

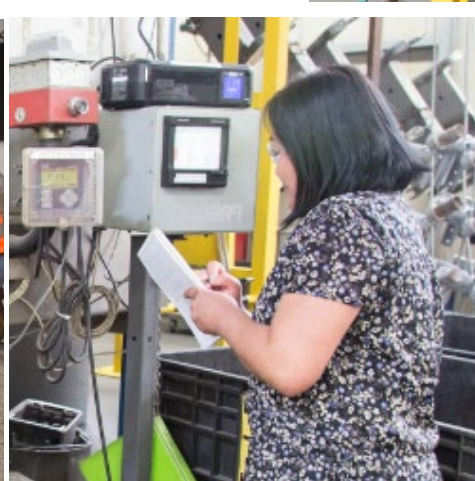
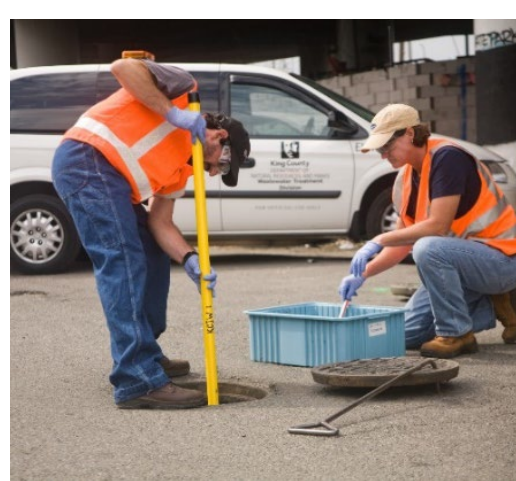


King County

INDUSTRIAL WASTE PROGRAM

*Partnering with Industries
to Prevent Pollution*

King County Industrial Waste Program



KCIW's WTD Responsibilities

We
Protect

- Worker Safety
- Infrastructure
 - Local and regional sanitary sewer system
 - Wastewater treatment plants
- Products – biosolids
- Effluent and sediment quality – NPDES

What is Industrial Waste?

Industrial Waste = Industrial wastewater

- Wastewater produced from commercial and industrial processes.
 - Excludes wastewater from toilets and sinks in bathrooms and breakrooms (e.g. domestic sources excluded.)
- Contaminated groundwater from remediation sites and process wastewater from construction sites.
- Industrial wastewater may:
 - Be more acidic or caustic than domestic wastewater,
 - Contain chemicals that the wastewater treatment process can't break down, like metals or petroleum-based oils, or
 - Be full of fats and food waste that clog our sewer pipes.



Industrial Waste Pretreatment Program

- Most industries must pretreat the process water they use before they discharge it to the sewer
- Different than domestic wastewater, and some pollutants aren't treatable or don't breakdown at our plants
- If not removed, these pollutants could harm our workers, assets, and recycled products

Types of Industries that KCIW regulates:

- Metal finishing/Electroplating
- Pharmaceutical manufacturing
- Aluminum can manufacturing
- Iron & steel manufacturing
- Electronic component manufacturing
- Centralized waste treatment facilities
- Industrial Laundries
- Food / Beverage manufacturing
- Contaminated groundwater remediation sites
- Contaminated industrial stormwater sites
- Construction dewatering
- Wastes Transfer operations
- Landfills



KCIW Services

- ✓ Implement federal, state, and local industrial waste regulations
- ✓ Identify sewer users
- ✓ Issue permits and discharge authorizations
- ✓ Review and approve treatment systems. Set local limits
- ✓ Inspect facilities
- ✓ Sample wastewater
- ✓ Educate on BMPs
- ✓ Investigate complaints and take enforcement actions
- ✓ Reward successes
- ✓ Assess IW fees to help recover program costs



Permits and authorizations for discharge

- Verbal Authorization
- Letters of Authorization
- Minor Discharge Authorization
- Major Discharge Authorization
- Waste Discharge Permit

Type depends on

- Industrial process
- Volume of water
- Short or long-term



Inspection and monitoring to assess compliance

- Businesses are required to collect samples of their wastewater and send in the results
- KCIW makes about 400 inspections each year and collects 1600 samples for analysis



