

Ordinance 896

EXHIBIT B FOG SEPARATOR REQUIREMENTS

EXH B.001 GENERAL PROVISIONS

A. Applicability

This Exhibit B to Ordinance 896 sets forth uniform requirements for Food Service Establishments (FSEs) and Non-FSE FOG Dischargers (NFDs), collectively FOG dischargers that discharge wastewater to the Fox River Water Reclamation District (FRWRD). The objectives of these requirements are:

1. To prevent the introduction of pollutants into the FRWRD by FOG dischargers that will interfere with the operation of the POTW;
2. To prevent the introduction of pollutants into the FRWRD by FOG dischargers that could cause Combined Sewer Overflows (CSOs) or Sanitary Sewer Overflows (SSOs);
3. To protect the environment from pollution caused by CSOs and SSOs. This ordinance shall apply to all non-residential users as defined herein as FSEs or NFDs that discharge or may discharge Fats, Oils and Greases (FOG) to the FRWRD.

Ordinance 896 authorizes inspection and regulation of these users; authorizes monitoring, compliance, and enforcement activities; establishes review procedures; requires user record keeping; provides for the issuance of control mechanisms if deemed necessary by the Executive Director or his designate; and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein if deemed necessary by the Executive Director or his designate.

B. Administration

Except as otherwise provided herein, the District shall administer, implement, and enforce the provisions of this ordinance through its Executive Director. Any powers granted to or duties imposed upon the Executive Director by the District may be delegated by the Executive Director to a duly authorized Fox River Water Reclamation District employee.

C. Jurisdiction

This Ordinance shall apply to users located within the boundaries of the Fox River Water Reclamation District and to parties outside of the Fox River Water Reclamation District who are, by contract or agreement with the District, users of the Fox River Water Reclamation Districts wastewater treatment system.

EXH B.002 ABBREVIATIONS AND DEFINITIONS

A. Abbreviations

The following abbreviations shall have the designated meanings:

FOG	Fats, Oils and Grease
FSE	Food Service Establishment
NFD	Non-FSE FOG Discharger

B. Definitions

Unless the context specifically indicates otherwise, the following terms and phrases, as used in this ordinance, shall have the following meanings:

“Additive” any material, in any physical form, put into a grease removal systems or any drain lines or appurtenances discharging to a grease removal system intended in any way to modify the operation of the system.

“Fats, Oils and Grease” (FOG) the term fats, oils, and grease shall mean those components of wastewater amenable to measurement by the methods described in Standard Methods for the examination of Water and Wastewater, latest approved edition or other methods approved by 40CFR136. For the purposes of these requirements, the term Fats, Oils and Grease shall include polar fats, oils, and grease and other components extracted from wastewater by these methods, excluding the non-polar fraction.

“Food Service Establishment” (FSE) shall mean any establishment, commercial or noncommercial, primarily engaged in the preparing, serving, or otherwise making available for consumption foodstuffs, that requires washing and that discharges to the POTW.

“Grease Separator” any relatively large in ground or above-ground tank, with internal plumbing and baffling intended to act as a grease removal system to serve one or more fixtures and which shall be remotely located.

“Grease Removal System” any device designed for, and intended for, separating, collecting, and removing waterborne FOG and settleable solids prior to discharging to the POTW.

“Grease Trap” any relatively small appurtenance, generally of cast iron or fabricated steel, with internal configuration and internal or external flow control, intended to function as a grease removal system.

“Non-FSE FOG Discharger” (NFD) any establishment, such as a church, synagogue, worship hall, banquet facility, preschool, school, hospital, nursing home, or meeting space, with a commercial-style kitchen that is used for preparing, serving, or otherwise making available for consumption foodstuffs that requires washing and that discharges to the POTW.

"High Volume Establishment" shall mean a Food Service Establishment (FSE) or Non-FSE FOG Discharger (NFD) that has a full-service commercial kitchen and those establishments, cook, prepare, or wash grease-laden foods, grease-laden equipment, or utensils.

"Low Volume Establishment" shall mean a Food Service Establishment (FSE) or Non-FSE FOG Discharger (NFD) which does not have a full-service commercial kitchen (no more than one kitchen appliance requiring a type 1 exhaust hood) that do not cook, prepare, or wash large amounts of grease-laden foods or grease-laden equipment and is based on carry out service, and/or limited seating such that washing is minimal and does not generate significant FOG that discharges to the POTW.

