

FREQUENTLY ASKED QUESTIONS

Department of Public Utilities Strong Waste Surcharge Program

1. What is the Strong Waste Surcharge Program (SWSP)?

Some commercial and industrial users are charged an additional surcharge on their sewer utility bill for processing waste water which is more difficult to treat than normal domestic wastewater. The SWSP applies to all commercial and industrial businesses operating within the City of Richmond whose waste water stream has been found to exceed the strength of normal domestic waste water. These surcharges provide dedicated funds to help the City of Richmond offset the ever increasing cost of strong waste water treatment and maintain sewer infrastructure.

2. Is the Strong Waste Surcharge Program new?

The SWSP has existed for many years. Many local businesses are already included in the program. The City of Richmond Department of Public Utilities Pretreatment Program has recently begun expanding the program to more businesses throughout the City of Richmond to better assess industrial and commercial usage of the sewer system as well as support the City of Richmond's environmental policy.

3. What does the Strong Waste Surcharge Program pay for?

The Strong Waste Surcharge Program provides funding to implement proper treatment of strong waste, sewer maintenance, repair, and improvements to the City's sanitary and combined sewer system. The SWSP helps maintain a system which helps to keep the James River clean.

4. What is strong waste?

Strong waste water is waste water that contains pollutants or characteristics which are more difficult for the City of Richmond's Waste Water Treatment Plant to treat. These pollutants or characteristics often come from activities performed at a commercial business or industry. The City of Richmond currently has a surcharge for waste waters high in Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS). However, pollutants such as Oil and Grease and Total Phosphorus are currently being reviewed for inclusion in the SWSP due to the cost of repairing sewer lines and treating wastewater affected by these pollutants.

5. Where does strong waste water come from?

Strong waste waters usually come from a commercial or industrial process. Strong waste waters may come from washing equipment or materials, cooling machinery or improper disposal of chemicals. If these waste waters enter the sewer system untreated they may be more polluted than normal domestic waste waters. Many commercial or industrial businesses opt to "pre-treat" the water leaving their facility in order to neutralize the waste water before it enters the City of Richmond's sewer system.

6. What are the environmental benefits of maintaining a Strong Waste Surcharge Program?

Maintaining a Strong Waste Surcharge Program helps to promote a cleaner, healthier James River and helps to create a suitable habitat for native wildlife. The SWSP also helps maintain important infrastructure which reduces chance of sewer back-ups which could potentially enter the James River untreated.

7. Didn't the City already have funding in place for strong waste issues?

No. Historically, money from the City's General Fund has provided limited funding for strong waste treatment. However, these funds are used for many other city programs and the funds are not adequate for the ever increasing cost of treating strong waste and maintaining sewer infrastructure that has been damaged as a result of strong waste.

8. What are the benefits to a Strong Waste Surcharge Program?

A dedicated funding source, such as a Strong Waste Surcharge Program, provides the city of Richmond with many benefits:

For citizens

- Improved public health and safety
- Improved customer service and a reduced backlog of customer complaints
- Reduction of long-term capital costs through proactive maintenance
- Resources to help mitigate sewer overflows

For business:

- Improved city services
- Support of sustainable population and economic growth by maintaining a strong and modern infrastructure.
- Support of the Green Richmond Initiative to create an improved quality of life for residents and a healthier environment

Overall:

- A more complete assessment of the industrial and commercial businesses operating within the City of Richmond and their impact on the local environment
- A greater ability to provide guidance to local industrial and commercial businesses operating within the City of Richmond with regards to the City of Richmond's environmental policy.

9. Is this being done elsewhere?

Yes. As national environmental policy becomes more stringent to adjust to the increasing demands on the environment, local and state governments throughout the country have been called upon to increase their efforts to more effectively treat the waters entering our nation's rivers and streams. As a result, failing infrastructure is being replaced and newer technological advances are being implemented through funds set aside specifically for waste treatment.

10. Who will be included in the Strong Waste Surcharge Program?

Any commercial or industrial user who discharges strong waste waters into the sewer system is eligible to be included in the Strong Waste Surcharge Program.

11. Who determines who is included in the Strong Waste Surcharge Program?

The City of Richmond Department of Public Utilities Pretreatment Program is tasked with maintaining the Strong Waste Surcharge Program. DPU Pretreatment employees will be reviewing local facilities for inclusion in the Strong Waste Surcharge Program.

12. How are the characteristics of my waste water determined?

As part of the review process, DPU Pretreatment employees will sample the waste stream coming from a selected facility to obtain an average strength of the facility’s waste water. If the average BOD or TSS levels in the waste water for a facility exceed limits for normal domestic waste (BOD>250mg/L, TSS>275mg/L), the facility is then included in the Strong Waste Surcharge Program.

13. How often is this information updated?

If a business is included in the Strong Waste Surcharge Program, the waste water from this business will be sampled annually and averaged with previous results to generate an updated average.

14. Will any other pollutants be sampled from my waste stream?

Surcharge pollutant parameters will be collected from every commercial or industrial business that is being reviewed. The collection of additional sample parameters such as heavy metals or oil and grease may also be collected depending on activities performed at the business. Violation of non-surcharge pollutant parameters may result in the commercial or industrial business being reviewed for an Industrial User Permit to discharge into municipal systems.

15. What is the surcharge rate and how much do I have to pay?

The average **Biological Oxygen Demand (BOD)** concentration is **≤ 250 mg/L**. BOD levels greater than the average concentration are subject to the following rate:

BOD	\$0.00160 per 100 cubic feet (ccf)
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The formula to calculate the Monthly Surcharge amount is:

$$(\text{BOD concentration in mg/L} - 250\text{mg/L}) \times \text{Monthly Water Consumption (ccf)} \times \$0.00160 = \text{Monthly Surcharge}$$

The average **Total Suspended Solids (TSS)** concentration is **≤ 275 mg/L**. TSS levels greater than the average concentration are subject to the following rate:

TSS	\$0.00125 per 100 cubic feet (ccf)
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The formula to calculate the Monthly Surcharge amount is:

$$(\text{TSS concentration in mg/L} - 275\text{mg/L}) \times \text{Monthly Water Consumption (ccf)} \times \$0.00125 = \text{Monthly Surcharge}$$

Example: A business uses 200 ccf of water in a month. The waste water strength of this business is found to have 300 mg/L of TSS with no BOD overage. The surcharge rate for this is \$0.00125. Using the above equation: (300mg/L – 275mg/L) x 200ccf x 0.00125 = \$6.25. The monthly surcharge for this business is \$6.25.

16. How is the surcharge billed to me?

The Strong Waste surcharge will be included in the utility total and mailed directly to the business owner with their regular bill.

17. Why is the Strong Waste Surcharge Program the best solution?

- A more equitable system: Sewer users who more heavily stress the system pay more to proactively maintain infrastructure thus maintaining unnecessary cost to the average sewer user.
- A stable level of funding: Ensures that sewer infrastructure receives adequate support, independent of the City's tax rate and General Fund.
- A dedicated fund: Revenues are used solely for sewer management.

18. How did the City obtain information about my business in order for possible inclusion in the Strong Waste Surcharge Program?

Business information was obtained through a review of DPU customer records and verified with a site visit by DPU Pretreatment personnel.