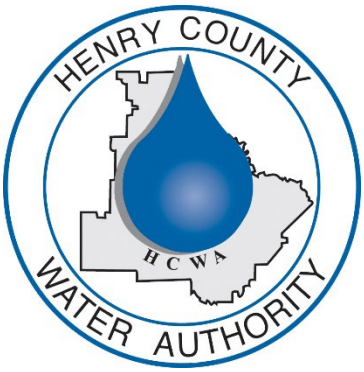
Industrial Pretreatment Program Guidance Manual

A Guide for Industrial Users



Henry County Water Authority
Industrial Monitoring Department
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(678) 583-5600

OUR ENVIRONMENTAL RESPONSIBILITY

The National Pretreatment Program was established by Section 307 of the Clean Water Act primarily to control pollutant loadings from industrial sources and prevent their interference with the operation of publicly owned treatment works (POTWs).

In Georgia, the Environmental Protection Division (EPD) of the Department of Natural Resources (DNR), operating under Rule 391-3-6-.08, has been delegated the authority by the Environmental Protection Agency (EPA) to administer local pretreatment programs found in 40 CFR Part 403.

The Henry County Water Authority (HCWA) works to protect the local receiving waters by regulating industrial wastewater discharge to the Authority's sewer system and by administering and enforcing federal EPA pretreatment regulations.

The Authority's objectives include:

- To safeguard the Authority's POTWs by preventing the introduction of industrial pollutants that will cause "interference" with the operation of the treatment facilities.
- To safeguard the receiving waters of the state of Georgia by preventing introduction of pollutants that will "pass through" the treatment facility.
- To ensure the health, safety, and welfare of the public.
- To improve opportunities to recycle and reclaim wastewaters and sludges.
- To equitably distribute the cost of operating and maintaining the treatment system and to provide a high level of wastewater treatment.
- To comply with federal and state regulations.

The Authority's ability to control the county's industrial wastewater discharge and to protect the county's water quality is a significant task.

OUR WASTEWATER TREATMENT FACILITIES

The Authority currently has three wastewater treatment facilities that have the capacity to treat 12.25 million gallons of wastewater per day.

The **Bear Creek Wastewater Treatment Facility**, constructed in 1997 and expanded in 2009, has a rated treatment capacity of 1.25 MGD. Bear Creek LAS facility has 230 wetted acres, a 2.4 MG and a 14 MG holding pond, for a total of 16.4 MGs of holding capacity. That treated wastewater is land applied through 1,360 spray heads.

The **Indian Creek Water Reclamation Facility** came online in November of 2001. Phase I of the facility provided HCWA with 1.5 MGD of wastewater treatment capacity. In 2019, a plant expansion increased the capacity to 3 MGD, using MBR technology. This expansion eliminated the need for land application.

The **Walnut Creek Water Reclamation Facility** came online in 2005 is the largest facility of the HCWA sewer operations. It currently offers 8 MGD of wastewater treatment capacity. This facility utilizes approximately 1,040 acres of forested land to spray the treated wastewater from two holding ponds having a total storage volume of approximately 80 Million Gallons. The treated wastewater is land applied with irrigation using over 8,000 spray heads. An ATAD (Autothermal Thermophilic Aerobic Digester) produces reduced sludge volume, pathogen free, Class "A" biosolids that has many environmentally-friendly uses. The Walnut Creek facility also houses the HCWA compliance laboratory.

The facility is currently undergoing an expansion which consists of a 6 MGD plant addition, an additional ATAD, biosolids building, solar dryer, and laboratory. Once the construction is completed, Walnut Creek WRF will have the capacity to treat 14 MGD.

The treatment facilities are themselves subject to the requirements and limitations of National Pollution Discharge Elimination System (NPDES) permits, which are issued by the

Georgia Environmental Protection Division. NPDES permits are required for all facilities (including sewage treatment plants) discharging to navigable waters or surface waters of the state. In order to meet and maintain the requirements of its NPDES permits, the Authority regulates industries discharging to the sewer system.

DOING YOUR PART

For Industrial Users (IUs) operating in Henry County, taking a proactive approach to industrial wastewater regulations and being in compliance makes good business sense. Compliance starts with contacting the Authority and submitting an industrial wastewater permit application.

Understanding IU responsibilities and knowing the resources available to assist in meeting compliance will enable industries to handle regulations effectively and efficiently.

