



Colorado Springs Utilities
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**Silver Source Control
Policies & Procedures Manual**

Colorado Springs Utilities
Industrial Pretreatment Section

2019

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Preface

The information, services and equipment listed herein are solely intended for the purpose of advising the customers of the Colorado Springs Utilities. Use of these services, equipment or information shall not be construed as a guarantee or assurance by Colorado Springs Utilities that any discharge or material handling procedure is, or will be, in compliance with Federal, State or Local environmental rules, ordinances, regulations or applicable codes. In addition, inclusion of the services, equipment or information in this manual is not to be construed as a tacit or implicit endorsement by Colorado Springs Utilities as to either silver removal efficiency or the accuracy of any vendor, manufacturer or sales representative's claims of silver removal efficiency. The information contained in this manual is not exhaustive; for example, many more environmental services are available, and inclusion or exclusion from this manual does not reflect a judgment by the Colorado Springs Utilities on the reliability of those services.

Adoption of Policy

To implement City Ordinance requirements in a uniform manner for silver dischargers, or potential silver dischargers, to the Colorado Springs Utilities sewer system, this manual is adopted as policy to more specifically defined general regulatory requirements which are now deemed to apply to all non-domestic dischargers of any silver contaminated wastewater.

Pursuant to City Code Section 12-1-109:B., on April 15, 2019, the Colorado Springs Utilities Environmental Services Division provided public notice of its intent to adopt this the Silver Source Control Policies and Procedures Manual. No substantial comments were received. Therefore, Colorado Springs Utilities does hereby adopt the Silver Source Control Policies and Procedures Manual, May 1, 2019, as Department policy.

This policy shall become effective upon the effective date of Ordinance No. 19-34 by the Colorado Springs City Council, adopted on May 28, 2019.



Chief Environmental Officer

Authority and Purpose

The Colorado Springs Utilities Industrial Pretreatment Section, is responsible for implementing requirements of Local, State, and Federal rules and regulations. This manual is established as the Silver Source Control Program in accordance with Section 12.5.705 of the Wastewater Treatment Code and serves as Colorado Springs Utilities' (hereinafter designated "Utilities") control strategy for silver reduction. All non-domestic dischargers that introduce waste silver-rich photochemical solutions into the Publicly Owned Treatment Works (POTWs) are subject to this manual.

This Silver Source Control Program sets forth uniform requirements for direct and indirect dischargers to the POTW for the City of Colorado Springs and enables Utilities to comply with all applicable State and Federal laws required by the Clean Water Act of 1977 and general pretreatment regulations (40 CFR Section 403). Wastewater Treatment Code Section 12.5.102.

The legal authority for Utilities to implement a Silver Source Control Program is provided by the National General Pretreatment Regulations, as amended, Colorado State Pretreatment Regulations, as amended, Colorado Discharge Permit System permit requirements, and City of Colorado Springs City Code.

This Silver Source Control Program shall apply to the City of Colorado Springs and to districts, persons, or other entities outside the City, who are, by contract or agreement, users of the City's POTW. Wastewater Treatment Code Section 12.5.102.

Industrial Users that generate waste silver-rich photochemical solutions are subject to this Silver Source Control Program excepting Section 12.5.703 of the Wastewater Treatment Code, and as otherwise noted herein. Wastewater Treatment Code Section 12.5.1111.

Applicability

In accordance with Section 12.5.707 of the Wastewater Treatment Code, the Chief Executive Officer may develop BMPs to implement the prohibitions of section 12.5.702 of [the Wastewater Treatment Code] and the local limits of subsection 12.5.703.B. of [the Wastewater Treatment Code]. The Chief Executive Officer may develop general BMPs that are applicable to categories of industrial users, categories of activities or geographic areas. Any industrial user may be required to comply with BMPs. BMPs may be incorporated in categorical pretreatment standards, discharge permits, control mechanisms, and orders. Elements of a BMP may include, but are not limited to:

1. Installation of treatment.
2. Requirements for or prohibitions on certain practices or discharges.
3. Requirements for the operation and maintenance of treatment equipment.
4. Time frames associated with key activities.
5. Procedures for compliance certification, reporting and records retention.
6. Provisions for reopening and revoking BMPs.

It is the policy of Utilities to use this Silver Source Control Policies and Procedures Manual as the control strategy for non-domestic silver dischargers. This Program will be implemented directly by Utilities in a manner consistent with the City of Colorado Springs City Code.

Definitions

The following definitions and abbreviations from the Utilities Code Article 5 Wastewater Treatment Code apply to this part, except as otherwise cited.

ARTICLE or THIS ARTICLE: Chapter 12, Article 5 of the Code of the City of Colorado Springs, as amended (*also referred to in this manual as the Wastewater Treatment Code*).

