

Guide for Discharging Industrial Wastewater To The Sewer



City of Los Angeles
Department of Public Works
Bureau of Sanitation
Industrial Waste Management Division

INDUSTRIAL WASTE MANAGEMENT DIVISION (IWMD)

The Industrial Waste Management Division (IWMD) of the Bureau of Sanitation monitors, regulates, and controls industrial wastewater discharges to the City's wastewater collection and treatment system.

MISSION

IWMD's mission is to protect public health and safety, the wastewater system, and the environment by implementing an effective and efficient program for source control of pollutants while enhancing relationships with industry, government, and the public.

VISION

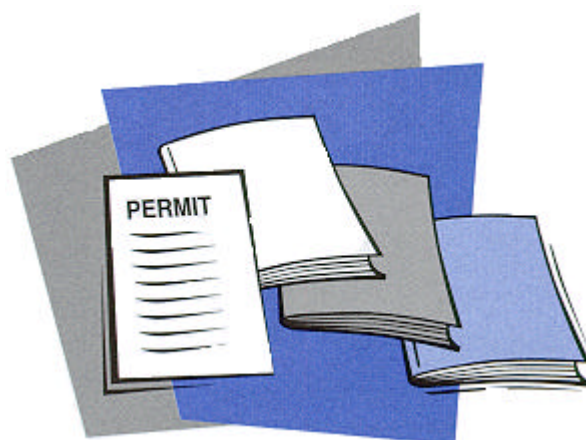
IWMD's vision for the future is to set the standard of excellence in source control of pollutants to the wastewater system.



Clean Water: Making it Happen

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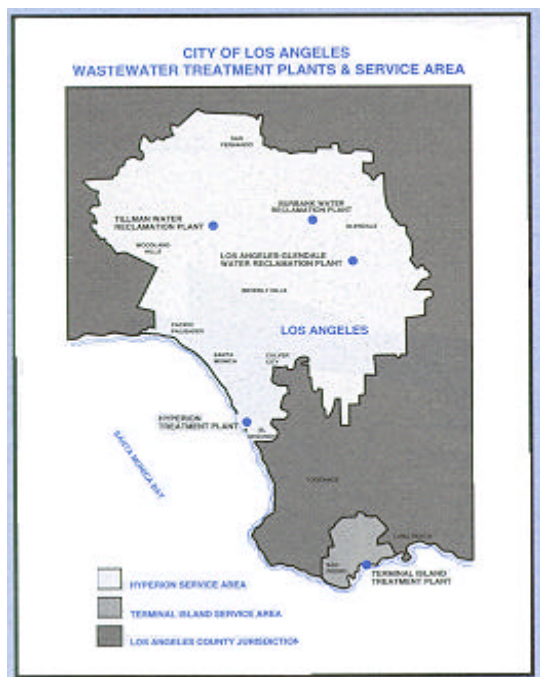


Our Environmental Responsibility

For more than five decades, the Industrial Waste Management Division (IWMD), of the Bureau of Sanitation, Department of Public Works, has worked to protect the local receiving waters (rivers and oceans) by regulating industrial wastewater discharge to the City's sewer system and by administering and enforcing the Los Angeles Municipal Code (LAMC) Section 64.30 Industrial Waste Control Ordinance) as well as federal EPA pretreatment regulations.

IWMD's objectives include:

- Protecting the treatment plants from interference with process operations and pass through of harmful pollutants;
- Protecting the life, health, and safety of operating and maintenance personnel;
- Ensuring the health, safety, and welfare of the public;
- Providing the opportunity for beneficial reuse of biosolids;
- Providing the opportunity for water reclamation.



IWMD's ability to control the City's industrial wastewater discharge and to protect the City's water quality is a significant task. The City of Los Angeles has four wastewater treatment plants that collectively treat an average of 450 million gallons a day of wastewater. The treated wastewater is either reused as reclaimed water or discharged to the Los Angeles River, Santa Monica Bay, and L.A. Harbor.

The four treatment plants are themselves subject to the requirements and limitations of National Pollutant Discharge Elimination System (NPDES) permits, which are issued by the California State Regional Water Quality Control Board (RWQCB). NPDES permits are required for all the 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 City through the IWMD, regulates industries discharging to the sewer system.

Doing Your Part

For industrial users (IUs) operating in the City of Los Angeles, taking a proactive approach to industrial wastewater regulations and being in compliance makes good business sense. Compliance starts with contacting the Industrial Waste Management Division (IWMD), submitting an industrial wastewater permit application and paying the required fees. Understanding your responsibilities and knowing the resources available to help you meet compliance will enable you to handle regulations effectively and efficiently.

