

CITY OF SHEPHERDSVILLE
OIL & GREASE
CONTROL PROGRAM

**SHEPHERDSVILLE OIL & GREASE
CONTROL PROGRAM**

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CITY OF SHEPHERDSVILLE
OIL & GREASE CONTROL PROGRAM

INTRODUCTION

This document outlines the policies and procedures for the City of Shepherdsville's Oil & Grease Control Program. This program originated as a result of several flow obstructions within the sanitary sewer collection system that were caused by large amounts of fatty oils and grease (FOG). These obstructions have blocked the sewer lines to the point of breaking them in some cases. In addition, large amounts of FOG have entered the Shepherdsville Wastewater Treatment Plant and not only prohibited it from operating efficiently, but have also increased operations cost for the facility.

In an attempt to prevent and control these problems, this Oil & Grease Control Program has been developed for the Shepherdsville sanitary sewer system. This program covers the City's survey of commercial users to determine participation, grease interceptor design and installation, sampling, inspection and clean-out procedures, permitting issues and enforcement policies.

The primary purpose of the program is to prevent the introduction of fatty oil & grease into the sanitary sewer where it can cause flow obstruction and/or inhibition of the wastewater treatment works. It is the City's intent to encourage recycling and beneficial reuse of this material wherever possible. This will be done by requiring the use of grease recycling equipment and companies to remove the material after collection, whenever possible.

Since prevention cannot be entirely effective, the secondary purpose of the program is to control the amount of FOG actually entering the collection system. This control will be done by requiring all food preparation establishments that generate large quantities of FOG to install and maintain adequately-sized grease interceptors. A rigid clean-out schedule for all grease traps will also be implemented through the use of permits and reporting requirements.

Inspections will also be conducted to insure that grease traps are properly cleaned and maintained consistently.

Examples of Oil & Grease Control Permits and permit applications, inspection checklist, and clean-out receipts are included in this document. In addition, basic policies regarding the size and design of grease interceptors are also included.

SECTION I
COMMERCIAL WASTE SURVEY

A. Description of Survey

In January of 2001, City of Shepherdsville personnel and consultants performed a survey to determine the need for an Oil & Grease Control Program for the commercial users of the city sanitary sewer system. This survey consisted of site visits at various commercial facilities to locate grease interceptors and possible sampling points and interviews with owners and/or employees to obtain information about their interceptors. The survey indicated that many of the commercial facilities discharging to the Shepherdsville sewer had very little knowledge of their interceptors and many were not pumping them regularly. Few knew the rate of pumping, if conducted, or who conducted such activities. The results of this survey are outlined in this section.

B. Grease Trap Survey Questionnaire

To conduct the survey, the City's consultant developed a questionnaire to be completed during each commercial user's on-site visit. Where possible, the owner of the establishment was interviewed. However, in several cases only employees or assistant managers were available. In those instances, the questionnaire was completed as thoroughly as possible and follow up telephone calls were made to the owner/manager at a later date.

A copy of the questionnaire used in the survey is included in Attachment A of this document. The form consists of questions regarding the type of facility and its operation, contact names and telephone numbers, schematic of the grease trap location and sampling point, if any, use of recycling and housekeeping procedures, among other information. The questionnaires were used to then determine which facilities had the potential to disrupt the sanitary sewer system and should be regulated by the Oil & Grease Control Program, which needed grease interceptors and/or sampling points, and how often the grease traps currently in use were or should be cleaned.

C. Criteria for Program Participation

The information gathered by the survey was used to determine whether an existing commercial user should be required to participate in the Oil & Grease Control Program. The same criteria will also be used to make the determination for future establishments. The criteria for making this determination were as follows:

- Type of food preparation, i.e., deep-frying, grilling, broiling, etc.
- Daily/Monthly wastewater flow volume
- Recycling procedures in use
- History of collection line obstruction/problems

D. Results of Survey

The results of the City's survey indicated that it has several commercial users that should be regulated by the Oil & Grease Control Program. Each of these users currently has grease interceptor in place and each discharges a significant volume of wastewater on a monthly basis.