BEST MANAGEMENT PRACTICES (BMPs): Schedules or activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution in waters of the State; to implement the prohibitions of Section 12.5.702 of the Wastewater Treatment Code and the local limits Subsection 12.5.703.B. of the Wastewater Treatment Code. BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BYPASS: The intentional diversion of waste streams from any point of an Industrial User's treatment facility.

CDPHE: Colorado Department of Public Health & Environment.

CFR: Code of Federal Regulations.

CONTROL MECHANISM: Control Mechanisms may be used to control the discharges of Significant Industrial Users and other Industrial Users. Control Mechanisms may be individual or general. Control Mechanisms may include Significant Industrial User permits, written authorizations to discharge for other Industrial Users, liquid waste hauler permits, and other requirements enforceable under the [Wastewater Treatment Code].

GENERAL BEST MANAGEMENT PRACTICE: A Best Management Practice developed by the Chief Executive Officer applicable to a category of Industrial Users, category of activities, or geographic area.

INDUSTRIAL USER: A source of discharge which introduces pollutants into the POTW from any non-domestic source regulated under Section 307(B), (C), or (D) of the Act.

INSTANTANEOUS COMPLIANCE SAMPLE: A grab sample collected for the purpose of gauging compliance with the Wastewater Treatment Code or otherwise used to track compliance schedule progress.

MANIFEST SYSTEM: A system consisting of a document that records information and data on generation, transportation, and disposal of waste.

PHOTOPROCESSING: A wet chemical process which renders an image on photo-sensitized material through the use of:

- 1) A silver halide suspension coated on a substrate (film, glass, plastic, metal, paper, or fabric);
- 2) Exposure of this photosensitized material to electromagnetic radiant energy; and,
- 3) Chemical enhancement of the previously exposed image via oxidation/reduction reactions in a series of chemical solutions. Byproducts of this reaction are liquid wastes which consist of reduced or oxidized chemical solutions, some of which include various complexes of silver and silver thiosulfate. This definition also includes any process which subsequently tones, enhances or alters the developed image. Establishments employing such processes may include, but are not limited to: hospitals, radiology clinics, printers and publishers, retail photographic stores, photographers, schools, veterinarians, and dentists.

PUBLICLY OWNED TREATMENT WORKS (POTW), WASTEWATER TREATMENT SYSTEM, OR WASTEWATER SYSTEM:

1. Any devices, facilities, structures, equipment or works owned by the City or used by Utilities for the purpose of the transmission, storage, treatment, recycling, and reclamation of industrial and domestic wastes, or necessary to recycle or reuse water at the most economical cost over the estimated life of the system, including intercepting sewers, outfall sewers, collection lines, pumping, power and other equipment, and their appurtenances, and excluding service lines;
 - A. Extensions, improvements, additions, alterations, or any remodeling thereof;
 - B. Elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and,
 - C. Any works, including the land and sites that may be acquired, that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from the treatment, or reuse of treated water for irrigation, recreation or commercial purposes.
 - D. It does not include the storm water drainage system, which is a separate municipal operation, not part of Utilities.
2. The municipality, as defined in Section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

SILVER DISHARGER: An industrial user that treats waste silver-rich photochemical solutions and discharges the treated wastewater into the Utilities wastewater collection system.

WASTE SILVER-RICH PHOTOCHEMICAL SOLUTIONS: Any waste photochemical solutions generated from photo processing activities that contain silver at significant concentrations, generally in excess of 400 mg/L. This includes, but may not be limited to, the following photochemical processing solutions: fix, bleach-fix, stabilizers from washless minilabs, and/or low-flow washes. This excludes non-silver-rich photochemical processing solutions such as developers and wash waters generated from properly operated and maintained photoprocessing equipment.

Applicable Code Citations

The following citations are direct excerpts of the Wastewater Treatment Code.

City Code Section 12-5-705: Silver Source Control Program

- A. The Chief Executive Officer may implement BMPs under a Silver Source Control Program for any Industrial User who has the potential to discharge waste silver-rich photochemical solutions into the Wastewater System. Industrial Users that are Significant Industrial Users may be eligible for coverage under the Silver Source Control Program if approved by the Chief Executive Officer.
- B. Industrial Users subject to coverage under the Silver Source Control Program shall comply with BMPs and treatment requirements contained in the Silver Source Control Policies and Procedures Manual.
- C. Prior to the discharge, the discharger shall install, operate, maintain, and monitor process treatment equipment capable of consistently achieving discharge concentrations which shall not exceed four hundred milligrams per liter (400 mg/L). It is unlawful to fail to either install, operate, or maintain wastewater treatment equipment.
- D. In order to assure compliance with the POTW's CDPS permits, compliance with local limits and the MAHL, and to prevent pass-through; or otherwise protect the wastewater system, the Chief Executive Officer may modify the Silver Source Control Policies and Procedures Manual in accordance with subsection 12.1.110.B. of this chapter, to require more restrictive treatment requirements, to impose numeric limits, to require discharge monitoring and/or other conditions determined to be necessary by the Chief Executive Officer. Alternatively, the Chief Executive Officer may revoke coverage under the Silver Source Control Program and may issue an Individual Control Mechanism or discharge permit.

