OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Food Handling Facilities, Waste Reduction & Water Quality Protection Guidelines

Food handling facilities such as restaurants, institutional cafeterias, grocery stores, bakeries, and delis, can contribute to storm water pollution, mainly through improper cleanup practices that allow food particles, oil and grease, and cleaning products to flow to a street, gutter, or storm drain. Storm water that flows directly to local creeks may contain a variety of pollutants. Storm water pollution is a serious problem for wildlife dependent on our waterways, and for people who live near polluted streams.

There are federal, state, county, city and town ordinances that apply to the discharge of materials other than storm water to the storm system. In Oklahoma, the discharge of oil and grease to a sanitary line is governed by the requirements of the receiving treatment plant. Also, some municipal Public Works Departments may be required to develop a Storm Water Plan for the public storm conveyance system.

Following the "**Best Management Practices**" (BMPs) in this manual will provide guidance for compliance with protocols for discharging to the sanitary system or to a storm water system.

What types of pollution do food handling facilities generate?

All substances left in a street, gutter, parking lot, or alley - dumped into a storm drain - end up in local creeks with no treatment.

- In addition to drawing flies and vermin and causing odor and public health problems, decaying organic materials use up dissolved oxygen in streams and bays, stressing or killing aquatic animals.
- Oil and grease cause additional health problems, and also plug sanitary sewer lines, causing sewer backups and severe risks to human health.
- Food handling facilities sometimes also discharge toxic chemicals, including cleaning products, disinfectants, and pesticides. Even biodegradable soaps contain ingredients that are initially toxic to aquatic life.

Sewer or storm drain?

If you are not certain whether a drain leads to the storm drain or sanitary sewer, call your city's sewer department so that they can help you resolve the question. In general, drains inside the building are connected to the sanitary sewer, and outside drains (except for capped sanitary sewer "cleanouts") are connected to the storm drain system. Sanitary sewer cleanouts are usually 6 inches in diameter or smaller, and storm drain inlets are larger - but there are exceptions. You need to know for sure!

When you're doing this...	...Don't forget to do this!
Cleaning dumpster areas, loading docks, or any paved surfaces	Control litter. Make sure the leasing company maintains and cleans dumpsters regularly; return leaking dumpsters for repair immediately. If you must wash down a dumpster, loading dock or other outdoor surface for health reasons, use dry cleanup methods first, and then rinse, collect water, and discharge to the sink or indoor floor drain.
Cleaning up spills	Control the spill, then sweep or clean up with rags and granular absorbents. Dispose absorbents to trash, then mop and collect water, put down mop sink, curbed mop basin, or indoor floor drain.
Cleaning up hazardous materials (e.g., cleaning products)	Use procedure above, but send residue and absorbents to a hazardous waste disposal site.
Cleaning large equipment	Clean indoors or within a bermed outdoor area where cleaning water will not flow to a storm drain. Collect water and dispose to a sink or indoor floor drain.
Handling grease, oils, and meat fat	Save for recycling in sealed containers. Never pour into a sink, floor drain, or storm drain.
Maintaining cooling towers and refrigeration equipment	Make sure all discharges go to the sanitary sewer and NOT to the street, storm drain, or creek. Advise your maintenance contractor about storm drain protection.
Landscaping and garden maintenance	Control erosion. Keep yard waste out of the street and storm drain. Use chemicals sparingly and never in wet weather.

BMP #1

Spill Cleanup & Pavement Cleaning

When cleaning dumpster areas, loading docks, and other paved surfaces, and whenever a spill occurs

1. **First, stop any spill at its source**.
2. Next, dry sweep.
3. If wet cleaning (including high temperature or high-pressure washing) is required, use this 3-step process:
   - Clean up as much as possible with rags.
   - Use granular absorbents (e.g. cat litter) to collect residue. Sweep and dispose in trash if hazardous materials are not involved.
   - Mop (or, if absolutely necessary, wash) and collect water, and dispose of water in sink or sewer drain, not the storm drain.
4. If a final rinse is necessary for health reasons, collect the rinse-water and dispose to sink or indoor floor drain.
   If outdoors, block storm drain before applying water, collect water, and dispose to sink or indoor drain.
5. Do not use bleach or disinfectants if there is a possibility that rinsewater could flow to a street, gutter or storm drain.

Dumpsters and loading dock areas

- Have spill cleanup materials handy in dumpster and loading dock areas.
- Keep litter from accumulating around loading docks by providing trash receptacles and encouraging employees to use them.
- Make sure that dumpsters and containers of grease, meat fat, and used cooking oil are always tightly covered. Make sure that drain holes are plugged to prevent leakage.

Spill Cleanup Plan

Each establishment should have a spill clean-up plan that includes:

- Procedures for different types of spills
- Schedule for training and refreshing employees about the procedures
- Clean-up kits in well-marked, accessible locations
- Designation of a key employee who monitors clean-up

Post the plan in the work area.

BMP #2

Cleaning & maintaining equipment

When cleaning floor mats, carts, tray racks, exhaust filters, hoods, cooking equipment, food containers, etc.