Some of the establishments are located in shopping centers and discharge to the sanitary sewer system at a common connection point. Since the individual wastewater discharges cannot be evaluated, the owner(s) of the shopping centers will be responsible for compliance with the program. Each individual restaurant will be controlled through the owner(s) of the shopping centers where they are located.

ATTACHMENT A

ON-SITE INSPECTION CHECKLIST

ON-SITE INSPECTION CHECKLIST

RESTAURANT INFORMATION

Restaurant Name: _____

Date: _____ Time: _____

Inspected By: _____

Type of Inspection: SCHEDULED _____ DEMAND _____

Primary Product: _____

Previous Deficiencies? YES _____ NO _____

EXPLAIN: _____

Facility Contact: _____

Title: _____

Hours of Operation Per Day: _____ Days Per Week: _____

Changes Since Last Inspection: YES _____ NO _____

GREASE TRAP INFORMATION

Are grease dumpsters in use? YES _____ NO _____

Are grease traps in use? YES _____ NO _____

IF YES,

Is Trap Pumped? YES _____ NO _____

How Often? YES _____ NO _____

By Whom? YES _____ NO _____

Are Receipts Being Kept In House? YES _____ NO _____

Are Receipts Being Sent To City Hall? YES _____ NO _____

COMMENTS: _____

ON-SITE INSPECTION CHECKLIST

MONITORING & REPORTING (When sampling must be done)

Was correct sample location used? YES _____ NO _____

Name of Lab: _____

All sampling results is reported? YES _____ NO _____

Schematic of Restaurant, Grease Trap and Sampling Point

SECTION II

LEGAL AUTHORITY

A. Legal Authority

The City of Shepherdsville's Sewer Use Ordinance No. 992-275 has been amended to include authorization of the Oil & Grease Program. The will be implemented under this authorization and in accordance with all federal, state and local regulations. A copy of the ordinance and all amendments are available for review and copying at the Shepherdsville City Hall.

SECTION III

INTERCEPTOR DESCRIPTION AND DESIGN

A. Definition of Grease Interceptor

A grease interceptor is a device designed and installed to separate and retain grease and other related undesirable matter from normal wastes and permit normal sewage or liquid wastes to discharge into a wastewater collection system by gravity. Interceptors differ from fixture traps in that, in addition to preventing the back passage of gases from drainage systems into a building, they also protect the drainage and wastewater collection systems from substances that might plug, block or otherwise be harmful to those systems.

B. Grease Interceptor Installation Requirement Criteria

Grease Interceptors are required for all facilities used and operated regularly for the sale of prepared food. Businesses requiring grease interceptors include but are not limited to restaurants, cafes, fast food outlets, delicatessens, catering shops, and any and all other kinds and types of food vending establishments in which any food preparation (including heating or defrosting in or by means of any kind of oven or heating device) takes place on the premises, whether or not such facilities are located in a separate building or structure or occupy space in a building or structure that is occupied by other businesses, as well as schools, churches, boarding houses with communal kitchen facilities, nursing homes, day care centers which have kitchens and engage in the preparation of food. In addition, meat cutting facilities and others capable of discharging significant amounts of grease into the City of Shepherdsville wastewater collection system shall be required to install grease interceptors.

The exception shall be those facilities granted a variance, after review from the Mayor and approved by the Industrial Pretreatment Coordinator. Grease interceptors shall not be required for private residences or dwellings.

C. Grease Interceptor Design Criteria

All cities and sanitation districts discharging to the Shepherdsville Wastewater Treatment Facility shall adopt, at a minimum, the City of Shepherdsville's procedure for grease interceptor sizing criteria. The cities and sanitation districts will be responsible for incorporating the sizing criteria into their rules and regulations.

Each business establishment, for which a grease interceptor is required, shall have an interceptor which serves only the establishment. The design of oil and grease interceptors shall be constructed in accordance with the design approved by the City of Shepherdsville and shall have a minimum of (2) compartments with fittings designed for grease retention.

There shall be an adequate number of manholes to provide access for cleaning all areas of an interceptor; a minimum of one (1) per ten (10) feet of interceptor length. Manhole covers shall be gastight in construction having a minimum opening dimension of twenty-four (24) inches. In addition, an effluent sampling box shall be provided on all grease interceptors. In areas where traffic may exist, the interceptor shall be designed to have adequate reinforcement and cover.