Enforcement

- Penalize companies that violate the rules
- Publish violators in the Seattle Times who:
 - Are in “significant noncompliance” and/or
 - Have received fines

Companies That Violate Wastewater Rules Receive Penalties



King County's Industrial Waste Program (KCIW) regulates industries that discharge wastewater to the sanitary sewer system to protect worker safety, local and regional sewer and treatment infrastructure, and biosolids. KCIW monitors compliance according to federal, state, and local regulations. Many companies must pretreat their wastewater before they put it into the sanitary sewer system and comply with reporting, monitoring, and discharge requirements. KCIW is required to report on companies who violate wastewater rules.

From July to December 2020, the following companies were in “significant noncompliance” (SNC) status with federal rules and/or received penalties:

Violations Resulting in Significant Non-Compliance (SNC) Status and/or Penalties	Reason for Publication and Additional Comments
Cascade Columbia Distribution CODE AND DISCHARGE VIOLATIONS: A Notice of Violation was issued for damage to Seattle Public Utilities' sanitary sewer and discharge violations between April 7, 2020 and April 10, 2020.	Cascade Columbia Distribution was determined to be in SNC. They were issued a \$13,060 penalty, a compliance order, and assessed \$10,710 in post violation charges for costs incurred by KCIW.
General Biodiesel - Seattle CODE VIOLATIONS: A Notice of Violation was issued for 1) Discharge of process water containing fats, oils, and grease (FOG) to the sanitary sewer, which obstructed the sewer and caused a sewer overflow and 2) failure to obtain written approval for the discharge of process water containing FOG from the facility.	General Biodiesel was issued a penalty, post violation charges and a compliance order. A determination of SNC was made for causing interference with the sanitary sewer system. This enforcement action was appealed by the company and a settlement was reached. As part of the settlement, General Biodiesel does not admit to any wrongdoing.
King County Solid Waste Division (KCSWD) – Cedar Hills Regional Landfill (CHRL) DISCHARGE VIOLATIONS: Multiple discharge violations that occurred between July 1, 2020 and December 31, 2020.	KCSWD CHRL was determined to be in SNC for violating arsenic mass loading limits. They were issued a compliance order previously and have made a good faith effort to address the discharge violations. KCIW is not taking further enforcement actions at this time.
Port of Seattle, Sea-Tac International Airport, Biffy Waste site CODE AND DISCHARGE VIOLATIONS: A Notice of Violation was issued for discharge of a prohibited substance that obstructed flow and interfered with the operation and performance of sewer works, and failure to report noncompliance.	Port of Seattle was determined to be in SNC. They were issued a final notice, compliance order, and assessed \$7,650 in post violation charges for costs incurred by KCIW.
Violation Resulting in Penalty only	Reason for Publication and Additional Comments
Lambert Marble & Tile Works Inc. REPORTING VIOLATION: Final Notice issued for failing to file a required report (Permit Application)	Fined \$500. The report was subsequently received by KCIW. No further action was taken.

Other Violations

KCIW acted on seven other violations at seven facilities from July 1 – December 31, 2020. These facilities were not in “significant non-compliance” status for these violations and were not fined. Where applicable, these facilities reimbursed the County for additional post-violation inspection and monitoring program costs.

Questions or Info. for King County?

- Email info.KCIW@kingcounty.gov
- Call 205-477-5300 or 711: TTY Relay
- Visit www.kingcounty.gov/industrialwaste

Enforcement: Marine Vacuum

- On October 19, 2021, KCIW issued a Notice of Violation to Marine Vacuum citing the following violations involving the release of H₂S into the sewer system:
- King County Code Violation for creating a public nuisance and preventing entry into sewer facilities.
- Multiple odor complaints
- Failure to obtain approval for a pretreatment system modification
- Failure to have procedures in place for oily waste sludges
- Exceedance of KCLL for H₂S short term exposure limit

Enforcement: Marine Vacuum

- KCIW issued an enforcement action for these violations.
 - A fine in the amount of \$5,624
 - Post violation cost recovery charges in the amount of \$13,770
 - An order to bring the facility back to compliance
 - Revised the permit to include periodic self-monitoring and reporting requirements for H₂S



