pour oil, grease, or large quantities of oily liquids such as sauces or salad dressings or waste grease down a sink, floor drain, storm drain, or into a dumpster.
- Install screens and solid traps in sink and floor drains to catch larger solids. Clean these screens and traps frequently.
- Don't try to "dissolve" grease by adding hot water or emulsifying chemicals it will only
 move the grease further down the building's sewer line and make it harder to remove
 later.
- Recycle grease and oil. Don't pour it into sinks, floor drains, or onto a parking lot or street. Look in the phone book for "Renderers" or call the local recycling or household hazardous waste information line.
- Use tallow bins or sealed containers with tamper-proof lids. Keep the exterior of the container clean. Check for leaks. Ask the recycler for a leak-free tallow bin and replace any leaky grease containers. If grease is stored outside, keep it under a roof, if possible.
- Do not contaminate the recyclable oils and grease in the tallow bin with the waste grease from the grease trap or grease interceptor.
- Inspect and clean all waste grease removal devices (grease trap or grease interceptor) often enough to keep them functioning properly and efficiently.
- For disposal of waste grease from the grease trap or grease interceptor, see "Grease Traps" or "Septic Tanks" in the phone book.

Landscaping and Grounds Maintenance

- Never dispose of leftover pesticides in the gutter, street, or storm drain. Leftover pesticides must be either used up or disposed of as hazardous waste.
- Do not blow or rake leaves, grass, or garden clippings into the street, gutter, or storm drain.
- If pesticides are used, do not over apply or apply when rain is forecast.
- Do not use copper-based algicides in pools or fountains. Control algae with chlorine or other alternatives to copper-based products.

Pest Control

Assign the task below to a "pest control captain." Check weekly to be sure they are done.

Food Sources

- Keep the kitchen free of food scraps.
- Take out garbage each night in a closed container.
- Refrigerate all food or store in pest-proof containers each night.
- Keep ventilation system working properly to keep greasy residue off walls.

Appliances

- Keep dishwasher area clean. Check the trap nightly.
- Where possible, elevate appliances at least 6 inches off the floor.
- Clean under appliances nightly.
- Steam clean or wash appliances weekly.
- Remember to clean under the counter, under the sink, and the refrigerator vent.

Drains and Trash Cans

- Steam clean or scrub floor drains with a brush to help eliminate fruit flies.
- Keep dumpster area clean inside and out.
- Wash garbage cans periodically.

Supplies and Entry Points

- Check for pests before bringing supplies in to the kitchen. Roaches like corrugated boxes.
- Don't store boxes in the kitchen take boxes away or store in a refrigerated area.
- Seal any gaps below doors.

When hiring a pest control service, look for a company that provides Integrated Pest Management (IPM) services. Work with them to:

Reduce Habitat

- Inspect the entire establishment inside and out.
- Suggest physical modifications that may help to eliminate pest behavior.
- Suggest changes in food storage or cleanup practices to eliminate food sources for pests.
- Place boric acid powder in wall voids.
- Seal cracks and crevices.
- Fill holes in the building's exterior.

Monitor for Pests

• Use sticky traps to monitor how well the pest control program is working. Pests caught in the traps warn of a possible problem.

Use Baits First

- Use baits for controlling pests. Remove bait when pests are gone, or else the bait may attract more pests.
- Use chemicals only as a last resort. If absolutely necessary, choose less-toxic chemicals, and ask the pest service to provide label information.
- Apply pesticides only if necessary, not on a regular schedule. Follow label directions. Do not apply pesticides around floor drains, sinks, or food.

Purchasing

■ Use non-disposable products. Serve food on ceramic dishware rather than paper, plastic or Styrofoam, and use cloth napkins rather than paper ones. If you must use disposable products, use paper instead of Styrofoam.

- Buy the least toxic products available.
 - Look for "non-toxic," "non-petroleum based," "free of ammonia, phosphates, dye, or perfume," or "readily biodegradable" on the label. Don't assume biodegradable products are safe. Biodegradable means the product will eventually break down, but it may harm the environment in the meantime.
 - Avoid chlorinated compounds, petroleum distillates, phenols, formaldehyde, and caustic or acidic products.
 - Use water-based products.
 - Look for and purchase "recycled" and "recyclable" containers. By doing so, you help ensure a use for the recyclable materials that people collect and recycle.

