

Subject:	Photon Sciences Environmental Awareness for Crystal Cutting (Course Code PS-ENV-CRYSTAL-CUT)					
Number:	PS-TRN-CRM-0002	Revision:	B	Effective:	04/27/2012	Page 1 of 2

Prepared and Approved By:	Mary Anne Corwin		
---------------------------	------------------	--	--

*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: Aspects associated with crystal cutting can have a significant impact on the environment. This course has been designed to provide you with the job-specific information that you need know to protect the environment and to meet Laboratory and Government regulations for handling the waste streams produced by this operation. The contents of this training have been extracted from the Photon Sciences PRM and BNL Subject Areas.

Description of Significant Environmental Aspects: Crystal cutting operations utilize fluids, lubricants and various cleaners. The wastes produced from the operations are industrial wastes. Industrial waste is not RCRA-hazardous waste; but it is still banned from disposal to the regular trash by Federal and State regulations.

Training Requirements: Staff members performing crystal cutting are required to read this form. Waste generators also have to take RCRA Hazardous Waste Generator training.

Operational Controls:

- Waste cutting fluids and the water used to clean the cutting wheel shall be collected and managed as industrial waste, labeled with a green non-hazardous waste label and brought to the 90-day area for disposal when full.
- Rags contaminated with cutting fluid or oils are to be collected in a fire-proof container. The container shall be labeled with a green, non-hazardous waste label. When collected, the rags are to be bagged in a clear plastic bag, labeled with a green non-hazardous waste label and brought to the 90-day area for disposal when full.

Response to Leaks/Spills: Take prompt action to prevent spills from discharging to floor drains or sinks if you are familiar with the hazards involved and feel comfortable doing so. If the spill is in Building 725, contact the NSLS Control Room Operator (x2550). Use the spill kits kept in the area. Any discharge to a drain, or to the outdoors, must 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: You are responsible for the proper management of your waste and to take prompt action in the event of spills. If you are ever in doubt regarding the proper course of action, contact your supervision or a member of the PS ESH Staff.

Potential Regulatory and Environmental Impacts: Mismanagement of waste can result in violations of state and local regulations. Discharge of oils and other chemicals to drains can result in violations of BNL 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 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: Please offer suggestions and comments to your supervision about pollution prevention and waste minimization. Disposal of industrial waste 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.