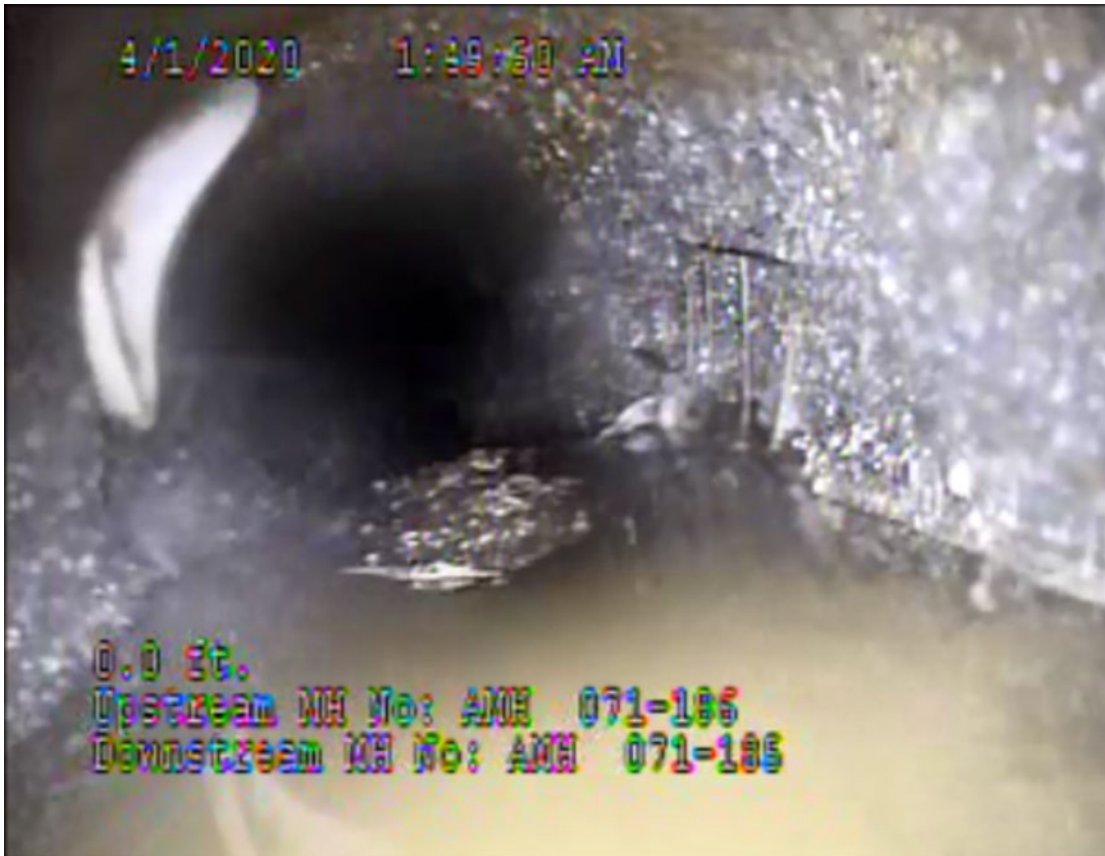
SECONDARY
OIL/WATER
SEPARATOR

1

Enforcement: Cascade Columbia



Enforcement: Cascade Columbia



- On April 1, 2021 SPU reported sewer damage downstream from Cascade Columbia.
- The reinforced concrete sewer pipe was corroded and crumbling.
- KCIW SMT deployed pH monitoring equipment

