

STORM WATER MANAGEMENT



Best Management Practice Guide

Food Service Facilities

Presented by:

Evansville City Engineer's Office
1 NW Martin Luther King Jr Blvd
Civic Center Complex, Room 321
Evansville, IN 47708

Focus of Document

This guidance presents best management practices (BMPs) to address the discharge of pollutants to the storm drainage system from food service facilities. These facilities include:

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

Sources of Pollutants

There are several activities that can potentially cause the discharge of pollutants to the storm drainage system from these facilities. These activities of concern include:

- Cleaning of equipment
- Grease handling and disposal
- Spill cleanup and surface cleaning
- Dumpster and loading dock area
- Cooling and refrigeration equipment maintenance
- Landscaping and grounds maintenance
- Parking lots
- Illegal connections
- Use of toxic cleaners

Pollutants of Concern

Some of the pollutants of concern from these facilities are:

- Organic materials (food wastes)
- Fats, Oil and Grease (FOG)
- Toxic chemicals in cleaning products, disinfectants, and pesticides

Best Management Practices

Best management practices are common sense, good housekeeping measures that can be implemented at reasonable effort and cost to the facility owner/operator. Many facility owners/operators are already implementing some of these practices. BMPs listed below apply mainly to the operations of such facilities. Structural controls or physical improvements are generally not recommended for existing facilities although opportunities for structural controls should be utilized when new food service facilities are constructed, or existing ones are remodeled.

Facility Maintenance and Management Practices

Cleaning Equipment

- Clean equipment in a designated indoor area, such as a mop sink, pot sink, or floor area with a drain connected to the sanitary sewer (indoor plumbing).
- Clean equipment in a designated covered, bermed outdoor area with a drain connected to the sanitary sewer (indoor plumbing). Don't allow food wastes to accumulate in this area.
- Do not clean equipment outdoors in any area where water may flow to a street, gutter, storm drain, or creek.
- If possible, use floor mats that are small enough to be cleaned inside in a mop sink or near a floor drain.
- If floor mats are too big to clean indoors, take them to a self-service car wash to clean. Alternately, identify a large enough area in your facility for washing mats, and make sure wash water drains to the sanitary sewer.
- For hood filter cleaning companies, search "Restaurant Equipment Repairing and Servicing" in your search engine of choice. Ensure the company is properly disposing of any used greasy wastewater they generate onsite.

Grease Handling and Disposal

- Never pour oil, grease, or sauces or salad dressings or waste grease down a storm drain, or into a dumpster. Use a recycler or a liquid disposal company.
- For disposal of waste grease from grease interceptors and traps, contact a disposal firm listed under "Grease Traps" and "Septic tanks". Most landfills will not accept grease or other liquid waste from businesses. It is in your best interest to ensure that your waste grease is disposed of properly. Ask your waste grease hauler where your waste grease is disposed of.

Spill Cleanup and Surface Cleaning

Spill Prevention

- Maintain and keep current, as required by other regulations, a spill response plan.
- Minimize the distance between waste collection points and storage areas.
- Contain and cover all solid and liquid wastes — especially during transfer.
- Purchase and maintain absorbent materials and other spill response equipment in accordance with local regulations and procedures for containment and cleanup of different spills, and make sure they are easily accessible anywhere in the shop. Saturated absorbents generally must be disposed of as hazardous waste.
- "Spot clean" leaks and drips routinely. Leaks are not cleaned up until the absorbent is picked up and disposed of properly.
- Check floor drains to ensure that they are not connected to or discharging to the storm drain system (see Rationale 6 at the end of section).

Spill Cleanup

- First, stop any spill at its source.
- Do not clean up spills by hosing down wash water into the gutter or a storm drain.
- If the spill could enter a storm drain, protect the drain with sandbags, absorbent rags, or a pile of dirt. You can temporarily seal the storm drain with plastic sheeting.
- Use granular absorbents (e.g. cat litter) to absorb the spill. Dry sweep and dispose of used absorbent in the garbage (if hazardous materials are not spilled).
- 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 water. Dispose of water in sink or other indoor drain, not the storm drain.
- 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 drains before applying water. Mop up or wet-vacuum water and dispose to sink or indoor drain.
- Do not use bleach or disinfectants if there is a possibility that the rinse water could flow to a street, gutter, or storm drain.

