

PRETREATMENT/LABORATORY DIVISION

Pretreatment Program

Pretreatment Programs were established to control the discharges of industrial users into collection systems. The Environmental Protection Agency first issued pretreatment regulations in 1978. The State of North Carolina identified the need for establishing pretreatment programs in 1980.

The City of Hickory's Pretreatment Program is an EPA federally-mandated program under the administration of the State of North Carolina PERCS Unit with the City of Hickory as the Control Authority. The main objectives of the Pretreatment Program are:

- To prevent the introduction of pollutants into the municipal wastewater system which will interfere with the operation of the system or contaminate the resulting sludge.
- To ensure that the municipality complies with its NPDES permit conditions, sludge use and disposal requirements and any other federal or state laws to which the municipal wastewater system is subject.
- To prevent the introduction of pollutants into the municipal wastewater system which will pass through the wastewater system, inadequately treated, into any waters of the State or otherwise be incompatible with the system.
- To promote reuse and recycling of wastewater and sludge from the municipal system.
- To protect both municipal personnel who may be affected by sewage, sludge, and effluent in the course of their employment as well as protecting the general public.
- To provide for equitable distribution of the cost of construction, operation, maintenance and improvement of the municipal wastewater system.

Pretreatment staff compile lists of potential industries and then survey, inspect, and analyze the discharges of these industries. Industries identified as Significant Industrial Users (SIU) must be permitted under the Pretreatment Program.

Significant Industrial Users

- Significant Industrial User – 15A NCAC 2H .0903(b)(34)
 1. Discharges an average of 25,000 gal/day or more of process wastewater (excluding domestic, non-contact cooling water, and boiler blowdown)
 2. Contributes a process waste stream which makes up 5% or more of any parameter's design capacity (MAHL) of the receiving POTW.
 3. All industrial users subject to Categorical Pretreatment Standards under the Code of Federal Regulations – Title 40 (40 CFR) Part 403.6, and CFR Title 40 Chapter 1, Subchapter N – Effluent Guidelines and Standards
 4. Is designated by the City of Hickory's Pretreatment Division as having a reasonable potential for adversely affecting the POTW's operations or violating any pretreatment standard or requirement.

If an industry meets at least one of these designations, steps are taken to permit the industry.

Major Pretreatment Program Elements:

- Sewer Use Ordinance (SUO)
- SIU Permits (IUP)
- Industrial Waste Survey (IWS)
- Long Term Monitoring Plan (LTMP)
- Headworks Analysis (HWA)
- Allocation Table (AT)
- Sampling, Analysis, and Inspection
- Enforcement Response Plan (ERP)
- Pretreatment Annual Report (PAR)
- Mercury Minimization Plan (MMP)
- Review of Pretreatment Designs (ATC)
- Compliance Judgment & Enforcement
- Dental Amalgam Rule



Hickory Regional Laboratory

The Hickory Regional Laboratory is a NC state certified laboratory which conducts laboratory analyses for NPDES permits, SIU's, & other analyses as needed for plants, industrial users, or the collection system.

Analyses conducted in laboratory:

- BOD₅ (Biological Oxygen Demand)
- TSS (Total Suspended Solids)
- NH₃/N (Ammonia/Nitrogen)
- COD (Chemical Oxygen Demand)
- Ultra-Low Range Chlorine
- Conductivity
- pH
- Dissolved Oxygen
- Temperature
- Total Phosphorus
- Phenol
- MBAS (Methylene Blue Active Substances)
- Fecal Coliform



FOG (Fats, Oils, & Grease) Program

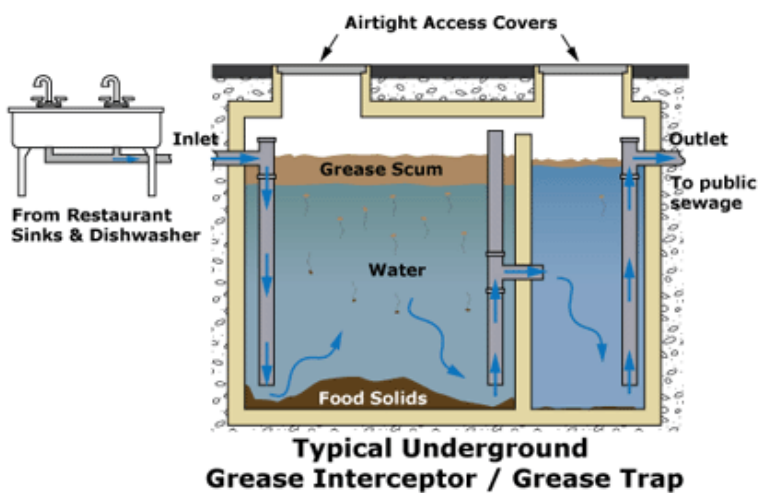


Objectives of FOG Program

- Administer the Oil and Grease policy in accordance with the City of Hickory's Sewer Use Ordinance
- Promote the reduction of sewer overflows
- Protect the City of Hickory's infrastructure by preventing the buildup of FOG in collection system lines, pumps, and equipment
- Meet with the City of Hickory's approximately 250 FOG contributors on a one-on-one basis to educate, inspect grease interceptors for compliance, gather information, and re-inspect for compliance if needed.

How does a grease interceptor work?

- A properly designed and maintained oil & grease interceptor allows solids, oils, and greases to be trapped, while allowing water to flow from the interceptor into the collection system.
- In order to properly maintain the interceptor, the oil & grease must be pumped from the interceptor on a regular schedule by an approved company. This helps reduce oil and grease in the collection system.



Typical Underground Grease Interceptor / Grease Trap

Sources of FOG:

- Restaurants
- Households
- Industrial cafeterias
- Schools
- Hospitals
- Nursing homes

Household tips to reduce FOG:

- **Don't put oil or grease down the drain**
- Collect oil & grease in containers and allow to congeal or place in freezer. Place in garbage afterwards.
- If you see a manhole overflowing, call City of Hickory dispatch immediately.

FURTHER INFORMATION

Thank you for stopping by our website. If we can be of further assistance or to schedule a tour, please feel free to contact us at (828) 322-4821.