# FREQUENTLY ASKED QUESTIONS Photo Imaging Operations



### What types of business are considered a photo imaging operation?

Photo imaging operations are defined under the Sewer Rates and Regulations Bylaw (No. 1862-2009) as "any operation which carries out photographic film processing or printing that uses silver in image forming or creates waste containing silver". Some examples of photo imaging operations include businesses such as photofinishing locations, dental offices, hospitals, animal hospitals, veterinary clinics, chiropractic offices, etc.

### What is silver recovery and is it necessary for me?

If you use photographic processing chemistry for film and paper development, the processes result in the accumulation of silver in waste liquids such as the fixer, bleach-fix, stabilizer and/or wash waters. These photographic processing waste liquids may exceed discharge limits for sliver and should be treated by on-site silver recovery or managed off site.

Silver recovery is the process used to harvest the silver from the photographic processing waste liquids and can be done in many ways including the use of chemical recovery cartridges and/or electrolytic cells.

All photo imaging locations operating within the City of Abbotsford are required to follow the Code of Practice.

### How do chemical recovery cartridges make a difference to my wastewater?

Chemical recovery cartridges are defined under the Sewer Rates and Regulations Bylaw as "a cartridge filled with steel wool, iron mesh, iron particles or iron-impregnated resin capable of removing silver from silver-bearing waste through the principle of metallic replacement". The chemical recovery cartridges remove the silver from the wastewater thus reducing or eliminating the amount of contaminants entering the environment.

#### How does electrolytic recovery make a difference to my wastewater?

Electrolytic recovery is defined under the Sewer Rates and Regulations Bylaw as "a method of recovering silver from silver-bearing liquid waste by passing direct electrical current between electrodes suspended in waste". The electrolytic recovery remove the silver from the wastewater thus reducing or eliminating the amount of contaminants entering the environment.

Is every trace of contaminant removed from my wastewater when I use a silver recovery system?

The majority of contaminants are removed to concentrations below the Sewer Rates and Regulations Bylaw (No. 1862-2009) limits but the silver recovery system must be regularly maintained to achieve this.

#### How should I dispose of silver?

The silver waste from non-digital x-ray and/or photo processing machines should be disposed of as a Hazardous Waste. However some waste disposal companies can recycle the silver by extracting it from the waste as a precious metal. Contact the service provider who originally installed the equipment and they should have information regarding waste handling options.

# Are there any exemptions for the Code of Practice for Photo Imaging Operations?

Yes. Photo imaging operations where only digital processes are used will be exempt from the requirement to install a silver recovery system. Photo imaging operations that process non-digital x-rays or photos on a rare occasion should speak with a product representative that can size the correct silver recovery system to meet the limited needs.

# How do I know if the silver recovery system I need requires chemical recovery cartridges or electrolytic cells?

Contact a product representative to help you determine what silver recovery system will work best for you. A list of silver recovery companies may be accessed through looking in the yellowpages under "Silver Recovery" or by visiting the Photo Marketing Association International (PMAI) website at http://www.pmai.org/print.aspx?id=7048&print=true.

### Do I need to install silver recovery methods if I only use digital photo imaging procedures?

No. The Code of Practice for Photo Imaging Operations only applies to operations using non-digital procedures.

# What maintenance and record keeping is required for silver recovery systems?

Photo imaging operations are expected to operate and maintain silver recovery systems to the manufacturer's or supplier's instructions. Maintenance records must be kept for a minimum of two years and must be available for inspection by the Engineer upon request, at any time during the ordinary business hours of the photo imaging operation. Refer to the Code of Practice for Photo Imaging Operations for more information about maintenance and record keeping.

#### Will silver recovery systems be inspected?

Yes. Staff from the City of Abbotsford, upon request, may inspect silver recovery system equipment at any time during regular hours of operation.

#### Who do I contact if I have any further questions?

Joe Vurzinger, CTech Utilities Environment Manager

Tel: 604-864-5663

Email: jvurzinger@abbotsford.ca