It is intended that this guidance manual will aide in IUs meeting the requirements of the Authority's Sewer Use Ordinance (SUO) and will protect and promote the health, safety, and welfare of the general public as it relates to industrial wastewater discharges. This guide is designed to assist businesses with questions regarding industrial wastewater discharge to the sewer. It contains information on permitting, fees and billing, inspection, monitoring and enforcement activities, and lists environmental resources available to businesses in Henry County. Pretreatment approval by the Authority does not relieve the IU of his responsibility to comply with all applicable laws and regulations. This manual is a supplement to the Authority's SUO and is not intended to cover all IU requirements.

The regulations of the EPA and EPD are updated periodically. The IU is solely responsible for staying informed of any changes to state and federal regulations.

WHO NEEDS AN INDUSTRIAL WASTEWATER PERMIT

Industrial facilities and certain commercial facilities which plan to discharge industrial wastewater to the Authority's sewage collection and treatment system are required to first obtain an industrial wastewater permit. Industrial wastewater is generated from any manufacturing, processing, institutional, commercial, or agricultural operation, or any operation that discharges wastes other than domestic or sanitary wastewater.

The Authority should be contacted to determine if a permit is required. Building permits, plumbing permits, and sewer connection permits do not constitute industrial wastewater permits and must be obtained separately.

The Authority will use the following criteria for regulating industrial users:

- Any user that contributes at least 5% of the average dry weather hydraulic or organic capacity of the POTW.
- All users with discharges greater than 25,000 GPD.
- All users subject to categorical pretreatment standards.
- All users with a potential to adversely affect POTW operations:
    - Potential to inhibit or upset the treatment facility processes.
    - Potential to cause a violation of the treatment plants' NPDES permit or water quality criteria.
    - Potential to limit sludge disposal options.
- All users with reasonable potential to violate any pretreatment standards or requirements, including toxic pollutants in their discharge.

HOW TO OBTAIN AN INDUSTRIAL WASTEWATER PERMIT

To obtain an industrial wastewater permit, a completed application, along with an application fee of $500 must be submitted. Applications can be found at: www.hcwa.com. For assistance with the permit application process, please contact our Industrial Monitoring Department at (678) 583-5600.

Industrial wastewater permits are not transferable from one company or person to another.

Whenever a change in ownership of a business occurs, the new company must obtain a new permit.

INDUSTRIAL WASTEWATER PERMIT REQUIREMENTS AND INDUSTRIAL USER RESPONSIBILITIES

Permits are issued to define IUs' responsibilities and obligations when discharging industrial wastewater to the sewer. Industrial wastewater permit holders should read permits carefully for a clear understanding of the specific permit requirements.

Permit requirements are determined based on the type and volume of industrial wastewater discharged. All permitted facilities are required to sample and monitor their wastewater and submit reports, which include technical and compliance reports, and notification of discharges. Additionally, any change in waste strength or flow, as well as any accidental discharges of prohibited or regulated material must be reported to the Authority.

Permits have a maximum duration of five years from the date of issuance or reissuance. Applications for permit renewal must be filed a minimum of ninety days prior to the permit expiration date.

SIGNIFICANT INDUSTRIAL USERS

Facilities which are classified as Significant Industrial Users (SIUs) have more stringent requirements than other types of businesses. A SIU is defined as a discharger that is either subject to categorical pretreatment standards, or discharges 25,000 gallons or more per day of process wastewater, or is designated to have a reasonable potential to adversely affect operation of the Authority's treatment plants.

DENTAL AMALGAM

HCWA classifies dental facilities as commercial users and are subject to fees and fines as industrial users.

In 2017, EPA finalized technology-based pretreatment standards under the Clean Water Act to reduce discharges of mercury and other metals from dental offices into wastewater systems. Mercury waste amalgam can make its way into the environment and have a wide range of health effects. This rule applies to offices, institutions such as dental schools and clinics, where dentistry is practiced that discharges to POTWs.

Dental offices that discharge to the sewer that do not place or remove amalgam need only to submit a one-time compliance form. Dental offices that place or remove amalgam must operate and maintain an amalgam. Scrap amalgam or line cleaners shall not be discharged to the sewer. A one – time compliance form must be submitted to the Authority's Industrial Monitoring Department.

