SCHEDULE “H”

CODE OF PRACTICE FOR PHOTOGRAPHIC IMAGING OPERATIONS USING SILVER

1. PURPOSE

Pursuant to section 5.2 of the Bylaw, this Code of Practice for Photographic Imaging Operations sets out the requirements for managing Non-Domestic Waste discharged directly or indirectly from a Photographic Imaging Operation into a Sewer or a Sewage Facility.

2. DEFINITIONS

2.1 In this Code of Practice the following meanings apply:

"Chemical Recovery Cartridge" means a cartridge capable of removing silver from silver-bearing Wastewater through the principle of metallic replacement;

"Electrolytic Recovery" means a method of recovering silver from silver-bearing Wastewater by passing a direct electrical current between electrodes suspended in the Wastewater;

"Photographic Imaging Operation" means any operation which carries out photographic film processing or printing that uses silver in image forming or creates waste containing silver;

"Silver Recovery System" means the combination of holding tanks, metering pumps, plumbing and silver recovery technology which is used to treat Wastewater containing silver produced by Photographic Imaging Operations.

"Silver Recovery Technology" means equipment that is designed to recover silver from Wastewater produced by photographic imaging operations using such methods as metallic replacement, electrolysis, ion exchange or chemical precipitation including: electrolytic units, chemical recovery cartridges, chemical precipitation units and ion exchange units.

“Silver-Rich Solution” is a solution containing sufficient silver such that effective recovery can be done either on-site or off-site. Within photographic processing facilities, such solutions include, but are not limited to, fix and bleach-fix solutions, stabilizers, low replenished (low-flow) washes, and all functionally-similar solutions. It does not include low silver concentration solutions such as used developers, bleaches, stop baths, pre-bleaches, and stabilizers following washes and wash waters.

3. APPLICATION

3.1 This Code of Practice applies to Photographic Imaging Operations that discharge Non-Domestic Waste containing silver directly or indirectly into a Sewer or Sewage Facility.

3.2 Notwithstanding this Code of Practice, a Sewage Control Manager may issue an Order for any of the purposes identified in section 1 of the Bylaw.

3.3 A Sewage Control Manager may issue a Waste Discharge Permit to a Person that owns or operates a Photographic Imaging Operation authorizing the discharge of Non-Domestic Waste.

4. REQUIREMENTS

4.1 On or before January 1, 2009, an operator of a Photographic Imaging Operation that discharges Non-Domestic Waste containing silver must treat the Waste at the Photographic Imaging Operation site prior to discharge to the Sewer using one of the following Silver Recovery Technologies:

(a) two Chemical Recovery Cartridges connected in a series; or

(b) an Electrolytic Recovery unit followed by two Chemical Recovery Cartridges connected in series; or

(c) any other Silver Recovery Technology, or combination of technologies that is capable of reducing the concentration of silver in the Wastewater to 5 mg/L or less and is acceptable to the Sewage Control Manager.

4.2 The discharge from a Photographic Imaging Operation may not contain Restricted Wastes other than the following:

(a) iron; and

(b) sulphate

4.3 The discharge from a Photographic Imaging Operation may not contain silver in a concentration that is in excess of 5 milligrams per litre (mg/L) as analyzed by a Grab Sample.

4.4 An operator of a Photographic Imaging Operation must install, operate and maintain the Silver Recovery System according to the manufacturer's or supplier's instructions and specifications.

4.5 An operator of a Photographic Imaging Operation must locate the Silver Recovery System in such a manner that an accidental spill, leak or container failure will not result in Wastewater containing silver in concentrations greater than 5.0 mg/L entering any Sewer.

4.6 An operator of a Photographic Imaging Operation must test the discharge to Sewer annually to confirm the effectiveness and efficiency of the Silver Recovery System and to confirm compliance with section 4.3.

4.7 An owner or operator of a Photographic Imaging Operation shall allow the inspection of the Silver Recovery System upon request by an Officer at any time during the ordinary business hours of the Photographic Imaging Operation.

5. RECORD KEEPING AND RETENTION

5.1 An operator of a Photographic Imaging Operation shall maintain records of all:

a) Silver Recovery System maintenance and inspections including:

i) date of service;

ii) description of service; and

iii) Name and contact information of person servicing or maintaining the Silver Recovery System;

b) Silver monitoring test results.

5.2 An operator of a Photographic Imaging Operation shall maintain these records for a minimum of three years and shall make these records available to an Officer upon request at any time during the ordinary business hours of the Photographic Imaging Operation.

5.3 The Sewage Control Manager may require an operator of a Photographic Imaging Operation to undertake an audit by a qualified professional to verify the degree of compliance with this Code of Practice.

5.4 The operator of a Photographic Imaging Operation must immediately report to the Sewage Control Manager any accidental releases of Silver Rich Solutions to Sewer and shall forthwith undertake all remedial action that is available to minimize the effect of such discharges.