

City of Laredo

INDUSTRIAL PRETREATMENT PROGRAM

Grease Control requirements for Food Services Establishments

Compliance Authority

The Water Utilities Department, under the Industrial Pretreatment Program, exists as the approving authority for the City of Laredo Code of Ordinances, Chapter 31 Utilities, Article II Sewers and sewage disposal, Division 3 Use of Public Sewers.

The following summarizes the requirements and the procedures for facilities requiring grease traps. These facilities are categorized as "Grease generator".

Generator Responsibilities

It is the responsibility for every existing and new facility expecting to practice as a Food Service Establishment (i.e. Restaurants, Cafeterias, Fast Food, Caterer, etc.) to contact the Water Utilities Department for the specifications and requirements needed for the approval of the required industrial waste pretreatments system.

It is the responsibility of the generator to install the adequately sized grease trap in accordance to the Water Pollution Control Division Industrial Waste Pretreatment Policy for Grease Traps.

It is the responsibility of the generator to comply with all city ordinances, rules regulations, codes and policies on the following:

- Installation of an approved grease trap.
- Installation of the grease trap under a plumbing permit.
- Proper grease trap cleaning and maintenance.
- Hiring a city registered grease trap cleaning and service company.
- Proper documentation of each grease trap cleaning service through the city's official manifest system.

Sizing Criteria

The adequate grease trap size calculation is based on the facility's kitchen plumbing fixture inventory. The plumbing fixtures are sinks, dishwashers, floor drains, and any other fixture used in the food preparation area that discharges into the sewer system. This calculation is based on the Industrial Waste Pretreatment Policy for grease traps.

Note: The sizing of the grease trap is a minimum requirement in an effort to produce an acceptable effluent discharge into the sanitary sewer system in order to reduce the introduction of pollutants.

Steps to Compliance

New facilities:

New facilities shall submit their full plans for construction, including Plumbing fixtures and trap design, if there is no trap design, we will be happy to assist you with the required specifications to meet grease trap requirements.

Existing Facilities:

Any existing facility constructed without the Water Pollution Control Division's plumbing plans review and approval shall be responsible for compliance with all modifications and/or installation of an approved grease trap.

Enforcement

The grease trap requirements are established under the City of Laredo Code of Ordinances. Facilities failing to comply with such requirements will be referred to our Water Pollution Control personnel and will be subject to citation and fines in accordance to City of Laredo Code of Ordinances.

Please contact the WPC Division, Pretreatment Program at (956) 721-2007 for your facility's grease trap requirements. We will be glad to provide you with all the full ordinances and policy documents. We will always be available for consultation.

SUBJECT: Procedure: Regulating grease generators

LEGISLATIVE AUTHORITY: Chapter 31, Article II, Division 3. USE OF PUBLIC SEWERS, Section 31-51 through Sections 31-64 of the City of Laredo Ordinance NO. 2003-O-209.

§ 31.51 Purpose and Policy

This chapter sets forth uniform requirements for users of the Publicly Owned Treatment Works for the City of Laredo and enables the City to comply with all applicable State and Federal Laws, including the Clean Water Act (33 United States Code 1241 et eq) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403). The objectives of this chapter are:

- A. To prevent the introduction of pollutants into the Publicly Owned Treatment Works (POTW) that will interfere with its operations;
- B. To prevent the introduction of pollutants into the POTW that will pass through the POTW, inadequately treated, into the receiving waters, or otherwise be incompatible with the POTW;
- C. To protect both POTW personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
- D. To promote reuse and recycling of industrial wastewater and sludge from the POTW;
- E. To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the POTW; and
- F. To enable the City to comply with its Texas Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements, and any other Federal or State laws to which the POTW is subject.

This chapter shall apply to all users of the POTW. The chapter authorizes the issuance of wastewater discharge permits; provided for monitoring, compliance, and enforcement activities; establishes administrative review procedures; requires user reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

In order to implement the policy for reducing the impact of grease waste, sand & grit waste and other potentially harmful wastes on the sewage collection and treatment systems (Chapter 31 Section 31-52), the following procedures are set forth:

The Industrial Waste Interceptors shall be adequately sized and/or rated for efficient treatment of wastes in accordance with Industrial Waste Pretreatment Rules and Regulations. The Industrial Waste Interceptor requirements are currently based on best available technology economically achievable to comply with the Industrial Waste Pretreatment requirements. Higher levels of technology shall be required to achieve efficient treatment of industrial wastes where deemed necessary.