Enforcement: Cascade Columbia

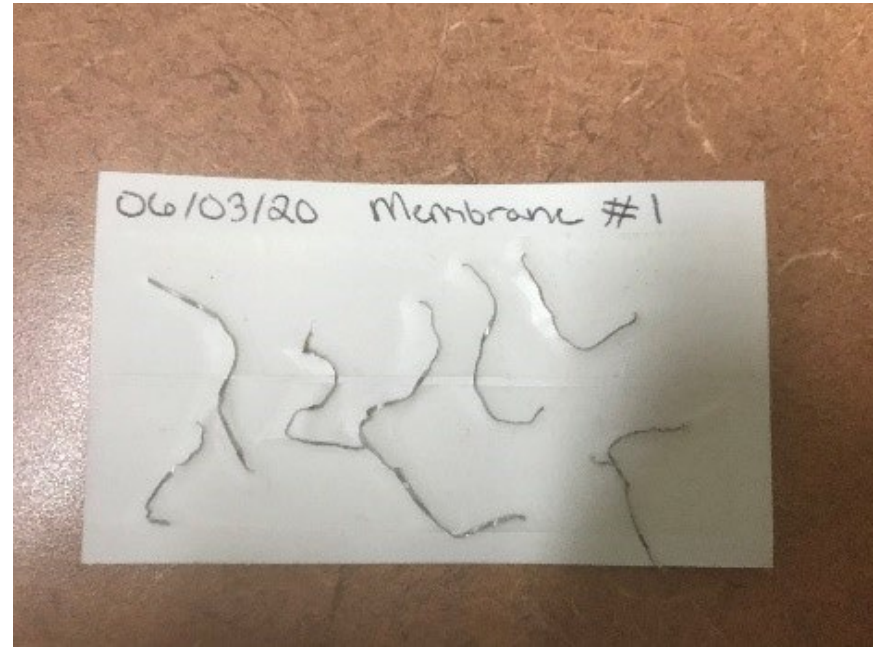
- KCIW inspected facility on April 14, 2021.
- During inspection washwater was visible near the truck parking area. There was a catch basin nearby that is connected to the damaged sewer line.
- KCIW tested the pH of the water in the catch basin and it measured 3.1 s.u.
- KCIW requested a sample of the product used to wash the trucks and totes. The chemical was named “buttercup”
- The pH of buttercup at working concentration was 1.36 s.u.
- KCIW representatives checked the pH of an untreated batch of process wastewater and a pH result of 13.27 s.u., was noted. Cascade Columbia representatives were asked to check the pH of the same process wastewater using their hand-held pH meter and they recorded a pH of 6.48 s.u.
- The facility was issued a notice of violation for multiple permit and code violations.
- The subsequent enforcement action included a penalty of \$13,060 and compliance order requiring the company to submit a new permit application, a new engineering report & SOPs, and to upgrade their industrial wastewater pretreatment facility.
- SPU made company responsible for the costs of replacing a pipe segment.



Studies and investigations

- Research how new industries may affect the wastewater system
 - e.g., wineries near Woodinville
- Investigate problems by testing at key maintenance holes
 - e.g., source of unexpected chemicals in the waste stream
- Unusual Occurrences

Investigations/Unusual Occurrences: Carnation Treatment Plant – membrane damage from metal shards