City Code Section 12.5.707: Best Management Practices

- A. The Chief Executive Officer may develop BMP's to implement the prohibitions of Section 12.5.702 of the [Wastewater Treatment Code] and the local limits of subsection 12.5.703.B. of the [Wastewater Treatment Code]. BMPs shall be considered pretreatment standards and local limits for purposes of this article and section 307(d) of the Act. Additionally, BMPs may be categorical pretreatment standards, established by the EPA.
- B. The Chief Executive Officer may develop BMPs that are applicable to categories of Industrial Users, categories of activities or geographic areas. Adoption of BMPs shall be in accord with Subsection 12.1.110.B. of [the Wastewater Treatment Code].
- C. Elements of a BMP may include, but are not limited to:
 - 1. Installation of treatment.
 - 2. Requirements for or prohibitions on certain practices or discharges.
 - 3. Requirements for the operation and maintenance of treatment equipment.
 - 4. Timeframe associated with key activities.
 - 5. Procedures for compliance certification, reporting, and records retention.
 - 6. Provisions for reopening and revoking BMPs.
- D. Any Industrial User may be required to comply with BMPs. BMPs may be incorporated in categorical pretreatment standards, discharge permits, control mechanisms, and orders. (Ord. 06-195; Ord. 10-82; Ord. 18-42; Ord. 19-34)

Section 12.5.702: Wastewater Discharge; Prohibitions

No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass-through or interference. This prohibition applies to all users of the POTW regardless of whether they are subject to categorical pretreatment standards or any other National, State or local pretreatment standards or requirements. In addition, it shall be unlawful for any person to discharge or deposit or cause or allow to be discharged or deposited into the wastewater treatment facility any wastes or wastewater containing the following:

- K. **Substances not Amenable to Treatment:** Substances which are not amenable to treatment of prescribed reduction by the treatment process employed by Utilities, or are amenable to such a limited degree of reduction that a discharge of the wastewater would result in an interference with the wastewater treatment works or pass through the treatment facilities that the effluent discharge from the treatment works does not meet requirements of State, Federal and other agencies having jurisdiction over discharge or application to receiving waters and/or lands.

- O. Spent Process Chemicals, Hazardous Waste: Spent process chemicals, solutions or materials, hazardous waste as defined by the Federal Resource Conservation and Recovery Act; and other materials normally used in industrial/commercial operations unless specifically authorized in writing by the Chief Executive Officer and after suitable treatment as approved by the Chief Executive Officer has been effected.
- T. Waste Silver Rich Photochemical Solutions: Waste silver-rich photochemical solutions not treated to greater than ninety percent (90%) removal of the initial waste silver concentration, unless in accordance with 12.5.705 of [the Wastewater Treatment Code] and 12.5.1111 of [the Wastewater Treatment Code] specifically authorized in writing by the Chief Executive Officer and after suitable treatment as approved by the Chief Executive Officer has been effected. (Ord. 98-173; Ord. 99-162; Ord. 00-204; Ord. 01-42; Ord. 08-44; Ord. 10-82; Ord. 14-66; Ord. 18-42; Ord. 19-34)

City Code Section 12.5.805: Admission to Property

- A. The Chief Executive Officer has the power to carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable pretreatment standards and requirements by Industrial Users. Representatives of the POTW shall be authorized to enter any premises of any Industrial User in which a discharge source or treatment system is located or in which records are required to be kept under [the Wastewater Treatment Code], to assure compliance with pretreatment standards.
- B. The inspection shall be completed with reasonable promptness. If any samples are taken, a portion of the sample shall be given, if requested, to the owner, agent, or operator. The occupant of such property or premises shall render all proper assistance in the activities.
- C. If entry or inspection to any property is denied or not promptly consented to, or at any other time to investigate sources of pollution impacting water quality within the wastewater system or the waters of the State within the City limits, the Chief Executive Officer is empowered to obtain, from Municipal, County or State District Court with jurisdiction, a warrant to enter and inspect any property, premise or place. (Ord. 98-173; Ord. 99-162; Ord. 00-204; Ord. 01-42; Ord. 10-82; Ord. 18-42; Ord. 19-34)

Silver Source Control Program

This Silver Source Control Policies and Procedures Manual applies to all non-domestic dischargers that produce waste silver-rich photochemical solutions in the Utilities service area. This Silver Source Control Policies and Procedures Manual establishes uniform requirements for Industrial Users that produce waste silver-rich photochemical solutions.

An Industrial User is categorized as a "Silver Discharger" if the waste silver-rich photochemical solution generated on site is treated and discharged into the Utilities POTW.