This guide provides information to help 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 Los Angeles.

Who Needs an Industrial Wastewater Permit

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

IWMD 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.

Exemptions

An industrial wastewater permit is not required if your facility's wastewater discharge is any of the following:

- Discharges from restaurants with seating capacity less than 150.*
- Bleed off or blowdown from cooling towers, evaporation condensers or other recirculating water devices with rated capacity of 25 tons or less.
- Self-service laundries with washing machines of 20 pounds maximum capacity, with further allowance that individual self service laundries may have a maximum of two machines with maximum of 50 pound capacity.
- Discharges from establishments where the industrial wastewater discharge is less than 200 gallons per day and pretreatment is not required.

*Note: Restaurants, regardless of seating capacity, which cause undue maintenance or stoppage of the sewer system will be required to obtain a permit and install pretreatment.

How to Obtain an Industrial Wastewater Permit

To obtain an industrial wastewater permit you must submit a completed application and pay the associated application fee (\$356 in 1997). For permit application and assistance, please contact IWMD at (323) 342-6200.

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 IU's responsibilities and obligations when discharging industrial wastewater to the sewer. If you have an industrial wastewater permit, read it carefully and be sure that you fully understand the permit requirements.

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

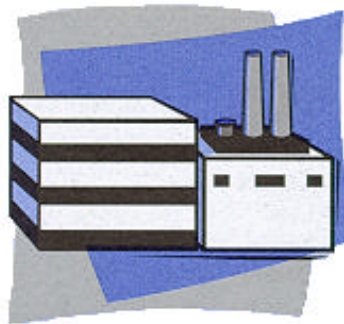


Significant Industrial Users

Facilities, which are classified as Significant Industrial Users (SIUs), have more stringent requirements than other types of businesses. A Significant Industrial User (SIU) is defined as a discharger that is either subject to Federal 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 City's treatment plants. SIUs are further classified as Categorical Industrial Users (CIUs) if they are subject to federal discharge limitations developed by the EPA.

CIUs are also subject to the City's local limits. All other SIUs are classified as Non-Categorical Significant Industrial Users (NCSIUs) and are subject only to the City's local limits.



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

Local Industrial Users

All permitted facilities not classified as SIUs are defined as **Local Industrial Users (LIUs)**. LIUs are subject only to the City's local limits and have lesser permit requirements than SIUs. Examples of facilities classified as LIUs include automotive repair and maintenance shops, laboratories, medical and dental offices, and restaurants.

Changes in the Facility

IWMD 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 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 City sewer system must comply, **Local Limits** and **Federal Limits**.

Local Limits

Local limits as specified in the table below, are established specifically to protect the City's treatment plants and are applied to all types of industries.

These local limits are reviewed on an ongoing basis to determine if revisions are necessary to meet local, state and federal regulations.

Federal Limits

Federal limits apply only to facilities with federally regulated processes and are implemented uniformly throughout the nation. For industries with federally regulated processes, the U.S. Environmental Protection Agency issues national categorical pretreatment standards which may be more stringent than those imposed by the City's local limits. In these cases, federal limits become part of the IU's permit requirements in addition to local limits.



CITY OF LOS ANGELES LOCAL LIMITS

| <u>Pollutant</u> | <u>Instantaneous Maximum (mg/l)</u> |
|--------------------------|-------------------------------------|
| Arsenic | 3.00 |
| Cadmium | 15.00 |
| Chromium (Total) | 10.00 |
| Copper | 15.00 |
| Lead | 5.00 |
| Nickel | 12.00 |
| Silver | 5.00 |
| Zinc | 25.00 |
| Cyanide (Total) | 10.00 |
| Cyanide (Free) | 2.00 |
| Dissolved Sulfides | 0.10 |
| pH Range | 5.50 – 11.00 (standard units) |
| Dispersed Oil and Grease | 600.00 |