One complete set of plans shall be submitted to the City of Shepherdsville including mechanical and plumbing sections. The plans should also include size, type and location of each interceptor. The City of Shepherdsville Building Inspection Division and Industrial Pretreatment Program shall approve the size and type of interceptor prior to construction.

D. Grease Interceptor Location

Each grease interceptor shall be so installed and connected that it shall be at all times easily accessible for inspections, cleaning, and removal of the intercepted grease. The use of ladders and removal of bulky equipment will result in violation of accessibility. The interceptor shall be located as close to the source as practical, however it must be outside the facility served. In no case shall a grease interceptor be installed in any part of a building where food is handled. The location of any grease interceptor shall meet the approval of the Mayor and Industrial Pretreatment Program.

E. Grease Interceptor Sizing Criteria

The parameters for sizing a grease interceptor are hydraulic loading and grease storage capacity, for one or more fixtures. The size of the interceptor shall be determined by the following formula:

$$\text{Liquid Capacity} = \text{Number of meals at peak hour}^1 (\text{x}) \text{waste flow rate}^2 (\text{x}) \text{retention time}^3 (\text{x}) \text{storage factor}^4$$

1. Meals Served at Peak Hour
2. Waste Flow Rate

With dishwashing machine	6-gallon(22.7L) flow
Without dishwashing machine	5-gallon(18.9L) flow
Single service kitchen	2 gallon(7.6L) flow
Food waste disposal (add to above)	1 gallon(3.8L) flow

3. Retention Times

Commercial kitchen waste dishwasher 2.5 hours

Single service kitchen single serving 1.5 hours

4. Storage Factors

Fully equipped commercial kitchen
8 hour operation: 1
16 hour operation: 2
24 hour operation: 3

Single service kitchen 8 hour operation: 1.5

SECTION IV

INSPECTION OF GREASE INTERCEPTORS

A. Inspection of Grease Interceptor

The City of Shepherdsville Industrial Pretreatment Program may inspect all grease interceptors in the City's service area. Any cities and sanitation districts connected to the City of Shepherdsville's wastewater Collection system will either develop a mechanism to inventory all grease interceptors, or turn over all inspection responsibility to the City of Shepherdsville. All requirements must be at least as stringent as the City of Shepherdsville. Once the grease interceptors in the service area are identified, the interceptors will be classified into two (2) categories.

- **Significant Grease Interceptors**

The facilities connected to these grease interceptors contribute significant amounts of animal/vegetable oil and grease to the wastewater collection system. These grease interceptors will be inspected at a frequency of at least once every three (3) to six (6) months.

- **Non-significant Grease Interceptors**

The facilities connected to these grease interceptors do not contribute significant amounts of animal/vegetable oil and grease to the sanitary sewer system. These grease interceptors will be inspected at a frequency of every six (6) to twelve (12) months.

City personnel will conduct inspections. Inspectors shall report to the Mayor, and all documentation shall be kept on file at City Hall.

B. On-site Inspection Checklist

All inspections shall use the checklist provided by the City. A copy is included in Attachment A. Checklist shall be kept on file at the Shepherdsville City Hall for three (3) years and may be kept longer if conditions warrant.

The checklist will be available for review and copying by the general public. A prior notification to the Mayor's office of three (3) business days will be required and an appointment must be made.

Inspectors are not required to provide prior notice to the establishment being inspected. Inspection frequencies shall be in accordance with the Oil & Grease Control Permits, but shall not be conducted less frequently than annually.

SECTION V

PERMITTING AND CLEANING PROCEDURES

A. Grease Interceptor Maintenance and Pumping Schedules

The owner and lessee are jointly responsible for the cleaning of the interceptor. It shall be maintained in efficient operating condition by the removal of accumulated grease and solids. The removal of grease and solids shall be performed before the capacity of the interceptor is exceeded. The owner and/or lessee shall conduct, on a quarterly basis at a minimum, an inspection on each interceptor. Records of these inspections must be kept on site for a minimum of three (3) years.