EXISTING FACILITIES: Those facilities already in operation.

1. Field inspection:

Grease trap compliance verification:

- A. The facility is inspected to determine if meets the minimum grease trap capacity requirements. This is determined based on the plumbing fixtures, which discharge grease laden wastewater into the sanitary sewer system.
- B. The facility's grease trap is inspected and measured to determine its treatment capacity in gallons.

2. Trap/Interceptor capacity calculation procedures:

Minimum Capacity Sizing Criteria and Method:

- A. An inventory of all plumbing fixtures discharging grease laden wastewater (greasy waste) is taken of the kitchen, food preparation and serving area.
(Sinks, dishwashers, floor drains, garbage grinder, etc.)
 - 1. All floor drains behind the service counter and around the food preparing area shall be considered as greasy waste drains and included in the interceptor capacity calculation.
 - 2. For indirect waste systems where hub drains and floor sinks are used as receptors for dishwashers, 2 and 3 compartment sinks, etc., the fixture unit count shall be twice (2x) the floor sink or drain trap arm size.
 - 3. Mop sinks and hand wash sinks may be drained through a sand and grease interceptor, they shall be included for interceptor sizing when they are in the preparation area.
- B. The fixture unit count is determined by the type and drain size of each fixture.
Please refer to Appendix A "Trap Arm Size Table".
- C. The total fixture unit count is multiplied by a factor of 3 gpm to obtain the required trap/interceptor flow rate (gpm) for adequate waste removal efficiency.
- D. The flow rate (gpm) is multiplied by a 12-minute detention time factor to determine the total minimum capacity in gallons required for the trap/interceptor.

A 50-G.P.M. rated prefabricated grease trap or a 240-gallon concrete grease interceptor are the minimum size approved for commercial use kitchens.

GPM Gallons per Minute

Facilities using dishwashers, wok stoves, garbage grinders or has serving on site will require installing the properly sized interceptor with a minimum two (2)-compartment design. The interceptor shall comply with the minimum twelve (12) minute total detention time design. (7 min. first compartment, 5 min. second compartment). The first and second compartment volumes shall have at a minimum a 60/40-ratio design respectively.

Facilities with limited kitchen fixtures such as one three compartment sink require a minimum of 50 G.P.M. rating prefabricated grease trap or 240-gallon concrete interceptor. Facilities installing a minimum 240-gallon concrete interceptor shall install an interceptor with a two (2)-compartment and a twelve (12) minute detention time.

3. Review and approval of proposed grease trap/interceptors:

A. Construction and Design Requirements:

1. Concrete traps/interceptors shall conform to ASTM C 913.
2. The trap/interceptor shall have a minimum of two compartments with the primary section having a 7-minute detention time (60% of total volume) and the secondary section having a 5-minute detention time (40% of total volume). The total volume of the trap/interceptor shall provide for a total twelve-minute detention time.
3. The trap/interceptor shall have equal access into each compartment for cleaning and inspection.
4. The interceptor manhole covers shall be air and water tight with a diameter of twenty-four (24) inches. The covers shall be secured in place with a concrete slab with the minimum dimensions of 42 by 42 inches with the proper reinforcement and at finished grade level
5. There shall be a minimum of twelve (12) inches of air gap between the trap/interceptor's water level height and the bottom of its lid shaft(s).
6. The interceptor shall be capable of withstanding the traffic load where installed.
7. The grease trap/interceptors shall be PDI approved. ***PDI Plumbing and Drainage Institute***
8. The design and size of the proposed Trap/Interceptor must be approved by the Industrial Waste Pretreatment Section before installation. An approval may be obtained from the Industrial Waste Pretreatment Section located at 5816 Daugherty Ave. Please Contact our office at (956) 721-2000 we will be glad to be of any assistance.
9. Any construction without the preliminary approval of the industrial waste pretreatment requirements by the Industrial Waste Pretreatment Department will require the installation of an approved pretreatment trap/interceptor and any other required modifications.