"Limited Food Service Establishment" shall mean any Food Service Establishment (FSE) or Non-FSE FOG Discharger (NFD) primarily engaged in the serving, or otherwise making available for consumption only not-cooked foods such as sandwiches, pre-packaged, baked, or a Single Service Kitchen, which is described as a "No food preparation, heat and serve only" establishment as defined by the Uniform Plumbing Code and is based on carry out service, and/or limited seating such that washing is minimal and does not generate significant FOG that discharges to the POTW.

EXH B.003 GENERAL REQUIREMENTS

A. Prohibited Discharge Standards

1. See Section 300.003 Prohibitive Discharge Standards of this Ordinance for prohibited discharges.
2. See Exhibit A Local Limits of this Ordinance for FOG Local Limits.
3. If a failure to maintain any grease removal system or lack of grease removal system results in partial or complete blockage of the building sewer, private sewer system discharging to the FRWRD or adversely affects the treatment or transmission capabilities of the POTW, or requires excessive maintenance, or poses a possible health hazard, the discharger responsible for the facilities shall be subject to the remedies of this Ordinance, including potential additional requirements, cost recovery, enforcement and penalties.
4. No person shall reintroduce into the sewer system of the District material which have been removed from the sewer system by grease separators or grease traps.
5. Physical, chemical or biological agents shall not be introduced into grease separators or grease traps for the purpose of re-suspending, dissolving, emulsifying or rendering soluble any pollutants or other materials removed from a wastestream by such devices and reintroducing these materials into the sewer system.

EXH B.004 GREASE REMOVAL SYSTEM REQUIREMENTS FOR NEW OR ALTERED ESTABLISHMENTS

All FSEs and NFDs shall have an adequate grease removal system installed and exercise proper kitchen best management practices to ensure that excess concentrations of FOG are not discharged to the facilities owned and operated by the FRWRD or tributary to FRWRD’s facilities.

- A. All new construction or altered FSEs and NFDs shall submit plumbing plans for all potential grease discharging lines, all grease removal systems, and connecting piping to the Technical Services Department for approval prior to construction. The plumbing shall be installed in accordance with the approved plans. Failure to submit plans or construct in accordance with approved plans is a violation of this ordinance.
- B. All new or altered FSE and NFDs designated as High Volume Establishments shall install a 1000 gallon or larger interceptor-style grease removal system accessible for maintenance purposes and when feasible, located outside of the building. All kitchen drains and any other drains that may carry FOG waste shall be connected to this grease removal system.
- C. All new or altered FSE and NFDs designated as Low Volume Establishments shall install a properly sized trap-style grease removal system with removable cover flush with finished floor in a readily accessible area for regular maintenance and inspection. All kitchen drains and any other drains that may carry FOG waste shall be connected to this grease removal system. The liquid holding capacity of the trap shall be determined by the District, but in all circumstances shall not be less than the total volume of connected fixture units draining to the trap multiplied by a safety factor of two (2). The minimum trap-style grease removal system volume may be determined using the equipment checklist calculation below:

Equipment Checklist

Fixture dimensions (Cubic Inches): Length (in.) x Depth (in.) x Width (in.) = Total Cubic Inches

Fixture 1: _____

Fixture 2: _____

Fixture 3: _____

Fixture 4: _____

Total Fixture Capacity (in³) _____ ÷ 231 (in³/gal) x 2 (safety factor) = _____ Gallons

- D. All new construction, multi-tenant commercial buildings (strip centers) shall provide for FOG removal either by:
 - 1. Including a separate waste line with 1000 gallon or larger interceptor-style grease removal system located outside of the building and accessible for maintenance purposes for each unit planned for FSE leasing into which no domestic sewage may be connected, or
 - 2. entering into a shared grease separator agreement with the District. Under a shared grease separator agreement, separate waste lines for all leasable spaces discharge to a common 1000 gallon or larger separator located outside of the building and accessible for maintenance purposes. The owner of the building must sign a shared grease separator

agreement with the District. Under such agreement, when a space is leased, sold, or rented to a FSE or NFD, all kitchen drains and any other drains that may carry grease-laden waste must be connected to an inside grease trap and then shall be connected to this waste line. No domestic sewage may be connected to this line. The property owner shall be responsible for proper maintenance of the separator in accordance with the provisions of this ordinance. The District Board of Trustees must approve all shared grease separator agreements.