CHANGES IN THE FACILITY

The Authority must be notified whenever certain changes such as operations, process, flow, or pretreatment modifications occur in a facility. The permit may be amended as a result of any such modifications.

Site visits/inspections will also be conducted to determine whether users have experienced changes that will require permit modifications.

DISCHARGE LIMITATIONS AND PROHIBITIONS

Discharge limits are numerical pollutant concentration values which are not to be exceeded at any time. There are two types of discharge limitations by which industrial users of the Authority's sewer system must comply, **Local Limits** and **Federal Limits**.

LOCAL LIMITS

Local limits, as specified in the table on the following page, are established specifically to protect the Authority's treatment plants and are applied to all types of industries. These local limits were approved by EPD in August 2022.

Parameter	Harmonized Local Limit (mg/L)
pH	6/9
BOD_5	330/220
TSS	330/220
Ammonia, as N	38/25
Oil and Grease	100
Total Phosphorus, as P	8
Arsenic	0.025
Beryllium	N/A
Cadmium	0.014
Chromium	2.4
Copper	0.23
Cyanide	0.03
Lead	0.12
Mercury	0.2
Molybdenum	0.064
Nickel	0.28
Selenium	0.051
Silver	0.57
Thallium	N/A
Zinc	0.42
Pentachlorophenol	N/A
Trichlorophenol	N/A

GENERAL PROHIBITIONS

In addition to the local and federal limitations, the 40 CFR 403 Federal prohibitions contain a list of prohibited wastes which must not be discharged to the sewer in any amount. Examples of prohibited wastes include:

- Flammable, reactive, explosive, corrosive, or radioactive substances
- Noxious or malodorous materials
- Medical or infectious wastes
- Solid or viscous materials which would cause obstruction to the flow or operation of the treatment plants
- Toxic substances
- Non-biodegradable oils
- Pollutants which result in the emission of hazardous gases

A complete list of prohibited wastes can be found in 40 CFR 403.

Backwash from any recreational water facility are not allowed to enter the POTW.

Any glutaraldehyde and ortho-phthalaldehyde (OPA) cold disinfectants shall not be discharged into the sewer. Neutralization of glutaraldehyde and OPA for discharge to POTWs falls under hazardous waste rules of Treatment by Generator. As such, federal, state, and local laws require documentation of onsite hazardous waste treatment via use of a chemical waste treatment log. This log is a record of chemical waste treatment and must be kept onsite for a minimum of three years. Dilution of the biocides with water is prohibited.

Illegal discharge to the sewer of regulated or prohibited substances can result in treatment plant upsets, poor quality of biosolids, eroded pipes, exploding sewer lines, and noxious fumes.

Illegal discharges are subject to civil and criminal prosecution.

SLUG CONTROL & SPILL PLANS

All Significant Industrial Users (SIUs) are required to provide the Authority with a Slug Discharge Plan. A Slug Discharge Plan must include a description of discharge practices, including non-routine batches, description of stored chemicals, and procedures for notifying the POTW of slug discharges.

A complete list of requirements can be found in the Authority's SUO.

Additional IUs may be required to provide a slug discharge plan upon request.

INSPECTION AND SAMPLING

The Authority's monitoring program is conducted to control discharge to the County's treatment plants. Routine facility inspections and sampling are conducted a minimum of once annually by industrial waste inspectors to ensure compliance with individual permit requirements. These inspections may not be announced to the IU and can happen at any time, 24 hours per day/7 days per week.

The Authority also reserves the right to request a monthly sampling schedule from any IU. In this case, samples must be collected on the specified dates and the Authority must be immediately notified of any deviations from the schedule.

Annual inspections at industrial user facilities will cover the following:

- Manufacturing areas
- Chemical and material storage areas
- Hazardous waste storage areas
- Pretreatment facilities
- Laboratory facilities
- Sampling, monitoring and analysis

Inspectors also conduct surveillance monitoring at sewer maintenance manholes, inspector targeted areas in the County to inventory industrial users that require permits, and respond to treatment plant upsets or interference which may require investigations of IUs upstream from treatment plants.

INDUSTRIAL WASTE FEES

Facilities that discharge industrial wastewater to the HCWA's sewer system may encounter additional fees to cover the Authority's cost of inspection, sampling, and additional treatment of wastewater with industrial pollutants or high strength. The types of industrial fees are described herein:

Industrial Wastewater Permit Application Fee

All facilities required to obtain an Industrial Wastewater Permit must pay an application fee of $500. The fee pays for the Authority's cost of processing permit applications, performing initial field visits, and issuing final permits. This fee also applies for permit renewals.