Initially, all Commercial and Industrial Users connected to grease interceptors are required to pump out their interceptors quarterly, i.e. once every three (3) months. The receipts from the pumping shall be sent to the City of Shepherdsville by the 10th of the first month of the following quarter (April, July, October and January). A copy of the receipt to be submitted to the city is included in attachment D. If the receipts are not received by the city violations, fines and public notices will be issued as stated in Section VI of this document.

B. Pumping Conducted by the City

The city can change the pumping schedule as needed to fit the needs of the facility and the WWTP. The following is a range of pumping frequencies categorized by product.

Fried Food	1/month to 1/quarter
Non-Fried Food	1/quarter to 1/six months
Non-Cooking	1/quarter to 1/six months

C. Biological Treatment

Biological treatment shall not be a substitute for the pumping of the grease interceptor at the frequency by the City of Shepherdsville.

D. Existing Sources Not Connected to Grease Interceptors

Existing sources not connected to grease interceptors and which contribute significant amounts of (FOG) will be identified through inspection of the collection systems by the City of Shepherdsville. Once these sources are identified, they may be required to implement Best Management Practices (BMP's) to keep oil and grease out of the wastewater collection system.

Examples of a BMP include:

1. Scrape food from plates into garbage can, or other disposal container.
2. Prewash plates by spraying them off with cold water over a small mesh catch basin positioned over a drain. This catch basin should be cleaned into a garbage can as needed.
3. Pour all liquid oil and grease from pots and pans into a waste grease bucket stored at the pot-washing sink. Heavy solids build up of oil and grease on pots and pans should be scraped off into a waste grease bucket.
4. Other kitchen practices identified by the City of Shepherdsville and/or facility which will decrease the point source discharge of oil and grease.

If the BMP's are not successful at the facility and the facility continues to contribute significant amounts of oil and grease to the wastewater collection system, as documented by field inspections, then the facility will be required to install an adequately-sized grease interceptor, in accordance with Section III.

E. Abandoned Grease Interceptors

Abandoned grease interceptors shall be pumped and filled as required for abandoned sewers and sewage disposal facilities as outlined in the Uniformed Plumbing Code and Kentucky's regulations as developed by the Cabinet for Health & Human Services.

F. Permit Issuance

All establishments regulated by the Oil & Grease Control Program shall be issued and Oil & Grease Permit. A copy of such permit is included in Attachment B. This permit will specify BMP's, contact person and number, pumping frequency of the interceptor(s), its location and any other information deemed necessary. The City may assess permit fees in accordance with the Sewer Use Ordinance.

G. Permit Application

A copy is included in Attachment C. New users must complete an application and submit it to the City of Shepherdsville prior to discharge. Permits will not be issued until the City receives a Permit Application. Failure to submit an application prior to discharge shall be a violation of the Sewer Use Ordinance and the Enforcement Response Plan shall be applicable.

ATTACHMENT B

OIL & GREASE PERMIT

CITY OF SHEPHERDSVILLE

OIL & GREASE PERMIT

Permit No. _____

In accordance with the provisions of Shepherdsville Sewer Use Ordinance and amendments thereto,

Name of Facility: _____

Address _____

Shepherdsville Kentucky 40165

Is hereby authorized to discharge domestic wastewater into the Shepherdsville sewer system in accordance with the effluent limitations, monitoring requirements, and other special conditions set forth in this permit.

All discharges authorized herein shall be consistent with the terms and conditions of this permit and the Shepherdsville Sewer Use Ordinance. The discharge of any pollutant identified in this permit at a level in excess of that authorized or in direct opposition to special conditions noted herein, shall constitute a violation of the permit.

This permit shall become effective at 12:01 a.m. On _____

And shall expire at midnight on _____

If the permittee wishes to continue to discharge after this expiration date the City must be notified for reissuance of this permit a minimum of thirty (30) days prior to the expiration date.

By _____

P.O. Box 400 Shepherdsville Kentucky 40165

Sewer Department (502) 543-7339 City Hall (502) 955-7803

PART I – GENERAL INFORMATION

Company Name_____

Company Contact_____

Telephone Number_____

Location of Discharge_____

Source of Waste_____

Type of Waste_____

Volume of Waste_____

II. Discharge Requirements

- A. It has been determined that the installation and operation of a grease interceptor at this facility is necessary to protect the City of Shepherdsville’s sanitary sewer system. Therefore, the permittee is required to install and maintain such equipment to control grease, oil, grit, and/or other similar pollutants from entering the POTW in such quantities as to interfere with the POTW’s normal operation.