FEDERALLY REGULATED INDUSTRIAL CATEGORIES

Aluminum Forming (40 CFR 467)
Asbestos Manufacturing (40 CFR 427)
Battery Manufacturing (40 CFR 461)
Coil Coating, Phase I (40 CFR 465)
Coil Coating, Phase II - Can Making Subcategory (40 CFR 465)
Copper Forming (40 CFR 468)
Electrical and Electronic Components, Phase I and Phase II (40 CFR 469)
Electroplating (40 CFR 413)
Fertilizer Manufacturing (40 CFR 418)
Glass Manufacturing (40 CFR 426)
Ink Formulating (40 CFR 447)
Iron and Steel (40 CFR 420)
Leather Tanning and Finishing (40 CFR 425)
Metal Finishing (40 CFR 433)
Metal Molding and Casting (40 CFR 464)
Nonferrous Metals Forming and Metal Powders (40 CFR 471)
Nonferrous Metals Manufacturing, Phase I and II (40 CFR 421)
Organic Chemicals, Plastics, and Synthetic Fibers (40 CFR 414)
Paint Formulating (40 CFR 446)
Pesticide Chemical Manufacturing (40 CFR 455)
Petroleum Refining (40 CFR 419)
Pharmaceutical Manufacturing (40 CFR 439)
Porcelain Enameling (40 CFR 466)
Pulp, Paper, and Paperboard and the Builders' Paper and Board Mills (40 CFR 430 and 431)
Rubber Manufacturing (40 CFR 428)
Soap and Detergent Manufacturing (40 CFR 417)
Steam Electric Power Generation (40 CFR 423)
Textile Mills (40 CFR 410)
Timber Products (40 CFR 429)

General Prohibitions

In addition to the local and federal limitations, the Industrial Waste Control Ordinance and 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 could 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 is included in the Industrial Waste Control Ordinance and in each IU's permit.

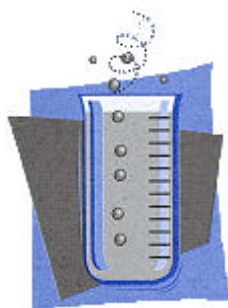
Illegal discharge to the sewer of regulated or prohibited substances can result in treatment plant upsets, poor quality of

biosolids, eroded pipes, exploding sewer lines, and noxious fumes. Illegal discharges are subject to civil as well as criminal prosecution.

Inspection and Sampling

IWMD's monitoring program is conducted to control discharge to the City's treatment plants, the storm drain systems, and the receiving waters.

Routine facility inspections and sampling are conducted by industrial waste inspectors to ensure compliance with the Industrial Waste Control Ordinance as well as each IU's individual permit requirements.



Inspectors also conduct surveillance monitoring at sewer maintenance holes,

inspect targeted areas in the City 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

Industries and residents pay an equitable share for the use of the city sewer system. All residential, commercial, and industrial facilities pay general sewer fees which include the sewerage facilities charge and sewer service charge. Businesses pay a **Sewerage Facilities Charge (SFC)** to purchase capacity in the City's sewer system. The **Sewer Service Charge (SSC)** is included in the water bill from the Department of Water & Power and is assessed to cover the City's wastewater treatment costs.

Facilities that discharge industrial wastewater to the sewer must pay additional fees to cover the City's cost of permitting, inspection, sampling, and additional treatment of wastewater with industrial pollutants or high strength. The various 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 (\$356 in 1997). The fee pays for the City's cost of processing permit applications, performing initial field visits, and issuing final permits.

Inspection and Control Fee (I&C Fee)

Permitted industrial users pay a quarterly inspection and control fee as a function of their assigned "Inspection and Control Class". There are six "Classes" based on the nature of the facility's operations and the fee ranges from \$244/yr to \$2928/yr. This fee pays for the cost of permitting, inspection, sampling and monitoring, laboratory services, inventory control and management.

Significant Industrial User Fee (SIU)

In addition to other industrial waste fees, Significant Industrial Users are subject to this fee which is assessed to recover the additional costs of an intensified industrial waste pretreatment program mandated by the EPA. This fee is divided into six groups based on industry category and/or flow and the fee ranges from \$2359/yr to \$4191/yr.

Quality Surcharge Fee (QSF)

The City measures an industrial user's waste "strength" in terms of Biochemical Oxygen Demand (BOD) and Suspended Solids (SS) concentrations. If concentrations of these pollutants, as measured in the industrial user's wastewater are higher than those typical of domestic sewage, a Quality Surcharge Fee will be assessed. For dischargers less than 40,000 gallons per day, the City uses predetermined "industry wide average" BOD and SS values. Such facilities have the option to self-monitor for SS and BOD values in lieu of using the City assigned values.

The Quality Surcharge Fee pays for the cost of the additional treatment at the City's wastewater treatment plants. Treatment and removal of "high strength" waste requires extra operating expenses such as the cost of additional chemicals, power, solids storage capacity and final disposal. This fee is assessed quarterly in arrears.