Inspection and Control Fee

Permitted industrial users must pay an annual inspection and control fee of $150. This fee offsets a portion of the cost of inspection, inventory control and management, and pretreatment processes.

Non-Compliance Fee

In addition to the other industrial waste fees, IUs are subject to this fee which is assessed on a case-by-case basis to recover additional costs of an intensified industrial waste pretreatment program mandated by the EPA. The minimum Non-Compliance Fee shall be $1500. The Non-Compliance Fee pays for the cost of administrative fees, sampling, testing, and monitoring. In addition to a Non-Compliance Fee, SIUs are subject to additional wastewater treatment costs.

Surcharge Fee

The Authority measures an industrial user's waste "strength" in terms of Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), nitrogen and phosphorus concentrations. If concentrations of these pollutants, as measured in the IU's wastewater, are higher than those indicated in the Industrial Wastewater Permit, a Surcharge Fee will be assessed. Treatment and removal of "high strength" waste requires extra operating expenses such as the cost of additional chemicals, power, solids storage capacity and disposal. The method used to calculate a surcharge fee can be found in the Authority's Schedule of Rates and Fees.

ENFORCEMENT

Industrial facilities that do not comply with permit requirements are subject to enforcement action. The Authority utilizes an enforcement response plan with actions ranging from issuance of Notices of Violation (NOVs) and Administrative Orders to permit suspension and revocation, and sewer or water service termination, as well as civil or criminal prosecution. The key to responding to a violation notice is understanding the problem. Ask questions and always work closely with the Authority when responding to NOVs.

A demonstration of good faith by the industrial user does not preclude enforcement action. However, a user's willingness to comply may predispose the Authority to select less stringent enforcement responses. To maximize compliance by industrial users, a wide range of

enforcement mechanisms are available. These mechanisms may range from a simple telephone call to imposing significant civil and/or criminal penalties.

Legal authority for enforcing the Industrial Wastewater Pretreatment Program is contained in the Authority's Sewer Use Ordinance (SUO). Procedures for enforcing the SUO are provided in an approved EPA Enforcement Response Plan (ERP) and are included in each IU's permit.

POLLUTION PREVENTION: REDUCE, REUSE, AND RECYCLE

Reduce your waste and reduce hassle. By minimizing the wastes generated, businesses save on disposal costs and associated regulatory fees, reduce future environmental liability, reduce health risks for its workers and improve overall public image.

One of the first steps a business can take in waste reduction is to identify what and how much of the facility's resources are being wasted. Important items to keep track of include volume of waste, different categories of waste, and the cost of disposal.

The following practices are some of the many approaches to implement pollution prevention:

- Modifying processes or operations to increase the yield of product from raw materials and energy input;
- Recovering unused raw materials and recycling them directly to the operation;
- Substituting raw materials of high toxicity with those having lower toxicity;
- Eliminating the need for certain toxic solvents or other toxic additives through innovative process modifications; and
- Substituting the end product with another product that has similar performance but generates less toxic waste.

Keeping track of technological advances and being involved in trade associations can also uncover ways to reduce waste generation.

HELP IS AVAILABLE

The Authority strives to maintain close contact with permittees and works hard to effectively protect the wastewater system while remaining sensitive to business needs. The Authority will continue to help its permittees comply, respond to enforcement orders, and find ways to reduce or eliminate pollutant discharges to the sewer.

REPORTING ILLEGAL DISCHARGES

To report uncontrolled or illegal discharges to the sewer system, please contact the Henry County Water Authority at (770) 957-6659 or (678) 583-5600 or after hours at (770) 957-1380.

To report clogged catch basins, and illegal dumping into storm drains, please contact the Henry County Stormwater Department at (770) 288-7246.

IMPORTANT CONTACTS

EPA National Response Center (NRC)
(800) 424-8802

GA Emergency Mgmt. Agency
(404) 635-7000

Georgia Environmental Protection Division
(404) 463-1511
askepd@gaepd.org

The Authority reserves the right to amend this document in cases of emergency, or in cases in which the Authority is required to adopt immediate rules or regulations to comply with federal, state or regulatory agency rules, regulations, and laws.

Approved this 6TH day of APRIL, 2023

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