B. Installation Requirements:

1. Installation requirements are established to insure that the designed g.p.m. rating, detention time; capacity and efficiency are not altered, rendering the trap/interceptor inefficient.
2. Any facilities requiring compliance by the Industrial Waste Pretreatment Section shall require a plumbing permit for the installation of the trap/interceptor and sampling well.
3. The trap/interceptor shall be installed as close as possible to the plumbing fixtures.

4. Concrete interceptors shall be set on a 6-inch sand base.
5. The trap/interceptor outlet pipe shall be at a height, which will maintain the designed interceptor capacity and the designed 12-minute detention time. The inlet and outlet pipes shall have downward extensions (manifold pipes) with lengths equaling one half of the water level height, where applicable.
6. Air vents shall be installed in the inlet and outlet pipes of the trap/interceptor.
7. Steel fabricated trap/interceptors shall be installed as per manufacturer's requirements and in accordance with applicable City of Laredo Building Department requirements.
8. Joint trap/interceptor utilization is prohibited. Each business establishment that requires a trap or an interceptor shall install one that serves only that establishment.
9. Establishments requiring additional trap/interceptor capacity may increase capacity through:
 - A. Installation of an additional trap/interceptor either in tandem or in series.
 - B. Remove and install new properly sized trap/interceptor in same location.
10. The facility representative (owner, general contractor, and plumbing contractor) shall be responsible for contacting the Industrial Waste Pretreatment office for an inspection and approval of the installation/modifications before they are covered up. The installations/modifications cannot be inspected for approval if they are not accessible for inspection.

C. Sampling Ports/Control Points:

A generator shall install or provide a sampling port/control point for liquid waste of size and type specified by the appropriate city authority. The sampling port shall be installed at the outlet side of the interceptor for proper sampling procedures.

4. Grease traps installation final approval:

FINAL TRAP/INTERCEPTOR INSTALLATION INSPECTION REPORT

A copy of an approved plumbing inspection report of all the plumbing connected to and discharging from the Trap/Interceptor shall be required for the issuance of the Industrial Waste Pretreatment Requirements Compliance Report. The City of Laredo Plumbing Inspector shall issue the plumbing inspection report.

B. Chemical and Biological Treatment:

1. Chemical and Biological agent usage for removal, reduction, and/or destruction of grease/oil or solids is strictly prohibited.
2. Usage of Chemical and/or Biological agents for improving plumbing lines within the restaurant is allowed as long as there is no inhibitory action with the pretreatment trap/interceptor.

APPENDIX A

DEFINITIONS

All terms defined in this appendix and used in the pretreatment policy are as defined in Chapter 31. UTILITIES, ARTICLE II. SEWERS AND SEWAGE DISPOSAL, DIVISION 3. USE OF PUBLIC SEWERS of the City of Laredo Code of Ordinances.

Act or "*the Act*" means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.

City means the City of Laredo or City Council of Laredo

Control Point means a point of access to a course of discharge before the discharge mixes with other discharges in the public sewer.

Generator means a person who causes, creates, generates, stores, or otherwise produces liquid waste, including but not limited to grease trap waste, grit trap waste and septage as a by-product of some domestic or nondomestic activity.

Indirect discharger or discharge means the introduction of pollutants into the POTW from any nondomestic source regulated under section 307(b), (c), or (d) of the Act.

Industrial wastes means liquids or other character of wastes resulting from any commercial, manufacturing or industrial operations or processes, excluding normal domestic sanitary sewage unless it exceeds three hundred fifty (350) mg/l BOD or three hundred fifty (350) mg/l total suspended solids, which waterborne or liquid wastes enter the sewage system, or any portion thereof, of the city.

Liquid waste means water-borne and liquids containing dissolved or suspended waste materials, including but not limited to, septage, and wastes from grease traps, and grit traps.

Manifest means the written, multipart documentation required to be in the possession of the transporter enabling disposal or hauled grit trap waste, grease trap waste, and septage at a permitted or registered disposal site.

Permit means the formal written control document issued by the city to a transporter which entitles such transporter to collect, transport and dispose of grease trap waste, grit trap waste and septage at a permitted or registered treatment, storage, or disposal site or facility, and regulates said activities.