If an Industrial User creates waste silver-rich photochemical solution but stores this solution for off-site disposal or recovery, they will be considered a "Silver Waste Generating Non-Discharger." Silver Waste Generating Non-Dischargers will be required to submit a one-time certification verifying that they do not discharge waste silver-rich photochemical solutions into the Utilities POTW. These Industrial Users must retain off-site disposal records for waste silver-rich photochemical solutions. These disposal records must be maintained for a minimum of three years and be made available to Utilities upon request. It is illegal to discharge inadequately treated waste silver-rich photochemical solutions into the Utilities wastewater system. Wastewater Treatment Code Section 12.5.702.T.

It is the policy of Utilities to use this Silver Source Control Program to prevent untreated waste silver-rich photochemical solution from being discharged into the POTW. The Best Management Practices (BMPs) contained in this manual are requirements and are expected to be followed by all Silver Dischargers. Silver Dischargers shall certify that BMPs are being implemented using the certification found in Appendix A of this manual. BMPs are an approved and proven control mechanism used to reduce the discharge of chemicals and contaminants to POTWs. BMPs may include specific operating practices, prohibitions, maintenance procedures, schedules of activities, disposal practices, and other management practices to prevent or reduce waste silver-rich photochemical solutions and toxic or hazardous substances from reaching the wastewater collection system.

All Industrial Users that generate waste silver-rich photochemical solutions must comply with this manual for the treatment and/or disposal of those solutions. It is recommended that waste silver-rich photochemical solution generators choose alternative means to develop film and x-rays, but if traditional radiography or film development is used, these users must adhere to the requirements found in this manual. Non-silver-rich waste solutions, such as process wash waters and waste developer can be discharged into the POTW; however, such discharges must comply with the Wastewater Treatment Code Section 12.5.702.

Silver Dischargers

Compliance Requirements

All Silver Dischargers must complete a Silver Source Control Program Compliance Certification and submit it to the Industrial Pretreatment Section within thirty (30) days of receipt.

A copy of this certification shall be maintained onsite in accordance with Section 12.5.902.B of the Wastewater Treatment Code. Silver Dischargers must certify that BMPs are used and that process treatment equipment is installed at their facility. The compliance certification is found in Appendix A of this manual. After a Silver Discharger completes and submits the compliance certification, a Notice of Coverage will be provided by Utilities and shall be permanently retained on site. The Notice of Coverage shall be immediately provided if requested by the Chief Executive Officer. The Notice of Coverage shall not be reassigned or transferred to a new owner, new user, different premises, or new or changed operation without, at a minimum, ten (10) days prior notification to Utilities.

Best Management Practices

As a compliance requirement for Silver Dischargers, the following BMPs must be followed:

- Completion of a Silver Source Control Program Compliance Certification for BMPs. This must be submitted per the instructions on the certification.
- Develop a facility Operation and Maintenance (O&M) Plan. Staff shall be trained in the proper operation and handling of process treatment equipment and chemicals.
- Applicable records, and operational logs must be maintained in accordance with the records retention policies described in this manual.
- The facility must install wastewater treatment equipment that provides for effective treatment of waste silver-rich photochemical solutions. Concentration of silver discharged from the process treatment equipment shall never exceed 400 mg/L.
- Statements and signage must state that no untreated waste silver-rich photochemical solutions will be disposed of down the drain and must be posted at nearby sinks and drains.

While adhering to Best Management Practices (BMPs), the Silver Discharger will not be required to sample the effluent following the silver removal process to show compliance, however, if a representative sample following the silver treatment process is collected and analyzed by an EPA approved method, the test results must be reported to the Industrial Pretreatment Section within 30 days of receipt.

Operations and Maintenance Plan

The Operations and Maintenance Plan (O&M Plan) is an internal document written by Silver Dischargers to ensure proper operation and maintenance of treatment equipment, adherence to the requirements of the Silver Source Control Policies and Procedures Manual, staff training, records retention, and a clear understanding and implementation of BMPs. If process changes or changes to silver treatment technology or disposal practices occur, the Silver Discharger must notify the Industrial Pretreatment Section and review and update the O&M Plan. The Chief Executive Officer may require the submission of a new certification.

The following items must be included in the O&M Plan:

- Required maintenance intervals for the wastewater treatment equipment as provided by the manufacturer.
- Description of how equipment failure will be addressed.
- Description of how to conduct a visual inspection of the wastewater treatment equipment and to recognize equipment failure.
- Development of operational logs, including a description for what information shall be logged.
- Description of how waste silver-rich photochemical solutions and other chemicals are handled, stored, and disposed.
- A records retention policy.
- A notice that no untreated waste silver-rich photochemical solutions may be disposed of down the drain.
- Emergency contact information and procedures.
- Spill response and notification procedures.