- B. The installation of the grease, oil and sand interceptor shall be in accordance with the Kentucky Plumbing Code and shall be located so as to provide ready access for maintenance and inspection.

III. Maintenance Requirements

- A. The interceptor shall be maintained by the permittee at his sole expense and in continuous and clean operation at all times.
- B. No cleaning or maintenance additives may be used in interceptor without first receiving written permission from the Superintendent.
- C. Cleaning shall be completed as needed, but in no case shall the frequency of cleaning be less than once per six (6) months.

IV. Reporting Requirements

- A. The permittee must prepare a cleaning receipt quarterly in March, June, September and December for submission to the City of Shepherdsville. The receipt shall include as a minimum the dates of cleaning. The cleaning contractor's name and a copy of the payment receipts or invoices for cleaning.
- B. The cleaning receipt shall be signed by a duly authorized representative as defined in Section 4.3 of the Sewer Use Ordinance.
- C. The cleaning report is due at the office of the City of Shepherdsville on or before 10th of the following month of the calendar quarter (April, July, October, and January). Should the cleaning report not be submitted within 30 days of the due date, the IU shall be considered to be in significant non-compliance?

ATTACHMENT C

OIL & GREASE CONTROL PERMIT

CITY OF SHEPHERDSVILLE
OIL & GREASE CONTROL PROGRAM
PERMIT APPLICATION

Company Name _____ **Date** _____

Address _____

Phone/Fax _____

Company Contact _____

1. Is food processed in the establishment? YES _____ NO _____
If yes please continue with question 2, if no please sign the certification statement and return.

2. Please describe food preparation and cleanup activities.

3. Are your kitchen sinks connected to a garbage disposal? YES _____ NO _____

4. Do you have a grease trap? (If this is a new facility, will you have a grease trap?)
YES _____ NO _____

If Yes please complete questions 5 through 12

If NO please skip to question 13

5. Describe the size and general condition of the unit.

6. How often is the grease trap serviced?

7. When was the grease trap last serviced?

8. What company services the grease trap?

9. Where are the grease trap pumping disposed of?

10. Is your dishwasher connected to the grease trap? YES _____ NO _____

11. Are your kitchen sinks connected to the grease trap? YES _____ NO _____

12. If you answer yes to question 3, is your garbage disposal connected to the grease trap? YES _____ NO _____ Please skio to question 16.

13. How does your facility dispose of cooking grease and deep fat fry grease?

14. How are grill cleanings disposed of?

15. If you answer yes to question 3, how is the excess process product disposed of?

16. How are by-products of food process contained (in reference to):

A. Solid Waste:

B. Oil & Grease:

C. Viscous Wastes:

D. Liquid Wastes:

17. Approximately how many customers do you serve per month?

18. Please provide the monthly water usage for the past six (6) months (If this is a new facility please provide an estimate of water usage):

MONTH

USAGE

I certify under the penalty of law that the above mentioned information is true and accurate to the best of my knowledge.

Signature _____ **Date** _____

RETURNED COMPLETED FORM TO:

City of Shepherdsville

P.O. Box 400

634 Conestoga Parkway

Shepherdsville, Ky. 40165

Telephone: (502) 955-7803

ATTACHMENT D

GREASE TRAP CLEANING RECEIPT

RECORD OF GREASE TRAP CLEANING

Business Name: _____ **Permit #:** _____

Address: _____ **Phone #:** _____

Gallons Removed in Trap: _____ **Full,** _____ **½ Full,** _____ **¼ Full** _____

Manager Signature: _____ **Date:** _____

Time Trap Was Pumped Out: _____

Signature of Hauler: _____ **Permit #** _____

Company Name _____

Comments: _____

Office Use Only: Receiver _____

Date Received _____ **Time:** _____

SECTION VI

ENFORCEMENT

A. Reporting

All receipts from the pump-out of the grease interceptor shall be submitted to the City no later than the 10th day of the month following the end of the calendar quarter.