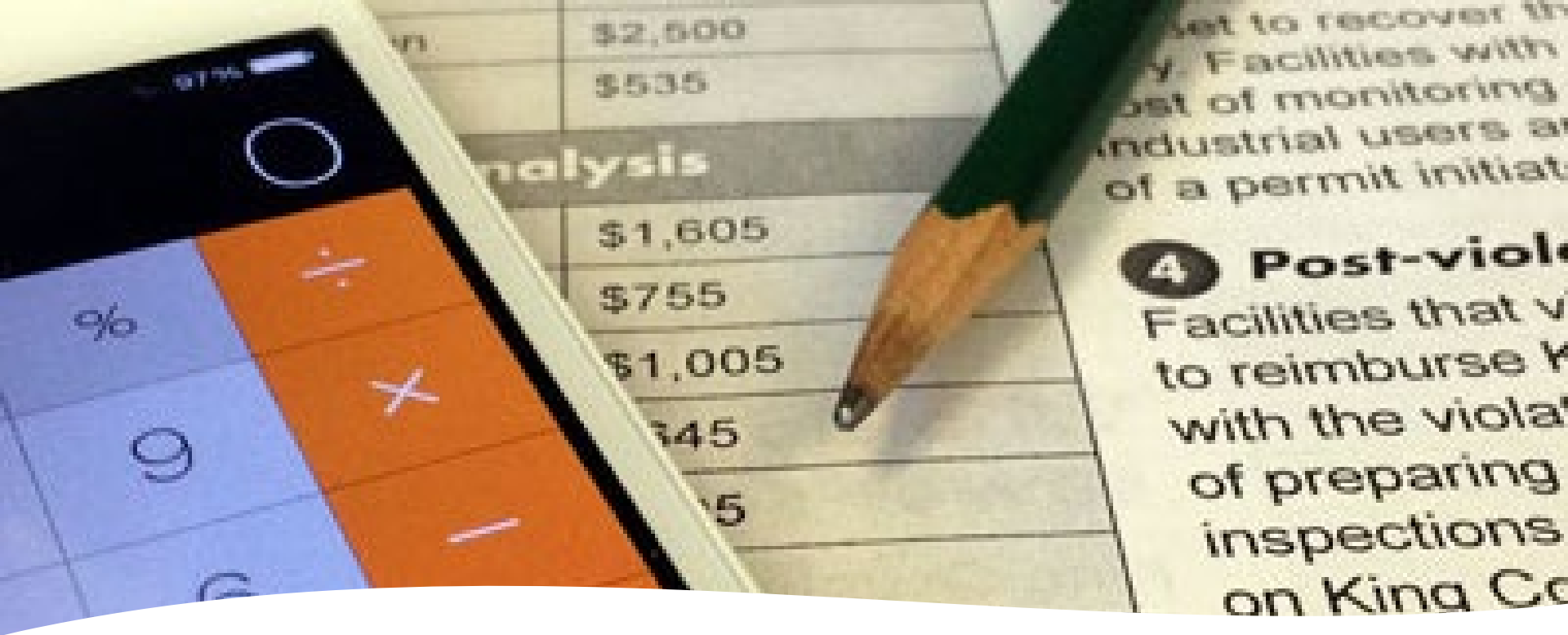
[Blog article: The case of the metal strands – teamwork leads to the source of treatment system damage](#)

Rewards and recognition

We recognize industrial wastewater dischargers that meet or exceed permit requirements with Gold and Silver awards.

The Commitment-to-Compliance Award honors companies that have received a Gold Award for five consecutive years.





Recovering costs: KCIW Fees

Types of fees:

- Permit Issuance
- Compliance Monitoring and Administration
- Surcharge Treatment (for the WWTPs!)
- Post-Violation Inspection, Monitoring Program
- Penalties and Fines (for non-compliance)

Per K.C.C. 28.84.060

Publications and education

- Technical assistance (BMPs, guidance, procedures, fact sheets)
- Web page
- Newsletters



In this edition: 2020 Annual Report, fulfilling your permit requirements during the pandemic, new rules for wineries, a new application, a new database coming, plus, see the 2020 clean water award winners and read about avoiding penalties so you can earn an award.



Industrial Waste staff are essential, please help protect them – ensure you and your staff are wearing masks

Even as the vaccine rolls out to more people, any of us can carry the COVID-19 virus without showing symptoms. We may not realize we're spreading it when we talk, cough or sneeze. Face



Future Challenges

Nitrogen
Permitting

PFOS/PFOA

Important KCIW & Component Agency Interactions

- **Unusual Occurrences**
 - Referrals (CCTV, Visual Observations, Dumping)
- **Construction Dewatering Projects**
 - Discharge Pts, rates, conditions. LSA Approval required 1st. (This info should be included by applicant in CDW application sent to KCIW)
- **New Industries**
 - KCIW will send out an Industrial User Survey
- **IW Fees** (Compliance Monitoring & Administration Fee and Surcharge Treatment Fee)
 - Billed from WTD Finance to LSA
- **Each Component Agency/Local Sewer Agency (LSA) is assigned an KCIW Investigator**
- **LSA Personnel Contacts** (Keep up to date!)
 - Database Updates; Keep in loop on Permit applications, renewals, enforcement actions, etc.
 - LSA Site & Corporate Contacts
- **How to Contact KCIW:** -> General Inbox: Info.kciw@kingcounty.gov or 206-477-5300



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King County Industrial Waste Program

Working cooperatively with businesses to protect people, the environment, and the economy since 1969.

www.kingcounty.gov/IndustrialWaste

Email: Info.kciw@kingcounty.gov

Phone: 206-477-5300

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