Operational Logs

The following are actions that shall be logged by each Silver Discharger:

- Monthly inspections of treatment equipment
 - Inspections should verify that the equipment continues to operate as it is designed.
 - Document the steps taken to remedy equipment failures, if equipment failure is observed.
 - Inspections should log the expiration date of the treatment media and maintenance interval set by the manufacturer to ensure proper operation.

- Receipts or waste manifests
 - Indicate when the treatment equipment was serviced and keep maintenance logs and receipts for electrolytic unit cleaning, cartridges changes, etc.
 - Keep records for shipping filters or cartridges off-site for treatment, recovery, or disposal.
- Employee training logs
 - Employee training should include techniques on the proper handling and disposal of waste silver-rich photochemical solutions including spill prevention and spill response, inspecting the treatment equipment, and records maintenance.

Selecting Adequate On-Site Silver Treatment

Silver Dischargers will be required to adequately treat waste silver-rich photochemical solutions. Concentrations of silver that may be discharged from the process treatment unit shall never exceed 400 mg/L. Failure to provide adequate treatment constitutes noncompliance with the Wastewater Treatment Code and the Silver Source Control Policies and Procedures Manual. Adequate treatment of waste silver-rich photochemical solutions is the responsibility of the Silver Discharger. Samples may be collected by Utilities during an inspection to verify compliance with discharge limitations. The performance based limit of 400 mg/L to demonstrate adequate levels of treatment (90% removal) was based on an assumed waste silver-rich concentration prior to treatment as 4,000 mg/L total silver. The assumed concentration of 4,000 mg/L is based on extensive sampling of various photoprocessors and x-ray processors.

Monitoring

It is recommended that Silver Dischargers perform sampling to verify process treatment operating efficiency. Instantaneous compliance samples can be used to demonstrate that the wastewater treatment system is operating in a manner consistent with manufacturers specifications. The following monitoring options are available for silver analysis:

- Test Strips: Paper or Copper (non-EPA approved)
- Colorimetric Methods
- Laboratory Methods (EPA approved)

Any samples of the wastewater discharge from the process treatment equipment analyzed using approved EPA methods must be reported to Utilities within 30 days of receipt of monitoring results, regardless of the reason the sample was taken. Tests of the wastewater discharge from process treatment equipment analyzed by non-EPA approved methods are not required to be reported.

Inspections

Industrial Pretreatment Section staff has the authority to inspect the premises of any Silver Discharger to review their operation and to determine, independent of information supplied by the Silver Discharger, compliance with BMPs and the requirements of this manual. Silver Dischargers must provide staff with access to their premises for this purpose. Wastewater Treatment Code Section 12.5.805. Silver Dischargers who are found to be out of compliance with the requirements of this document are subject to enforcement action by the Industrial Pretreatment Section. Inspections and monitoring of Silver Dischargers may be random or on demand. Inspections may include, but are not limited to, examining and copying records, inspecting equipment, and sampling the wastewater discharged from the process treatment equipment. Inspections may be scheduled or unscheduled.

Records Retention

All Silver Dischargers are required to keep a copy of the compliance certification onsite for a minimum three years or until the facility is closed, moves to a new location, or is sold. Wastewater Treatment Code Section 12.5.902.B. If the facility moves to a new location within Utilities' service area, a new certification shall be required.

The following documents will be maintained on site for a minimum of three (3) years and made available to Utilities upon request (Wastewater Treatment Code Section 12.5.902.A):

- Receipts or waste disposal documents from the recycling facility for all silver waste recovery media from the process treatment equipment that has been sent offsite for recycling or disposal.
- Receipts for maintenance on the treatment equipment.
- Staff training logs and other required operational logs.

Corrective Action Required for Inadequate Treatment

Silver Dischargers are inadequately treating waste silver-rich photochemical solutions if treatment systems have been uninstalled, bypassed, or inadequately maintained. If the concentration of total silver in the discharge is greater than 400 mg/L, the Silver Discharger is in noncompliance with the Wastewater Treatment Code. If discharge concentrations exceed 400 mg/L, the Silver Discharger is required to notify Utilities within 24 hours of discovery. In instances of noncompliance, the Silver Discharger will be required to perform corrective action. Corrective action shall be accomplished by properly operating and maintaining the treatment equipment, and/or installing additional approved treatment unit(s), and performing additional sampling within seven (7) working days. Resampling by approved EPA methods is required to demonstrate the Silver Discharger's return to compliance with discharge limitations. Failure to report or implement corrective action or failure to perform additional monitoring is noncompliance. Noncompliance will be treated in accordance with the Industrial Pretreatment Section's Enforcement Response Plan.

Silver Waste Generating Non-Dischargers

Compliance Requirements

As defined in this manual, Silver Waste Generating Non-Dischargers are Industrial Users that generate but do not treat or discharge waste silver-rich photochemical solutions to the POTW. The waste silver-rich photochemical solutions generated from these Industrial Users must be collected for off-site disposal or recovery. The Silver Source Control Program requires Silver Waste Generating Non-Dischargers, to complete and submit a one-time compliance certification. The compliance certification is included in Appendix A of this manual.

