

Date Prepared 05/2001  
Prepared By Carla McGreevy  
Revised 6/14/05 P. Watt

**BMP# PHOTOGRAPHY #2**

**TITLE:** SILVER RECYCLING UNIT INSPECTION AND OPERATION

**Regulatory Citation:** RCSD No. 1 Article VI Section 12

**Applicability:** Silver Recycling Unit located in Print Room and Negative Room.

**Purpose:** Proper management of silver recycling unit.

**Person or  
Department Responsible:** Photography Faculty

**Schedule:** Daily during scheduled classes.

**Procedures:** A visual inspection of the silver recycling units located in the Print Room and Negative Room will be done daily when the room is in use. The inspection shall include a visual inspection of unit for leaks, loose fittings. If any leaks are noted, use of the unit will be discontinued and the Director of Environmental, Health and Safety shall be notified. At least monthly, the Photography Faculty will test the system discharge as described in the attached instructions and log the results on the attached log sheet which is kept in room 1124.

The Photography Department will follow the attached instructions on use of the silver recovery system and maintenance procedures.

The Director of Environmental Health & Safety will test the filters twice yearly (August and January) according to the manufacturer's instructions to ensure the filters are effective. The silver recovery unit will be changed out every August, before the start of classes. At the time of replacement, the Director will contact the Silver Recovery unit supplier to arrange for the units removal and replacement. The current replacement vendor is PDI, Rochester, NY and the recycler is Refining Services in Salt Lake City, Ut. .

**Record keeping:** logs of unit discharge  
Recovery cartridge shipping papers &  
Statement of recovery

**Record Location:** Recovery & shipping papers: EPA files  
Log of unit discharge: Photography dept, room 1124

**Contact:** Jean O'Malley 629-7583  
Director of Environmental Health and Safety (629-7163)

HVCC-BMP-Photo#2-silver recovery

Graphics Department & Photography - BTC  
Silver Recovery Process

Silver recovery :       Refining Services, Salt Lake City, Utah  
                                  - 828-6011 (Technical Services)

Silver cartridge changeout:   PDI Photographic and Digital Imaging Supply  
  Rochester, New York  
  1-800-869-8004  
  1-585-224-0590

Process: solution is poured into top bucket – holding area and filtered through silver reclamation cartridge. Filtrate is diverted by hose to sink in dark room.

Maintenance & changeout: PDI recommends filtrate be tested monthly with Ag-Fix paper and keep dated in a log (they will send sample log). They will send testing procedure. Any crusty material forming along edges of bucket and valve is ok – this is iron containing material and indicates filter is working. Can use brush to clean off if desired.

Changeout procedure: Cartridge does not have to be changed out until paper indicates or once per year at end of spring semester, whichever comes first. Coord EHS contact PDI to order new buckets. Try to do Graphics and Photography all at same time to get lot of 3 for shipment.

Change out: disconnect hose and two buckets, attach new bucket and reattach hose. Drain as much liquid as possible from the old bucket through the new system. (Easiest to do this by placing new bucket on floor and pouring contents of old bucket into it. Use tray in case any liquid drains out, but this is not likely since bucket has to be full before draining starts.) Cap the outlets to the old bucket with the plugs that will be sent along with replacement bucket. Place old bucket in plastic bag and seal. Place bag in box that new bucket came in. Fill out paperwork – call PDI and ask for Tim or John to walk through paperwork. Determine how check should be made out HVCC – Physical Plant? for reclaimed silver.

Call Len Stein at PDI (800-869-8004) for pickup. They will complete all paperwork and arrange shipping to SLC. After reclamation, check will be mailed with statement of recovery – keep this in environmental files along with copy of shipping papers.

These are provided to Photography Dept:

**Photography Department  
Silver Recovery System  
Operating Procedures**

After development of film, filter the BLEACH-FIX and RINSE solutions through the silver recovery system by slowly pouring into the upper bucket.

**DO NOT POUR DEVELOPER THROUGH FILTER SYSTEM!!**

Developer can be poured directly into sink drain.

Wear goggles while pouring solution into bucket to prevent any eye or skin contact with solution.

**Silver Recovery System  
Maintenance Procedures**

Conduct a visual inspection of the silver recovery system each day that it is used. Check for leaks, loose fittings. If any leaks are noted, do not use the unit and contact Coordinator of EHS immediately.

At least monthly, test filtrate draining from the silver recovery system.

Saturate a piece of Af-Fix Paper with the filtrate. Rinse the paper with water and let dry on clean white paper. Compare color of paper to color chart on paper roll. If color is equal to or greater than the "2" position on the color chart, contact the Coordinator of EHS immediately.

Record results on log sheet.

Coordinator of EHS: Patty Watt            7163

Back up: Karen Seward            7427