Education and Training

Employees can help prevent pollution when urban runoff training is included in employee orientations and reviews. Train all employees upon hiring and annually thereafter. Use a training log to document employee training. Promote these BMPs:

- Storage containers should be regularly inspected and kept in good condition.
 - Place materials inside rigid, durable, water-tight and rodent-proof containers with tight fitting covers.
 - Store materials inside a building or build a covered area that is paved and designed to prevent runoff from entering storm drains.
 - Place temporary plastic sheeting over materials or containers and secure the cover with ties and weighted objects. (Not appropriate for storing liquids.)
- Post BMPs where employees and customers can see them.
- Remember the facility is liable for the behavior of contractors. Be sure all contractors hired to clean inside or outside are aware of and implement these BMPs.
- Explain BMPs to other food businesses through your business associations or chambers of commerce.
- Label storm drain inlets with a stormwater pollution prevention message.

Treatment Control BMPs

For information on inspecting and maintaining treatment controls, see Section 4 of this handbook.

For information on designing treatment controls, see Section 5 of the Development and Redevelopment Handbook.

More Information

Booklets, Checklists, Fact Sheets, and Pamphlets

General Water Pollution Prevention

Bay Area Storm Water Management Agencies Association (BASMAA), 1996. Pollution from Surface Cleaning – Flat Work, Sidewalks, Plazas, Building exteriors, Parking areas, Drive-Thru.

City of Santa Cruz, 2000. Food Service Facilities – Best Management Practices, Section 2 of Best Management Practices Manual for the Storm Water Program.

Fairfield-Suisun Urban Runoff Management Program, 1999. Storm Water Pollution Prevention Practices for Mobile Cleaning Activities, Guidance for Mobile Washers Who Clean Buildings Exteriors, Flat Work, Sidewalks, Drive-Thru, Plazas, Parking Areas or Who Perform Fleet Washing, Auto Detailing, Carpet Cleaning, or Food-Related Cleaning Activities.

Grease Management

Bay Area Pollution Prevention Group, 2001. Avoid Fines and Health Risks from Grease Overflows.

Contra Costa Clean Water Program, City of Concord, and Central Contra Costa Sanitary District, no date. Water Pollution Prevention Tips: Tips to protect water quality and keep your food service facility clean.

Eastern Municipal Water District (Riverside County), 1993. Grease...Help for the Food Service Establishment.

Regional Water Quality Control Plant—Palo Alto, 1996. Food Service Facilities – Selecting and installing a grease removal device.

Food Production

County of Los Angeles, no date. Food and Related Facilities – Best Management Practices, Project Pollution Prevention.

Posters

2002 Poster, San Bernardino County Stormwater

City and County of San Francisco, 2000. Don't Set a Table for Pests! Serving them costs more than you think!

Los Angeles County, 1995. Good Cleaning Practices – Food & Restaurant Industry.

Santa Clara Valley Nonpoint Source Pollution Control Program, 1994. Good Cleaning Practices to Protect Our Creeks and Bay.

Videos

City of Monterey and Monterey Bay National Marine Sanctuary, 2000. Make the Connection: BMPs for Restaurant Kitchen Staff on how to prevent storm drain pollution.

References

Bay Area Pollution Prevention Group, 2001. Avoid Fines and Health Risks from Grease Overflows.

Bay Area Storm Water Management Agencies Association (BASMAA), 1996. Pollution from Surface Cleaning – Flat Work, Sidewalks, Plazas, Building exteriors, Parking areas, Drive-Thru.

City and County of San Francisco, 2000. Don't Set a Table for Pests! Serving them costs more than you think! poster.

City of Santa Cruz, 2000. Food Service Facilities – Best Management Practices, Section 2 of Best Management Practices Manual for the Storm Water Program.

Contra Costa Clean Water Program, City of Concord, and Central Contra Costa Sanitary District, no date. Water Pollution Prevention Tips: Tips to protect water quality and keep your food service facility clean.

County of Los Angeles, no date. Food and Related Facilities – Best Management Practices, Project Pollution Prevention poster.

Eastern Municipal Water District (Riverside County), 1993. Grease...Help for the Food Service Establishment.

Fairfield-Suisun Urban Runoff Management Program, 1999. Storm Water Pollution Prevention Practices for Mobile Cleaning Activities, Guidance for Mobile Washers Who Clean Buildings Exteriors, Flat Work, Sidewalks, Drive-Throughs, Plazas, Parking Areas or Who Perform Fleet Washing, Auto Detailing, Carpet Cleaning, or Food-Related Cleaning Activities.

Los Angeles County, 1995. Good Cleaning Practices – Food & Restaurant Industry.

Regional Water Quality Control Plant—Palo Alto, 1996. Be a part of the Team! Keep the Bay CLEAN! Water Quality Protection Guidelines for Food Handling Facilities.

Regional Water Quality Control Plant—Palo Alto, 1996. Food Service Facilities – Selecting and installing a grease removal device.

Santa Clara Valley Nonpoint Source Pollution Control Program, 1994. Good Cleaning Practices to Protect Our Creeks and Bay poster.