A Silver Waste Generating Non-Discharger will be allowed to discharge non-silver-rich waste solutions such as process wash waters and waste developers. Such discharges must comply with the Wastewater Treatment Code Section 12.5.702, Wastewater Discharge; Prohibitions.

To operate as a Silver Waste Generating Non-Discharger, authorization in the form of a Notice of Exemption must be obtained from the Industrial Pretreatment Section. A sample of a Notice of Exemption is included in Attachment C of this manual. To obtain a Notice of Exemption, the following steps must be completed:

- The Silver Waste Generating Non-Discharger must complete a Silver Source Control Program Compliance Certification and submit it to the Industrial Pretreatment Section within thirty (30) days of receipt (Wastewater Treatment Code Section 12.5.901.F.). The Compliance Certification (which acts as a Nonresidential User Questionnaire) is included in this manual in Appendix A. A copy of this certification shall be maintained onsite for a minimum of three years in accordance with Section 12.5.902.B. of the Wastewater Treatment Code.
- Following receipt of the Compliance Certification, Industrial Pretreatment Section staff will issue a Notice of Exemption to the Silver Waste Generating Non-Discharger. If the Compliance Certification is not complete or is otherwise found to be unacceptable, it will be returned for modification, or the Industrial User may be categorized as a Silver Discharger. If operations change, it is the responsibility of the authorized representative to contact Utilities and submit a new Compliance Certification.
- The Silver Waste Generating Non-Discharger must develop an Operations and Maintenance Plan that includes procedures for spill prevention. Section 12.5.806 of the Wastewater Treatment Code. It is the responsibility of the Silver Waste Generating Non-Discharger to provide adequate protection against spills or unauthorized discharge of waste silver-rich photochemical solution or other prohibited materials.

The following items must be included in the Operations and Maintenance Plan:

- Statements and signage that state that no waste silver-rich photochemical solutions will be disposed of down the drain posted at nearby sinks and drains.
 - Staff training in the proper handling and disposal of wastewater and chemicals.
 - Description of how waste silver-rich photochemical solutions and other chemicals are handled, stored, and disposed.
 - Records retention policies.
 - Spill prevention and notification procedures.
- A Silver Waste Generating Non-Discharger must notify Utilities of any change to its operation or disposal practice prior to the change occurring including plans to discharge any Waste silver-rich photochemical solutions. Wastewater Treatment Code Section 12.5.901.J.
 - The Notice of Exemption shall not be reassigned or transferred to a new owner, new user, different premises, or new or changed operation without, at a minimum, ten (10) days prior notification to Utilities.

Off-Site Recovery or Disposal

Facility staff must have training on the proper use, handling and disposal of waste silver-rich photochemical solutions and hazardous materials, including the importance of keeping these materials out of the POTW. Proper transport and disposal of waste silver-rich photochemical solutions is the responsibility of the Silver Waste Generating Non-Discharger and may be achieved by contracting with a certified waste hauler. Untreated waste silver-rich photochemical solutions must not be discharged into sinks, toilets or drains. If the Generator of waste silver-rich photochemical solutions chooses to hire a hauler to transport and dispose of these solutions, it is recommended that they carefully check the hauler's credentials.

If a Silver Waste Generating Non-Discharger chooses to transport and dispose their own waste silver-rich photochemical solution, it is the Silver Waste Generating Non-Discharger's responsibility to comply with all applicable federal, state and local laws and regulations regarding transport and disposal. It is recommended that the Silver Waste Generating Non-Discharger contact CDPHE and other appropriate agencies for transport and disposal requirements.

Records Retention

All Silver Waste Generating Non-Dischargers are required to keep a copy of the Notice of Exemption onsite until the office is closed, moves to a new location, or is sold (Section 12.5.705.B.).

The following documents shall be maintained on site for a minimum of three (3) years Wastewater Treatment Code Section 12.5.902.B:

- Receipts or waste disposal documents from the recycling facility for all silver waste that has been sent offsite for recycling or disposal.
- Staff training logs and other required operational logs.

All documents shall be made available to Utilities upon request

Enforcement

Compliance with the Silver Source Control Program is required. Failure to comply with any terms and/or conditions of the Silver Source Control Program shall be a violation of the Wastewater Treatment Code and shall be subject to enforcement as such. Violations will be enforced in a manner consistent with the Colorado Springs Utilities Industrial Pretreatment Section Enforcement Response Plan (ERP).

Enforcement response is determined by the type of noncompliance and, to some extent, the circumstances surrounding the noncompliance. The Chief Executive Officer or his designee may use any enforcement response either individually, sequentially, concurrently, or in any order or sequence for one violation or a group of violations, as appropriate for the circumstances. Responding to noncompliance with one informal response will not prevent the Industrial Pretreatment Section from responding to the same instance of noncompliance with a more severe formal administrative or judicial/monetary enforcement response later. The legal authority for enforcement is contained in the City Code, Chapter 12, Article 5, Part 12, "Enforcement".