B. Enforcement

As the Shepherdsville City Ordinance # 992-275 for the use of the Municipal Sanitary Sewage Collection and Treatment System give the penalties for the violation of this ordinance.

A. Written Notice

Any user found to be violating any provision of this ordinance or a wastewater permit of order issued hereunder, shall be served by the Superintendent or their designee with written notice stating the nature of the violation. The offender shall permanently remedy all violations upon receipt of this notice.

As contained in Article IX, the notice may be of several forms. Also as contained in article IX, penalties of various forms may be levied against users for violations of this ordinance. The penalties, if levied shall range from a publication of violators in the local newspaper to administrative fines of at least \$1,000.00 per day per violation.

B. Revocation of Permit

Any user violating any of the provisions of this ordinance or a wastewater permit order issued hereunder, may be subject to termination of its authority to discharge sewage into the municipal sewer system. Such termination may be immediate if necessary for the protection of the Shepherdsville Waste Water Treatment Facility and Collection systems. Said user may also have water service terminated.

Any user who violates the following conditions of this ordinance, or applicable State or Federal Regulations, is subject to having his permit revoked in accordance with the procedures of this ordinance.

1. Failure of a user to factually report the wastewater constituents and characteristics of his discharge;
2. Failure of the user to report significant changes in operations, or wastewater constituents and characteristics;
3. Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring; or
4. Violation of conditions of the permit.

C. Liability

Any user violating any of the provisions of this Ordinance, discharge permit or other order issued hereunder shall become liable to the City of Shepherdsville for any expense, loss or damage occasioned by the City by reason of such violation. This civil liability is as provided by state and federal regulations.

D. Misrepresentation and/or Falsifying of Documents

Any user who knowingly and/or negligently makes any false statements, representations or certification of any application, record, report, plan or other document filed or required pursuant to this ordinance or Industrial User Discharge Permit or who falsifies, tampers with or knowingly and/or negligently renders inaccurate any monitoring device or method required under this Ordinance, shall be punished by a fine of at least \$1000 or by imprisonment for not more than twelve (12) months or by both.

E. Destruction of POTW and Legal Action

No person(s) shall maliciously, willfully, or negligently break, damage destroy, uncover, deface, or tamper with any structure, appurtenance or equipment which is part of the POTW. Any person(s) violating this provision shall be subject to immediate arrest under charge of disorderly conduct. It shall be noted that the Clean Water Act does not require proof of specific intent to obtain conviction.

F. Legal Action

If any person discharges sewage, industrial waste or other wastes into the City's wastewater disposal system contrary to the provisions of this ordinance, Federal or State Pretreatment Requirements or any order of the City, the City may commence an action for appropriate legal and/or equitable relief in the appropriate Court of this jurisdiction.

G. Injunctive Relief

Whenever a user has violated or continues to violate the provisions of this ordinance or permit or order issued hereunder, the Superintendent, through counsel may petition the Court for the issuance of a preliminary or permanent injunction or both (as may be appropriate) which restrains or compels the activities on the part of the industrial user.

H. Civil Penalties

1. Any user who has significantly violated or continues to violate this ordinance or any order or permit issued hereunder may be liable to the Superintendent for a civil penalty of not more than \$500.00 per day plus actual damages incurred by the POTW per violation per day as long as the violation continues. Each day in which such violation shall continue shall be deemed a separate offense. In addition to the above described penalty and damages, the Superintendent may recover reasonable attorney's fees, court cost, court reporter's fees, and other expenses associated with the enforcement activities, including sampling and monitoring expenses.

2. The Superintendent may petition the court to impose, assess and recover such sums. In determining amount of liability, the Court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through the industrial user's violation, corrective actions by the industrial user, the compliance history of the user, and any other factor as justice requires.

I. Criminal Prosecution

1. Violations-General

- a. Any user who willfully or negligently violates any provision of this ordinance or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed \$1,000.00 per violation per day or imprisonment for not more than twelve (12) months or both.
- b. In the event of a second conviction, the user shall be punishable by a fine not to exceed \$10,000.00 per violation per day or imprisonment for not more than three (3) years or both.