- E. All new or altered FSE and NFDs designated as Limited Food Service Establishments shall install a properly sized trap-style grease removal system with removable cover flush with finished floor in a readily accessible area for regular maintenance and inspection. All kitchen drains and any other drains that may carry FOG waste shall be connected to this grease removal system. The liquid holding capacity of the trap shall be determined by the District, but in all circumstances shall not be less than the total volume of connected fixture units draining to the trap. The minimum trap-style grease removal system volume may be determined using the equipment checklist calculation below:

Equipment Checklist

Fixture dimensions (Cubic Inches): Length (in.) x Depth (in.) x Width (in.) = Total Cubic Inches

Fixture 1: _____

Fixture 2: _____

Fixture 3: _____

Fixture 4: _____

Total Fixture Capacity (in³) _____ ÷ 231 (in³/gal) 1 (safety factor) = _____ Gallons

- F. Any FSE undertaking a remodel and any NFD undertaking a remodel of kitchen facilities will be subject to the provisions of this ordinance.
- G. All grease removal systems shall be maintained as required in this ordinance.

EXH B.005 EXISTING ESTABLISHMENTS

- A. Any existing FSE or NFD which is found to have a prohibited discharge as defined in these requirements, that does not have a grease removal system will become automatically subject to the requirements of this ordinance as if a new construction.
- B. Any existing FSE or NFD which is found to have a prohibited discharge as defined in these requirements, that has a grease removal system may be required to provide additional grease removal system capacity.

EXH B.006 NEW ESTABLISHMENT - EXISTING FACILITY

- A. Any new FSE or NFD which will occupy an existing facility which has a grease removal system consistent with the requirements of this Ordinance shall maintain such grease removal system in accordance with these requirements. The FSE or NFD shall have the system inspected and cleaned prior utilization.
- B. Any new FSE or NFD which will occupy an existing facility which does not have a grease removal system consistent with the requirements of this Ordinance shall install such grease removal system in accordance with these requirements.
- C. For the purpose of this Ordinance, a new business shall include new ownership of an existing business.

EXH B.007 GREASE REMOVAL SYSTEM MAINTENANCE

- A. All grease removal systems shall be maintained to ensure proper and effective operation. At a minimum, interceptor-style grease removal systems shall be cleaned at least once every 90 days and trap-style grease removal systems cleaned at least once per month, or more frequently as needed to prevent carry-over of FOG into the collection system. These required frequencies may be extended with the approval of the Technical Services Department. Grease Removal Systems must be cleaned whenever the combined thickness of the floating greases and settled solids is equal to or greater than, 25% of the total liquid depth in the grease removal system.
- B. Interceptor-style grease removal systems are to be cleaned by a licensed grease hauler. When cleaned, an interceptor-style grease removal system must have all solids and grease removed at a minimum of twice per year. Also, all internal plumbing must be inspected for damage and corrosion. If repairs are required, they shall be performed within 30 days. Manifests must be on site and available for FRWRD to review during the FSE or NFD grease inspection.
- C. FSE Twenty-five Percent (25%) Requirement. The last section of an external GI at an Food Service Establishment (FSE) shall be measured to determine that the total volume of the GI being used for any food-derived solids to settle or accumulate plus the floatable grease-derived materials that rise and accumulate, identified as a solids blanket and grease cap respectively, is less than twenty-five percent (25%) of the total design hydraulic depth as measured from the effluent Discharge pipe to the bottom ("Twenty-five Percent (25%) Requirement"). The District will apply the Twenty-five Percent (25%) Requirement above normally at the Discharge side of the external Grease Separator prior to mixing with any other Wastewater from the contributing FSE's property. The District reserves the right to apply the Action Level for Discharge at an end-of-pipe Discharge location that connects to the Public Sewer system in the event that a unique sampling location in the end compartment of the GI is not available or there is no external GI. The District also reserves the right to apply said Action Level to the Discharge in the next Sanitary Sewer manhole downstream of the facility in the event that there is neither a GI sampling location nor a Sampling Manhole at the site. The District may also apply the Twenty-five Percent (25 %) Requirement for external GI that are used in non-FSE locations such as an automobile service, repair and dispensing properties.

- D. Trap-style grease removal systems may be maintained by the FSE or NFD. When cleaned, the trap must have surface grease and oil removed, settled solids removed, all of the sides scraped, removable parts removed and cleaned, be inspected for damage and corrosion, and be properly reassembled. If repairs are required, they shall be performed within 30 days. A cleaning log must be kept and available for FRWRD to review during the FSE or NFD grease inspection. These cleaning logs shall be retained for a minimum of two years.
- E. The material that is removed in the process of cleaning a grease removal system shall not be discharged into any part of the POTW, any private sewer, any drainage piping, or storm sewer system. All materials removed shall be handled and disposed of in accordance with Federal, State, County and Local laws, rules and regulations.
- F. Chemical and Biological treatments such as drain cleaners, enzymes, bacteria, acid, or any other chemical or biological additives to emulsify or remove grease is strictly prohibited.