For a complete copy of the Enforcement Response Plan (ERP), contact the Industrial Pretreatment Section.

Centralized Collection and Treatment

An Industrial User that collects waste silver-rich photochemical solution from different locations and brings the waste together at one location where the waste solution is treated and discharged to the Utilities Wastewater Collection System is subject to additional regulations.

If waste silver-rich solutions are picked up and transported to a recycling location to recover the silver, and treated liquids are discharged to the Utilities Wastewater Collection System, the operator of the recycling location may be defined as a Significant Industrial User (SIU) (Wastewater Treatment Code Section 12.5.201), and be subject to Nonferrous Metals Manufacturing Categorical Pretreatment Standards (40 CFR Part 421), or other federal treatment regulations. All Significant Industrial Users are required to obtain a Significant Industrial User discharge permit from the Colorado Springs Industrial Pretreatment Section prior to discharge. Wastewater Treatment Code Section 12.5.1101.

Summary of minimum compliance requirements:

	Silver Waste Generating Non-Discharger	Silver Discharger
Silver Source Control Program Compliance Certification	Submitted Once and Updated as Needed	Submitted Once and Updated as Needed
Required BMPs	None	Yes
Type of Notice	Notice of Exemption issued Once Per Owner/Location	Notice of Coverage issued Once per Owner/Location
Monitoring by Generator	None Required	Recommended but Not Required
Reporting by Generator	Off-Site Disposal Reports upon request or during inspection	Equipment Maintenance Receipts upon request or during inspection
Possible Non-Compliance Correction	Enforcement Response Plan, Individual Permit	Enforcement Response Plan, Individual Permit
Wastewater Discharge Limit for Silver	Discharge of Silver Wastewater prohibited	< 400 mg/L
Operation and Maintenance (O & M) Plans	Reviewed and Submitted as Needed	Reviewed and Submitted as Needed
Inspections and Monitoring by Utilities	Random and/or On Demand	Random and/or On Demand

Silver Source Control Policies and Procedures Manual

Appendix A

Silver Source Control Program Certification

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Colorado Springs Utilities

It's how we're all connected

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Colorado Springs, CO 80903-4348
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Telefax: (719) 668-4748

SILVER SOURCE CONTROL PROGRAM CERTIFICATION

Complete the certification below. A response is required on all statements. Return the completed and signed form via U.S. mail. An original ink signature is required, photocopies will not be accepted.

Section 1 – Business Name and Addresses

Business Name: _____

Phone Number: _____ Website: _____

Site Address: _____

Mailing Address: _____

Primary Contact or
Owner (Name and Title): _____

Phone Number: _____ E-mail Address: _____

Section 2 – Silver Program Applicability

Does this facility perform traditional photo or x-ray development? Yes No

Does this facility generate any waste silver-rich photochemical solutions? Yes No

If waste silver-rich photochemical solutions are generated, is it disposed of to the sanitary sewer? Yes No

If waste silver-rich photochemical solutions are collected for offsite recovery or disposal, describe the process:

Contact Name and telephone number for service provider: _____

If no silver wastewater is generated or discharged to the sanitary sewer skip to Section 6(a), sign the certification statement, and return this survey to Colorado Springs Utilities. If waste silver-rich photochemical solution is discharged, please continue to Section 3.

Section 3 – Operating Information

How many days per week is silver-bearing wastewater generated at this facility: _____

Does this facility develop traditional radiographs: Yes No

Does this facility develop traditional film for photographs: Yes No

What is the maximum volume of silver-bearing wastewater generated per month: _____

Section 4 – Treatment and Disposal

Does this facility collect silver-bearing wastewater for offsite recovery or disposal: Yes No

Does this facility treat silver-bearing wastewater and discharge it to the sanitary sewer: Yes No

Does this facility discharge silver-bearing wastewater to the sanitary sewer without treatment: Yes No

If silver-bearing wastewater is discharged to the sanitary sewer after treatment, please describe the treatment methods: _____

If silver-bearing wastewater is collected for offsite recovery or disposal, please describe the process and provide information on the service provider: _____

If silver-bearing wastewater is shipped offsite list the last 2 shipment dates and the volumes: _____

Section 5 – Best Management Practices

Does this facility have an Operations and Maintenance Plan for process equipment? Yes No

Are employees trained to operate processing equipment and in chemical handling? Yes No

Does this facility prevent untreated wastewater discharge to the sanitary sewer? Yes No

Does this facility have a plan if silver-bearing wastewater is spilled onsite? Yes No

Is treatment used prior to discharging silver wastewater to the sanitary sewer? Yes No

I understand that my facility may be subject to an inspection. Yes No

Does this facility perform periodic inspections of the silver treatment equipment? Yes No N/A

Does this facility maintain records for off-site disposal/recovery of wastewater? Yes No N/A

Section 6 - Certification Statements

This certification must be signed by an Authorized Representative of the facility. Select (a) or (b) and then sign.