The following formula is used to obtain a facility's Quality Surcharge Fee:

$$C = V [a (SS - 205) + b(BOD - 215)] k$$

where C = Quality Surcharge Fee (\$)

V = Discharge flow in g.p.d.

$$k = \frac{8.34 \times 365}{1000000} = .0030441 *$$

a = \$.343 per lb. of SS

b = \$.258 per lb. of BOD

SS = suspended solids concentration, mg/l

BOD = biochemical oxygen demand concentration, mg/l

* a dimensional constant to convert C to dollars

A facility's discharge flow per day is determined from any of the following:

- 90% of facility's total water usage or;
- water balance worksheet (to be submitted by facility and verified by IWMD) or;
- data from flow meter, if present, at facility's discharge point.

Delinquency Fee

If the fees are not paid on or before the last day of the month in which they are due, an additional charge equal to ten percent (10 %) of the required fees, but not less than \$10.00, is added to the fees. If the fees are again not paid after 30 days, the facility's permit is subject to revocation. All outstanding delinquent fees and additional charges must be paid before any new permit is issued.

QUESTIONS REGARDING FEES

Regarding Sewerage Facilities Charges

Call the Department of Public Works, Bureau of Engineering, Central Permits Division at 213/977-6032.

Regarding Sewer Service Charge

Call the Department of Public Works, Sewer Service Information Line at 800/540-0952 or 213/473-8413.

Regarding Industrial Waste Fees

Call Surcharge and Billing Squad, Industrial Waste Management Division at 323/342-6200

Regarding Flow and IC Class Determination

Call Permitting Squad, IWMD at 323/342-6200



HOW CAN I REDUCE MY FEES?

You may be able to reduce your fees by taking any of the following steps:

- Since the sewerage facilities charge, sewer service charge, quality surcharge fee, and inspection & control fee are based upon the amount of metered water that your business

uses, conserve and recycle as much water as possible. Implement pollution prevention practices in your facility.

- If you disagree with the City's assigned BOD and SS values, you may consider self-monitoring for your facility's SS and BOD values. If independent laboratory analyses indicate that your BOD and SS values are actually lower than the City's industry wide average values, you may apply to have your quality surcharge fee reduced. Call the Surcharge and Billing Squad of IWMD at (323) 342-6200 for more information regarding this process.
- If you have an industrial wastewater permit and the discharge from your facility contains BOD or SS concentrations less than 215 mg/l and 205 mg/l respectively, you may qualify for a **low strength Sewer Service Charge (SSC)**. However, this plan also involves payment of a **Zero-based Quality Surcharge Fee** and requires periodic self-monitoring to verify actual BOD and SS values. Careful consideration should be made as to whether this option will reduce your overall sewer costs. For additional information, please contact the Surcharge and Billing Squad of IWMD at (323) 342-6200.

Enforcement

Industrial facilities that do not comply with permit requirements are subject to enforcement action. IWMD 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 IWMD when responding to NOVs.

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. For free technical assistance on pollution prevention opportunities, contact Pollution Prevention Squad of IWMD at (323) 342-6200.

Help is Available...

IWMD strives to maintain close contact with permittees and works hard to effectively protect the wastewater system while remaining sensitive to business needs. IWMD will continue to help its permittees comply, respond to enforcement orders, and



to find ways to reduce or eliminate pollutant discharges to the sewer. In addition, various agencies are available to businesses in handling environmental concerns. The following is a list of resources available to businesses:

- **City of Los Angeles**
Department of Public Works
Bureau of Sanitation
Industrial Waste Management Division (IWMD)
2714 Media Center Drive
Los Angeles, CA 90065

(323) 342-6200

- **Hazardous and Toxic Materials Office (HTM),**
Environmental Affairs Department,
City of Los Angeles

Provides on-site environmental assistance, pollution prevention training and workshops, access to vendor database and technical library

(213) 580-1079.

- **San Fernando Valley Permit Assistance Center**

Assists L.A. City businesses in local, regional and/or state permit procedures

(818) 756-7572

- **Valley Economic Development Center, Inc.**

Provides L.A. City businesses with management consulting, entrepreneurial training programs and financial assistance

(818) 907-9977

- **California Business Environmental Assistance Center (BEAC)**

Provides information, technical assistance, education, and training

(800) 799-BEAC

- **California Chamber of Commerce**

Provides environmental compliance guides, seminars, "Helpline"


(800) 348-2262

- **US EPA Asbestos & Small Business Ombudsman Hotline**

Provides information, assistance, and publications

(800) 368-5888

Reporting Illegal Discharges



To report uncontrolled or illegal discharges to the sewer, please contact the Industrial Waste Management Division (IWMD), City of Los Angeles at:

(323) 342-6200

To report clogged catch basins, and illegal dumping into storm drains, please contact Stormwater Management Division, City of Los Angeles at:

(800) 974-9794



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