Pretreatment means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the POTW

Pretreatment requirement means any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

Pretreatment standards or standards means prohibited discharge standards, categorical pretreatment standards, and local limits.

Prohibited Discharge Standards or ***Prohibited Discharges*** means absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 31.52.1 of Chapter 31 Utilities of the City of Laredo Ordinance.

Publicly Owned Treatment Works or ***POTW*** means a “treatment works” as defined by Section 212 of the Act (33 U.S.C. 1292), which is owned by the city. This definition includes the five wastewater treatment plants, any devices or systems used in the collection, storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant.

Sewage means human excrement and gray water (household showers, dishwashing operations, etc.)

Transporter means a person who utilizes a vehicle to transport liquid waste by roadway, which is:

- (1) Disposed of within the regional boundary;
- (2) Transferred within the regional agent boundary; or
- (3) Collected from a generator or waste transporter within the regional agent boundary.

Trap/Interceptor means a device designed to skim, settle, or otherwise remove grease, oil, sand, flammable wastes or other harmful substances.

User or ***Industrial User*** means a source of indirect discharge.

Wastewater means liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the POTW.

Wastewater Treatment Plant or ***Treatment Plant*** means that portion of the POTW, which is designed to provide treatment of municipal sewage and industrial waste.

Sec. 31-170. Responsibilities of generator and disposal site operator.

(a) It shall be unlawful and an offense under this section for a generator to fail to do the following:

- (1) It shall be the responsibility of every generator of liquid waste to:
 - a. Know or ascertain the contents, characteristics and classifications of wastes;
 - b. Have liquid waste removed from his premises by a transporter holding the proper city, state, and/or federal permits or registrations required to collect and transport such waste; and
 - c. Make a determination that the waste to be transported under this division is nonhazardous, as required.

(2) A generator of hazardous waste, or liquid waste in combination with hazardous waste, shall only have such waste removed from his premises by a transporter holding the applicable city, state or federal permit or registration to transport wastes.

(3) A generator of liquid waste shall have traps serviced as frequently as necessary to prevent bypass or overflow and to insure proper operation of the trap. Such generators shall at minimum, have traps serviced quarterly or as approved by the director in accordance with all other provisions of this division.

(4) A generator of liquid waste shall sign the manifest presented by the liquid waste transporter holding a city liquid waste transporter permit and shall keep the manifest for a period of five (5) years. Appropriate department personnel may inspect such manifests during normal business hours.

(5) A generator shall, in addition to the requirements above, be responsible for performing the following:

- a. Install or provide a collection point for liquid waste of size and type specified by the appropriate city, state, or federal authority, if any such specification exists.
- b. Continuously maintain the collection point in an accessible, clean, safe and proper operational condition.
- c. Supervise the proper maintenance of the collection point.
- d. Report discharges spills or accidents involving collection point which pose a threat to the public health or potential damage to the environment involving the collection point to the utilities department immediately.
- e. Recover all accidental spills and discharges immediately and have such waste disposed of by a transporter holding a valid permit, license, or registration from the appropriate city, state or federal authority.

(6) It is the responsibility of every generator to hire and supervise the maintenance of their grease trap, grit trap or septage tank for proper cleaning and procedures. Any dissatisfaction with service must be discussed with the contracted liquid waste transporter. If high surcharge bills continue although regular trap maintenance, it is the responsibility of the generator to hire and supervise the maintenance to their satisfaction.

(7) Grit trap waste generators that choose to dry their waste before disposal shall construct an onsite drying facility specified and approved by the director. The waste shall be transported and disposed of by a transporter holding a city permit to an authorized and permitted disposal site.

(b) It shall be unlawful and an offense under this section for operators to fail to do the following:

(1) Liquid waste disposal site operator which accepts liquid waste from a transporter permitted by the city shall comply with this division and receive waste from a transporter holding a city permit issued hereunder according to the requirements of the permit and the division. Every disposal site operator shall maintain the operator's copy of a manifest from a city liquid waste transporter permit for a period of five (5) years. The appropriate department personnel may inspect such manifests during normal business hours.