King County Industrial Waste (KCIW) Program Update

Presented to the Metropolitan Water Pollution Abatement Advisory Committee
June 24, 2015
KCIW Update

- Program elements & services
- Annual standard fee update process
- Surcharge program evaluation
Federal Environmental Protection Agency (EPA)
- Delegates this responsibility to states

Washington State Department of Ecology (Ecology)
- Delegates this responsibility to KCIW
- Oversees KCIW’s program

KCIW’s program is required through treatment plants’ National Pollutant Discharge Elimination System (NPDES) permits
Sewage treatment plants are designed to treat biological waste. Heavy metals and oils will not break down.

Keeping industrial waste out of the sewage system works.
Working with businesses to prevent pollution

- Industries do their part by:
  - Pretreating the water they use before they send it to the sewer
  - Removing substances that could harm the workers, environment, wastewater treatment process, or recycled products.
Over 600 businesses are permitted or authorized to discharge industrial waste that meets discharge requirements.

<table>
<thead>
<tr>
<th>Type of Authorization</th>
<th>Number issued in 2014</th>
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<tbody>
<tr>
<td>Discharge Permit</td>
<td>121</td>
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<tr>
<td>Major Discharge Authorization</td>
<td>196</td>
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<tr>
<td>Minor Discharge Authorization</td>
<td>153</td>
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<tr>
<td>Letter of Authorization</td>
<td>165</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>635</strong></td>
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About 1,600 businesses have established or are developing best management practices (dentists, wineries, breweries, distilleries).
More than a billion gallons each year from many different industries

System-wide, 3 to 5 percent of wastewater flow comes from industrial sources.
KCIW helps businesses meet regulations and prevent pollution

- Review business practices and issue approvals to send treated industrial wastewater to the sewer.
- Inspect and monitor the quality of the wastewater coming from businesses.
- Provide assistance and incentives to businesses.
- Maintain federal and local limits.
- Research new trends and investigate problems.

KCIW makes about 350 inspections each year and collects 1700 samples for analysis.
Companies with exceptional compliance receive awards
Over half of the eligible companies received awards in 2014.
Three companies received awards for perfect compliance for 5 years.
The following fees are paid by businesses:

- Permit and authorization fees
- Monitoring fees
- Surcharge fees
- Post-violation fees and fines

KCIW fees set to recover costs

Circuit board manufacturers pay monitoring fees for heavy metals

Food and beverage processors pay a surcharge for high-strength wastewater
KCIW special projects

- Construction dewatering: Simplify permit process.
- Industrial User Survey: Inventory thousands of businesses to determine which need permits or authorizations to send industrial wastewater to the sewer.
- Surcharge: Update fee for businesses with high-strength (concentrated) waste.
For businesses with high-strength waste.
- Fee covers additional cost to treat high levels of solids and organic material out of the water.
- Businesses that send high-strength waste to the sewer pay a surcharge.
- The surcharge is based on the cost to remove material from the wastewater.

Food and beverage processing and pavement de-icing create high strength wastewater.
Goal is to distribute costs of treating wastewater fairly among ratepayers
How We Compare to Our Peers

Surcharge Peers

- King County (Current)
- Orange County SD (CA)
- Pierce County (WA)
- Portland (OR)
- Sacramento RCSD (CA)
- San Francisco PUC (CA)

BOD ($/lb)

King County (Current)  Orange County SD (CA)  Pierce County (WA)  Portland (OR)  Sacramento RCSD (CA)  San Francisco PUC (CA)
Today, we spend much more removing material from wastewater than moving flow.
* Update how much it costs to treat high-strength waste (BOD, Soluble BOD, TSS).
* Use recent data to evaluate the concentration of waste sent by each business.
* Address other issues that can impact treatment plant operations.
* Coordinate with local agencies to implement change over time to be sensitive to the needs of affected businesses.
Surcharge Communications

- Direct communications with affected businesses
  - Letters and briefings
  - Phased implementation
- Fact sheets to help answer questions
  - For King County staff
  - For local agency billing staff
- Web updates
- King County contact for additional questions
Working cooperatively with businesses to protect people, the environment, and the economy since 1969.

Contact us:
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