1. **Do not clean equipment outdoors or in any area where water may flow to a street, gutter storm drain, or creek**.
   In order of preference:
   - *Clean equipment in a designated indoor area, such as a kitchen sink or floor, with a drain connected to the sanitary sewer.*
   - *Clean equipment in a designated covered outdoor area with a drain connected to the sanitary sewer. This area should be isolated from the storm drain with a berm or other barrier.*
   - *Clean equipment in a small, designated uncovered outdoor area, isolated from the storm drain with a berm or other barrier, where water can be collected for disposal in the sanitary sewer.*

1. Use a static rinse tank to clean filters, screens frying racks, etc. Dispose of used solution to the sanitary sewer.

2. If possible, use floor mats that are small enough to be cleaned inside near a floor sink or drain plumbed to the sanitary sewer.

3. Drain, oven, and toilet bowl cleaner: Use up, and place empty containers in dumpster.

BMP 3#

Grease handling & disposal

When cleaning frying equipment or storing or grease for removal to a grease recycler

1. **Never pour oil grease, or large quantities of oily liquids such as sauces or salad dressings down a sink, sanitary sewer drain, storm drain, or into dumpster.** Most landfills will not accept grease or other liquid wastes from business/commercial customers.
2. Recycle waste oil and grease whenever possible.
3. Inspect and clean grease interceptors and traps regularly. Some county regulations require you to clean grease traps at least every three months.

BMP #4

Refrigeration/Cooling tower maintenance

For large food handling facilities, such as grocery stores, with large refrigeration units and cooling towers

1. Make sure all discharges from cooling equipment go to the sanitary sewer and **NOT** to the street, storm drain, or creek.
2. Make sure your maintenance contractor is knowledgeable and skilled at minimizing corrosion with correct chemical treatment.

BMP #5

Landscape & garden maintenance

For restaurants and other businesses with landscaped grounds

1. Schedule grading and earth-moving landscaping projects for periods of dry weather.
2. When landscaping, protect nearby storm drains with hay bales or other erosion controls.
3. Collect grass clippings, leaves, tree pruning waste, etc. for composting, or place in trash. Do not blow, rake or sweep yard waste into the street or gutter.
4. Use minimal amounts of pesticides, fertilizers, etc.–and only in dry weather periods. Never exceed manufacturer's recommended application rates. Landscaping runoff is a significant source of stormwater pollution.
5. Do not use copper-based algaecides in pools or fountains. Control algae with chlorine or other alternatives to copper-based products.
6. Discuss good pollution prevention practices with all employees at least quarterly.
7. Systematically inform new employees about these best management practices.
8. Post cleanup guidelines and the name of each shift's designated spill cleanup monitor in a visible location.
9. Complete the following checklist, and share it with employees.

CHECKLIST FOR WATER QUALITY PROTECTION

General Information	Yes	No	N/A
1. All management personnel have reviewed this brochure.	__	__	__
2. All employees have been advised of these BMP's.	__	__	__
3. Storm drains are stenciled "I only drain rain".	__	__	__
Grease Traps/Interceptors			
1. A grease trap is located inside the facility.	__	__	__
2. A grease interceptor is located outside the facility.	__	__	__
3. Frequency of pumping/removing grease: ___weekly? ___monthly? ___yearly?	__	__	__
4. All records of grease pumping are kept for the period of time specified by local ordinance.	__	__	__
5. The following fixtures are connected to a trap or interceptor:			
a. Wall or floor-mounted sinks	__	__	__
b. Automatic dishwashers	__	__	__
c. Floor drains	__	__	__
d. Other _____	__	__	__
Spill Response			
1. In case of a spill (e.g., grease), absorbents such as cat litter are readily available.	__	__	__
2. Employees are trained:			
a. To control and clean up spills	__	__	__
b. To call for assistance in case of emergencies	__	__	__
Equipment Cleaning			
1. The following items are cleaned in such a manner that all washwater goes to the sanitary sewer or is hauled offsite:			
a. Grease filters	__	__	__
b. Floor mats	__	__	__
c. Floors (mop water and rinse water)	__	__	__
d. Grill(s)	__	__	__
e. Other _____	__	__	__
Dumpsters and Recycling Containers			
1. Dumpsters and recycling containers are always covered.	__	__	__
2. There are no signs of leaks or missing drain plugs.	__	__	__
3. Spilled materials around garbage containers are picked up regularly.	__	__	__
If water is used to clean the area, washwater is collected or directed to the sanitary sewer.	__	__	__

In case of a spill or emergency...
For help stopping spills from flowing to a creek or storm drain, call DEQ Hotline at 1-800-522-0206.

RESOURCES

American Public Works Association (APWA)
2345 Grand Blvd., Suite 500
Kansas City, MO 64108
Telephone: (202) 393-2792
Email Address: apwa@bbs.pubworks.org

American Water Works Association (AWWA)
6666 West Quincy Avenue
Denver, CO 80235
Telephone: (303) 794-7711 ***Fax:*** (303) 795-1440
Email Address: bbeaudet@awwa.org

Consortium for Decentralized Wastewater Technology and Management
www.tuns.ca/wwater/

Environmental Finance Center- Region 6 University of New Mexico
nmeri.unm.edu/ta/efc.htm

Ground Water Protection Council gwpc.site.net/gwpc/
827 NW 63rd Street, Suite 103
Oklahoma City, OK 73116
Telephone: (405) 848-0690 ***Fax:*** (405) 848-0722

National Rural Water Association www.cais.com/nrwainfo/
2915 S. 13th Street
Duncan, OK 73533
Telephone: (405) 252-0629 ***Fax:*** (405) 255-4476
Email Address: nrwainfo@nrwa.org

Wastewater Virtual Library Information www.halcyon.com/cleanh2o/ww/

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For more information:
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