Waiver (must qualify)

- (a) I certify under penalty of law that this facility does not dispose of any silver-bearing wastewater to the sanitary sewer before or after treatment. I certify that if any silver-bearing wastewater is generated, it is stored for off-site disposal or recovery. I understand that this certification will serve as an exemption to further requirements of the Silver Reduction Program with Colorado Springs Utilities. I understand that, if at any time, the practices and procedures of the facility change to include the creation of silver-bearing wastewater and the need to discharge to the sanitary sewer, I will be required to submit a new Silver Source Control Program Certification to Colorado Springs Utilities and this exemption is considered void. I acknowledge that my facility will be required to develop an Operations and Maintenance Plan as described in the Silver Source Control Policies and Procedures Manual. I understand and certify to these requirements:

Yes No

Standard Certification

- (b) I certify under penalty of law that this facility has implemented and is complying with all the BMPs in this certification. I certify that no silver-bearing wastewater will be discharged to the sanitary sewer without appropriate treatment meeting the limits described in the Silver Source Control Policies and Procedures Manual. I understand that this facility may be inspected to verify the information in this certification:

Yes No

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Authorized Representative

Date

Name (please print or type)

Position or Title

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Silver Source Control Policies and Procedures Manual

Appendix B

Notice of Coverage

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Colorado Springs Utilities

It's how we're all connected

701 East Las Vegas Street
Colorado Springs, CO 80903-4348
<http://www.csu.org>
Telefax: (719) 668-4748

Notice of Coverage Under the Colorado Springs Utilities Silver Source Control Program

In accordance with Article 5, Chapter 12 of the Code of the City of Colorado Springs (Code), (Business Name) at (Address) has been issued a Notice of Coverage in accordance with the Silver Source Control Program.

This notice verifies that the Silver Certification required by the Silver Source Control Policies and Procedures Manual was completed by (facility), has been reviewed by the Industrial Pretreatment Section of Colorado Springs Utilities and was found to be complete and satisfactory.

This coverage remains conditional upon conformance to the above-mentioned Code, the Federal General Pretreatment Regulations as amended, the Colorado State Pretreatment Regulations as amended, and all other requirements set forth in the Silver Source Control Policies and Procedures Manual.

Any substantial change in the information contained in the Silver Source Control Program Questionnaire which would change the nature of the discharge shall be reported to the Industrial Pretreatment Section fourteen (14) days prior to the change.

Please retain a copy of this notice to be made available upon request of the Chief Executive Officer at the time of a facility inspection. An inspection may be used to verify the information to which the Authorized Representative certified.

Signed this _____ day of _____, 20XX

Colorado Springs Utilities Representative

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Silver Source Control Policies and Procedures Manual

Appendix C

Notice of Exemption

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701 East Las Vegas Street
Colorado Springs, CO 80903-4348
<http://www.csu.org>
Telefax: (719) 668-4748

Notice of Exemption Under the Colorado Springs Utilities Silver Source Control Program

In accordance with Article 5, Chapter 12 of the Code of the City of Colorado Springs, (Business Name) at (Address) has been issued a Notice of Exemption covered by the Silver Source Control Program. This notice verifies that the Silver Certification required under the Silver Control Program found in the Silver Source Control Policies and Procedures Manual was completed by (facility), has been reviewed by the Industrial Pretreatment Section of Colorado Springs Utilities and was found to be complete and satisfactory.

The information in the certification states that your business will **NOT** discharge waste silver-rich photochemical solutions to the Colorado Springs Utilities wastewater system. Therefore, your business will be classified as a Silver Waste Generating Non-Discharger, which is defined as a producer of waste silver-rich photochemical solutions that does not discharge these solutions into the Colorado Springs Utilities wastewater system, or a facility which generates no silver-bearing wastewater as a result of business operations.

This coverage remains conditional upon conformance to the above-mentioned Code, the Federal General Pretreatment Regulations as amended, the Colorado State Pretreatment Regulations as amended, and all other requirements set forth in the Silver Source Control Policies and Procedures Manual. Coverage requires the development of an Operations and Maintenance Plan, staff training, and appropriate records retention.

Any substantial change in the information contained in the Silver Source Control Program Questionnaire which would change the nature of the discharge shall be reported to the Industrial Pretreatment Section fourteen (14) days prior to the change.

Please retain a copy of this notice to be made available upon request of the Chief Executive Officer at the time of a facility inspection. An inspection may be used to verify the information to which the Authorized Representative certified.

Signed this _____ day of _____, 20XX

Colorado Springs Utilities Representative