POLICY ON THE MANAGEMENT OF WASTES GENERATED FROM X-RAY PROCEDURES AND FILM PROCESSING

X-ray procedures in dental clinics and research laboratories generate the following wastes: spent fixer, used developer, lead foil, and lead shields (aprons). Waste management for each of these waste streams are as follows:

1. **Used or spent fixer** contains silver and is considered hazardous waste. Used fixer MUST NOT BE POURED DOWN THE DRAIN.
   
a.) Clinics and research labs with x-ray equipment must collect the spent fixer from each x-ray film processor unit (including manual or instant developers) in plastic containers. These containers must have tight-fitting caps, and kept closed at all times except when adding the fixer. All spent fixer containers must be labeled with the label shown below. If re-using empty containers of the fixer, the original label should be defaced or removed.

   ![Hazardous Waste
   Spent Photographic Fixer](image)

   **Hazardous Waste
   Spent Photographic Fixer**

   Keep securely capped except when filling. Bring to Radiology Department when container is 90% full.

   **Note:** Larger capacity processors (i.e., Gendex) are connected to the fixer and developer reservoirs by flexible tubings. These containers or reservoirs must also be kept closed with caps that have holes equivalent to the diameter of the flexible tubings wherein the flexible tubings can pass through.

b.) Call Radiology Department Quality Control Technician at x89383 or x89386, for pick-up when the spent fixer container is 90% full. For processor units where the fixer recirculates, contact the QC Technician when the fixer is no longer usable for developing films to collect the spent fixer. The spent fixer solution is placed into the silver recovery unit located at Clinic 1A, for recovery and recycling of the silver
compound. X-ray processors in some areas that re-circulate the fixer are connected directly to filter units that recover the silver compound from the fixer. These units are serviced and/or changed out quarterly by an outside contractor through NYU Environmental Services.

2. **Used developer** may be poured down the drain with copious amounts of water. When performing this task, please remember to wear appropriate personal protective equipment (i.e., safety glasses and gloves).

   Used developer solution must not be mixed with the spent fixer. If the x-ray developer and fixer are accidentally mixed, the mixture is now considered as hazardous waste. Contact the Office of Quality Assurance at x89949 or x89932, or NYU Environmental Services at x81450, for proper disposal.

3. **Lead foils** are potentially toxic materials and must be handled accordingly. Separate the lead foils from x-ray films from the vinyl and paper covers and place them in the lead foil recycling containers. The vinyl or plastic and paper covers can be thrown in regular trash.

4. Worn-out **lead shields and aprons** should be collected and returned to the manufacturer or recycled using New York University’s hazardous waste contractor. Do not dispose in the trash or biohazard bags. Contact the Office of Quality Assurance at x89949 or x89932, or NYU Environmental Services at x81450, for proper disposal.