EXH B.008 GENERAL SPECIFICATIONS AND SIZING

- A. Specifications outlined in this Section shall be considered minimum requirements only. It shall be the responsibility of each User to have a grease trap or separator installed and maintained that will produce an effluent in compliance with the requirements of this or other applicable Ordinances.
 - 1. New grease traps or separators shall meet or exceed the more stringent of specifications and requirements set forth in this Ordinance and other applicable Local, State, or Federal requirements.
 - 2. An existing grease trap or separator which is upgraded shall meet or exceed the specifications set forth in this Ordinance and other applicable Local, State, or Federal requirements.
- B. Grease traps and separators shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature and capable of withstanding the traffic load where installed.
- C. Grease traps and separators shall be located so as to be readily and easily accessible for cleaning and inspection of the pretreatment device and shall be equipped with easily removable covers.
- D. Grease separators (known as interceptor-style) shall have a total liquid capacity of not less than one thousand (1,000) gallons. Grease traps, when allowed by this Ordinance, shall under all circumstances have a total liquid capacity of not less than the total volume of connected fixture units draining to the trap. Additional capacity for grease traps shall be required as determined by the District's FSE or NFD classification as specified within this Ordinance.
- E. Plans for new grease traps/separators or modifications to existing grease traps/separators shall be submitted to the FRWRD's Technical Services Department for review.

- F. The Technical Services Department of the FRWRD must give approval of the final plumbing plans.
- G. Grease traps and separators shall be installed by a licensed plumber. Completed grease traps and separators shall be subject to inspection by the FRWRD Inspector prior to connection to the sanitary sewer.

EXH B.009 RECORD KEEPING/REPORTING REQUIREMENTS

A. Record Keeping

Users subject to this ordinance shall document all cleaning and maintenance activities performed on their grease removal system. These records shall be maintained for a minimum of two (2) years and be available for inspection by the FRWRD Inspector or his representative. This period shall be automatically extended for the duration of any litigation concerning the user or the POTW, or where the user has been specifically notified of a longer retention period required by the Technical Services Department. Users shall copy and forward such records to the District when requested.

B. Reporting

Where the FRWRD Inspector has determined that a user must provide written reports, these reports shall be submitted in accordance with the requirement of the Pretreatment Department. Written reports will be deemed to have been submitted on the date postmarked.

C. Manifests

All grease pumping companies doing business with in the District shall provide the FSE or NFD with a manifest containing the following information: date of cleaning, amount of material removed, cleaning frequency, and any noted repairs.

EXH B.009 ENFORCEMENT

Any violations of these requirements will be subject to enforcement as provided for in this Ordinance. Fines and penalties may be assessed as provided for in this Ordinance.

EXH B.010 APPEAL OF FOG SEPARATOR REQUIREMENTS

In the event a User is dissatisfied with the District's determinations in applying the FOG separator requirements as it applies to uniform requirements for Food Service Establishments (FSEs) and Non-FSE FOG Dischargers (NFDs), collectively FOG dischargers that discharge wastewater into the Fox River Water Reclamation District, that User shall seek relief through the use of the following procedure. The procedure outlined herein is voluntary, and shall not act as a bar or condition precedent to the District's use of any remedies provided herein.

- A. Initial Review of Complaint. User shall contact the District with his complaint or questions, and shall be referred to the appropriate department for initial screening. Where the problem is routine in nature or requires only explanation, no further action will be taken.
- B. Staff Review of Appeal. Where a User is not satisfied with the response given by the appropriate department, the complaint or question shall be produced to writing and referred to the Executive Director for review. The Executive Director or his designee shall review the file and consult with the User in an effort to resolve the problem. If the matter can be resolved to the User's satisfaction at this level, no further action will be required.
- C. Board Review of Appeal. If the findings and actions by the Executive Director do not satisfy the User, the User may appeal to the Board of Trustees. The Board of Trustees will review provided information at a regularly scheduled meeting of the Board and make a determination in the matter. Determinations by the Board of Trustees are final.

EXH B.011 MISCELLANEOUS PROVISIONS

- A. General Grease Program Charges and Fees

The Fox River Water Reclamation District may adopt reasonable fees for reimbursement of costs of setting up and operating the District's FOG Separator Requirements. These fees relate solely to the matters covered by these requirements and are separate from all other rates or charges for sewer service, provided that the District shall collect said charges in the same manner as other sewer rates are collected.

Currently there are no separate fees associated with the District's FOG Separator Requirements.