



3.4 POST CONSTRUCTION STORMWATER CONTROL FACT SHEETS (PTP)

Post Construction Stormwater Control Practices	PTP-07 Grease Management
<p data-bbox="235 489 358 611"></p> <p data-bbox="228 695 321 722">Symbol</p> <p data-bbox="215 814 358 926"></p>	
<p data-bbox="191 1108 365 1150">Description</p>	<p data-bbox="399 1108 1401 1371">Many businesses such as restaurants and food manufacturing generate grease waste during daily operations. The disposal of grease wastes can become a significant source of pollution in streams if not managed properly. Spills, overflows, and leaks occur due to poor maintenance of storage facilities and lack of proper disposal education. This fact sheet addresses proper disposal technique and storage facilities to hold used fats, oils, and grease. In addition to water quality pollution impacts, poor management practices can cause unpleasant odors, attract rodents, and have negative visual effects.</p> <p data-bbox="399 1409 1401 1514">As grease spills may cause potential health risks, grease practices should be approved by the Health Department, and sites should be maintained according to any special operating requirements for food service establishments or grease collection systems.</p> <p data-bbox="191 1549 380 1591">Applications</p> <p data-bbox="399 1549 1401 1734">Grease is generated from several different sources, including meat fats, lard, food scraps, sauces, butter or margarine, shortening, and dairy products. Food service industries such as restaurants should implement grease management and staff education to ensure implementation. Grease management implementation is suitable for the following applications:</p> <ul data-bbox="407 1755 751 1934" style="list-style-type: none">➤ Restaurants➤ Food Preparation Facilities➤ Food Manufacturers➤ Caterers



Approach

Cover and Contain

In situations where the grease collection dumpster is located outside, overhead cover in the form of a canopy and containment, via a curb system is recommended.

Treat and Discharge

For situations where grease has the potential to be released to the ground, a treat and discharge solution is recommended. This could be accomplished by installing a BMP such as a water quality unit (PTP-06) or another BMP designed to remove oils and greases.

Internal Grease Management

An internal collection system is a closed-loop, grease and oil collection system that utilizes two storage tanks, one each for fresh oil and waste oil. The system directly connects the flow of fresh oil to kitchen oil fryers. Once this oil has been used, the system can directly pump new oil in while the used oil is pumped out. Waste oil and grease is then drained through a filter and to the waste oil storage tank.

Maintenance

A maintenance and operation plan must be submitted for grease management structures that specifically addresses the following items:

- Inspect storage area weekly and following rainfall events
- Repair or replace containment structures, perimeter controls, or storage bin as needed

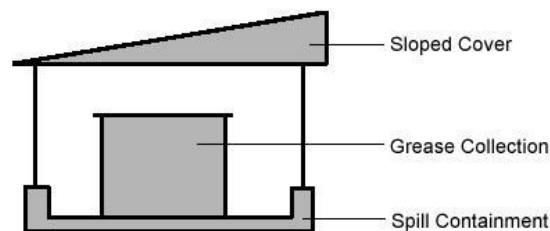


Figure PTP-07- 1 Containment for grease disposal



Management Alternatives

Exterior containment of grease is one management solution, but other management solutions exist. Alternative grease management techniques that are available include internal collection systems (shown in Figure PTP-07-02). These systems, if properly maintained and installed, may be better suited for restaurants or other food preparation facilities that utilize deep fryers or other cooking equipment using large quantities of oil. These systems are often preferred to minimize spills, transfer containers, and related employee injuries.

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The system is metered by a service provider who monitors need for delivery of new oil and removal of waste oil. This is performed through a pump system and directly transferred to the delivery/removal truck.

Although the City of Bowling Green does not endorse specific brands or products, one example of an internal collection system manufacturer and provider is Restaurant Technologies, Inc. (RTI). More information about RTI products can be found on their website, www.rti-inc.com.



Figure PTP-07- 2 Internal Grease Collection System