

OFFICIAL NOTICE  
RULES AND REGULATION NO. 97.01  
BY ORDER OF  
THE DIRECTOR OF PUBLIC UTILITIES

Pursuant to the Authority granted under Columbus City Codes Chapter 1145, the Director of the Department of Public Utilities hereby adopts, establishes, and publishes these rules to be effective at the earliest time allowed by law. These rules and regulations are in addition to any requirements presently established or as may be established from time to time by Ordinance or Resolution of the Department of Public Utilities or other offices, boards, commissions, agencies, divisions, or departments of the City.

DIRECTOR'S REGULATIONS PURSUANT TO CITY CODE CHAPTER 1145 TO  
DIRECT AND CONTROL THE DISCHARGE OF WASTEWATER TO THE COLUMBUS  
SEWERAGE SYSTEM

Pursuant to Columbus City Code, the Director establishes a policy for implementation of the Code of Management Practices for Silver Dischargers which provides Best Management Practices for controlling discharges of silver process wastewater to the City's sewer system.

**PURPOSE:** The purpose of this policy is to prevent the metal silver, designated as a toxic pollutant by the United States Environmental Protection Agency (USEPA), from being discharged to the sewer system without treatment. The regulation will require facilities performing silver processing to install and maintain pretreatment equipment that is designed to achieve a level of treatment appropriate to the size of the facility. Unlike other metals reduction strategies, this silver control regulation does not require facilities to attain specific numerical limits, but rather to incorporate the strategy of best management practices.

**DEFINITIONS:** For the purpose of this regulation:

**BEST MANAGEMENT PRACTICES (BMPs):** Best Management Practices are typically a schedule of activities, prohibitions, maintenance policies, and other management procedures that are implemented to prevent or reduce the discharge of pollutants into the public sewer system. BMPs also include pretreatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**BEST MANAGEMENT PRACTICES PLAN  
FOR DISCHARGERS OF TOTAL SILVER PROCESS WASTEWATER  
FROM PHOTOGRAPHIC PROCESSING FACILITIES  
TO THE CITY'S SEWER SYSTEM:**

- (a) All pretreatment processes installed pursuant with these regulations shall be appropriate to achieve the minimum percent recovery of silver-rich solutions required by the applicable subsection of this regulation.
- (b) In lieu of complying with any requirements of this regulation, persons discharging total silver process wastewater to the public sewer system may have all silver-rich solutions transported off-site for recovery, reclamation, and/or refinement. Persons that exercise this option are required to manifest and/or document all loads regarding the disposal of silver-rich solutions including the name of transporter, the quantity removed and how the silver-rich solutions are disposed.
- (c) All records and measurements kept pursuant with this regulation shall be available at all times for inspection.
- (d) Persons defined as a Significant Industrial User must obtain an Industrial Wastewater Discharge Permit.
- (e) Persons defined as a Photographic Processing Facility must obtain a proper permit based on BMP.

- (f) Design of pretreatment processes shall be based upon percent recovery of silver-rich solutions.
- (g) On or before March 1, 1998, any person that discharges total silver process wastewater to the public sewer system shall prepare and implement a Best Management Practices Plan. The BMPP shall include the following:

(1) Dischargers of 100 gallons Total Silver Process Wastewater or less per day shall:

- (i) Install metallic replacement pretreatment processes designed to recover 90% of the silver from the silver-rich solutions processed;
- (ii) Test for silver concentration in the influent and effluent from the silver recovery units using silver test paper and/or test kits once per month on a day that is representative of normal operations;
- (iii) Measure and record quantities of Total Silver Process Wastewater discharged to the public sewer system;
- (iv) Keep written records and measurements at their facility for a minimum of three (3) years.

(2) Dischargers of 100 to 1000 gallons Total Silver Process Wastewater per day shall:

- (i) Install and operate one of the following technologies designed to recover a minimum 90% of the silver from the silver-rich solutions.
  - (A) two metallic replacement units in series and operated simultaneously;
  - (B) electrolytic recovery; or
  - (C) chemical precipitation;
- (ii) Test for silver concentration in the influent and effluent from the silver recovery units using silver test paper and/or test kits once per month on a day that is representative of normal operations;
- (iii) Measure and record quantities of Total Silver Process Wastewater discharged to the public sewer system;

- (iv) Keep written records and measurements required by this regulation at their facility for a minimum three (3) years;

(3) Dischargers of 1000 to 10,000 gallons Total Silver Process Wastewater per day shall:

- (i) Install and continually operate one of the following technologies designed to recover a minimum 95% silver from the silver-rich solutions:

- (A) electrolytic recovery and metallic replacement; or
- (B) chemical precipitation; or
- (C) any combination of the above;

- (ii) Test for the silver concentration in the influent and effluent from the silver recovery unit using silver test paper and/or test kits once per month on a day that is representative of normal operations;

- (iii) Perform one composite sampling of the influent and effluent once every two (2) years on a representative day for silver by a certified laboratory and mail in the results to the City's pretreatment office;

- (iv) Measure and record quantities of Total Silver Process Wastewater discharged to the public sewer system;

- (v) Keep written records and measurements at their facility for a minimum three (3) years;

(4) Discharges of over 10,000 gallons Total Silver Process Wastewater per day shall:

- (i) Install and continually operate one of the following technologies designed to recover a minimum 99% of the silver from the silver-rich solution;

- (A) two metallic replacement units installed in series and operated simultaneously and one electrolytic recovery unit; or

- (B) one electrolytic recovery unit and chemical precipitation;

- (ii) Test for silver concentration in the influent and effluent from the silver recovery unit(s) using silver test paper and/or test kits once

per month on a day that is representative of normal operations;

- (iii) Perform one daily representative composite sampling of the influent and effluent once every two (2) years analyzed for silver by a certified laboratory and mail in the results to the City's pretreatment office;
- (iv) Measure and record daily quantities of Total Silver Process Wastewater discharged to the public sewer system;
- (v) Keep all measurements and records required by this regulation at their facility for a minimum three (3) years.

DATE:

8/5/97

James P. Joyce  
James P. Joyce, P.E., Director  
Department of Public Utilities