Education and Training

- Train all employees upon hiring – and annually thereafter – on personal safety, chemical management, and proper methods for handling and disposing of waste. Make sure that all employees understand storm water discharge prohibitions, wastewater discharge requirements, and these best management practices. Use a training log or similar method to document training (see Rationale 1 and 5 at the end of section).
- Post instructional/informational signs around your shop for customers and employees. Put signs above all sinks prohibiting discharges of vehicle fluids and wastes. Put signs on faucets (hose bibbs) reminding employees to conserve water and not to use water to clean up spills.
- Label outdoor drains by paint/stencil (or equivalent) to indicate whether they flow to an on-site treatment device or to a storm drain. Labels are not necessary for plumbing fixtures directly connected to the sanitary sewer (see Rationale 3 at the end of section).

Dumpster and Loading Dock Areas

- Keep dumpster lids closed to keep out rainwater.
- Keep dumpsters or the dumpster enclosure locked to prevent illegal dumping.
- Never place liquid waste or leaky garbage bags into a dumpster.
- Don't hose out dumpster interior in areas that drain to the storm drain system. Apply absorbent if any fluids are spilled in the dumpster. (Dumpster may be hosed if the wash area drains to the sanitary sewer.)
- Leaking dumpsters and compactors, and dumpsters that need to be cleaned out, should be serviced by the dumpster leasing company.

- Make sure used cooking oil bins (cooking oil/meat fat recycling bin), and any containers of waste grease are always tightly covered to prevent contamination of the grease and to prevent problems with rats and insects.
- Have spill cleanup materials handy near the dumpster and loading dock areas.

Cooling and Refrigeration Equipment Maintenance

- Make sure all discharges from cooling and refrigeration equipment go to the sanitary sewer and not to the street, storm drain, or creek.
- Make sure your maintenance contractor is knowledgeable and skilled at minimizing corrosion with correct chemical treatments.

Landscaping and Grounds Maintenance

- Use up pesticides. Rinse containers and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost or dispose appropriately. Do not place clippings, pruning waste, or tree trimmings in gutters. Do not blow or rake leaves, etc. into the street.
- In communities with yard waste recycling, leave clippings and pruning waste for pickup in approved bags or containers or take to a landfill that composts yard waste.

New or Substantially Remodeled Food Service Facilities

The elements listed below should be included in the design and construction of new or substantially remodeled food service facilities.

- Grade and pave the outdoor waste receptacle area to prevent run-off of storm water.
- Alternately, store the waste receptacle in a covered enclosure with wash down capability.

Rationale for BMPs

BMPs that are mostly preventative practices are typically inexpensive to implement versus collection, treatment and disposal of water that has picked up pollutants. The rationale(s) used in this guide are listed below:

- 1) Rationale: Prevention practices are cost effective and relatively inexpensive to implement vs. collection, treatment disposal of wastewater or fines. Materials to achieve dry cleaning are readily available and materials can be disposed of through existing practices.
- 2) Rationale: Pollutants from incidental spills and leaks and trash will collect in storm drain facilities during dry weather period and will be a significant source of pollutants during the first significant storm. Cleaning will remove this potential source.

- 3) Rationale: The public in general do not realize that storm drains flow directly through to the streams, lakes, and rivers without treatment. Labeling storm drains is an effective method of public education.
- 4) Rationale: HAZMAT and HAZWASTE are toxic to aquatic life and waterfowl in streams, lakes, rivers, and prevention of spills is more cost effective than cleanup.
- 5) Rationale: Spills are cheaper to clean up when quickly contained. A spill response plan will prepare employees to use equipment and material available for containment and cleanup, and to ensure their safety while doing the cleanup.
- 6) Rationale: Improperly plumbed floor drains can become a direct point of discharge of spills that occur indoors and outdoors to streams and waterways.
- 7) Rationale: Cleaning products, disinfectants, and pesticides are toxic to aquatic and wildlife and must be prevented from entering the storm drainage system.

SCAN QR CODE



HELP?

For assistance with implementation of Best Management Practices, municipal staff or facility owners and operators should contact:

**Evansville City Engineer's Office
Storm Water Management Department
1 NW Martin Luther King Jr. Blvd., Rm 321
Evansville, IN 47708
Office: 812.436.4977**