

Subject:	Photon Sciences Environmental Awareness for Photographic Darkroom Operations (Course Code PS-ENV-PHOTO)						
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*Approval signatures on file with master copy.

[Revision Log](#)

Instructions: Read the material below and then close this document. You will receive credit for training through the BNL training system.

Course Objective: Photographic darkroom operations generate hazardous and industrial wastes that have been designated as significant environmental aspects for the Photon Sciences Directorate and are subject to specific controls. This course has been designed to provide you with the information that you need know to protect the environment and to meet Laboratory and Government regulations for handling these wastes. The contents of this training have been extracted from the PS PRM and BNL Subject Areas.

Training Requirements: All personnel using the photographic darkroom in must complete this training. Darkroom managers must also complete RCRA Hazardous Waste Generator training. The Satellite Accumulation Area (SAA) Manager assigned to the Photographic Darkroom must complete the training for PS Environmental Awareness for Satellite Area Manager.

Operational Controls: Spent stop bath and spent developer are collected together in one carboy and disposed of as industrial wastes. Spent fixer and static rinse water is collected in another carboy and managed as a RCRA hazardous waste because of its silver content. All of these industrial and hazardous wastes must be stored near their point of generation in the darkroom SAA until ready for transfer to the NSLS 90-day Storage Area. Wastes stored in a Satellite Accumulation Area must meet the following requirements.

- Waste containers must be closed at all times except when making additions.
- Containers must be labeled to identify the contents as waste (labels are available in the 90-day Storage Area).
- The container must be kept in one of the SAA secondary containment trays and kept away from sinks or drains.
- Incompatible materials may not be stored in the same tray.
- Decisions about mixing must be made in consultation with a member of the PS ESH Staff.

The Darkroom Manager will transfer wastes from the SAA to the NSLS 90-Day Storage area when containers are full.

Response to Leaks/Spills: If any material is spilled, take prompt action to prevent entry to floor drains or sinks if you are familiar with the hazards involved and feel comfortable doing so. If the spill is in Bldg 725, contact the NSLS Control Room (x2550). Use the spill kits kept in the area. Any discharge to a drain or sink must also be reported to the Lab emergency response number (x2222) and, for those in Building 725, to the NSLS Control Room Operator (x2550).

Your Role and Responsibility: While working in a photographic darkroom, it is important that you follow the procedures and instructions established by PS and take prompt action in the event of spills. Be attentive to the information available through postings, email, and on the web and seek help when needed. The Darkroom Manager should be contacted with any questions.

Potential Regulatory and Environmental Impacts: Mismanagement of waste can result in violations of RCRA hazardous waste regulations. Discharge of oils and other chemicals to drains can result in violations of BNL's sanitary release limits. Both can ultimately result in contaminated soil or groundwater. BNL is subject to fines and penalties for such violations, and is responsible for the clean-up costs

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Brookhaven National Laboratory/ Photon Sciences Directorate

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associated with any required remediation. BNL has also suffered poor public perception due to poor waste management practices and contamination events in the past. Proper management of waste and spills will help us maintain a positive relationship with regulators and the public.

Pollution Prevention and Waste Minimization: Disposal of wastes is costly and time consuming. Please make every effort to minimize the quantity of chemicals you bring to the NSLS and the quantity of waste materials generated.

