

# Silver Recovery Systems



Existing and proposed Pierce County Sewer Utility commercial customers/tenants that use **x-ray systems or photo processing** as part of their services (e.g., Medical offices, Dental offices, Chiropractic offices, Veterinarian offices, Photo processing, Junior High Schools, High Schools, Colleges, etc ...) will be required to provide sufficient details to determine if a silver recovery system is required on the site. A silver recovery system must be approved by the Pierce County Sewer Utility, installed by the owner/vendor, and the silver-bearing waste treated prior to discharge of any silver-bearing waste to the sewer system,

The bulletin is intended to assist the applicant in preparing the necessary documents to be provided with a complete Pretreatment Review Application. This document is a guide only and should not be misconstrued as a replacement or revision of the Pierce County Code and associated Sewer Utility design and construction standards.

## **What additional information do I have to provide about my x-ray or photo processing equipment when submitting my Pretreatment Review Application?**

If films (x-rays, etc...), and or photos are developed on-site and the intent is to discharge the processing fluids to the sanitary sewer, a silver recovery system is required to be installed.

The local limit for the discharge of silver is 2.00 mg/l. Discharge to the County sewer shall not exceed 2.00 mg/l silver. The discharge from the silver generating device must meet that limit for a 24-hour average not to exceed 4.00 mg/l for an instantaneous maximum. The submittal (manufacturer's literature) is to confirm that these limits will be complied with. The system must as a minimum be two (2) canisters connected in series.

The Pretreatment Review submittal is to include the following information for our review:

- a. Floor/Plumbing plans, are to indicate the location of the device with an interior sample point directly downstream from the silver recovery system,
- b. Catalog cut sheets of the silver recovery system.
- c. Sizing criteria for the proposed silver recovery system with verification that the tenant is within the criteria (i.e. GPD of fixer used/treated, Films/day or week processed, etc).
- d. Information provided (letter from manufacture or sizing criteria) must indicate the unit will operate at or below the discharge limit of 2.00 mg/l of silver.
- e. Operation and Maintenance manual (Please note a log book is to be kept on site with receipts of inspections for the silver recovery system up to three years).
- f. The owner shall enter into a Maintenance Agreement with a commercial service to maintain the proposed Silver Recovery System. Provide a copy of the detailed Maintenance Agreement for review by this department with the plan submittal.

### **What if I don't intend to discharge silver-bearing waste to the sewer system?**

The following information must be provided in addition to the information required for the Pretreatment Review Application.

1. If there will be no processing of films (x-rays, etc ...) or photos on-site, clearly state as such in writing in the Pretreatment Review Application submittal. This would include:
  - a. Sites that have x-ray equipment and process the films at another location.
  - b. Shops for film/photo drop off that process the films/photos at another location.
  - c. Sites that have no x-ray or digital imaging equipment and will send patients to another site for these services.
2. If digital imaging equipment is used with no processing of films (x-rays, etc...) on-site, clearly state as such in writing in the Pretreatment Review Application submittal.
3. If films (x-rays, etc ...) and or photos are developed on-site and the silver-bearing waste is contained on-site (with no discharge of silver-bearing waste to the sanitary sewer system), clearly state as such in writing in the Pretreatment Review Application submittal.
  - a. The owner/user must enter into a maintenance agreement with a commercial service to remove the silver-bearing waste from the site. Include a copy of the maintenance agreement to remove silver-bearing waste from the site with your Pretreatment Review Application.

### **Where can I get the forms that I need?**

Sewer Utility Division Standard Plans and Forms can be downloaded in PDF format from the following webpage: [www.piercecountywa.org/sewer](http://www.piercecountywa.org/sewer)

Completed applications and fees (make checks out to Pierce County) must be delivered in person to:

Pierce County Sewer Utility – Permits  
2401 South 35<sup>th</sup> Street, Room 150  
Tacoma, WA 98409-7494

Or mailed to:

Pierce County Sewer Utility – Engineering  
9850 - 64<sup>th</sup> Street West  
University Place, WA 98467-1078

If you have any questions, please contact either:

A Sewer Utility Permit Technician at (253) 798-2737, or  
A Sewer Utility Engineer at (253) 798-4050