

Course Title: RHIC Facility Specific Information for Cooling Water System
(Process/Operation)
Course Number RC-Env-FS2

Because this work activity has been identified as having significant potential to impact the environment, this material has been compiled to provide you with the job-specific information that you must know to protect the environment.

Please read the following carefully. If you have any questions concerning the material, contact your supervisor or ES&H Coordinator.

Environmental Process Evaluation Title: RHIC Cooling Water Systems 523/528

Environmental Aspect Liquid Discharges, Storage/Use of Chemicals

Contacts for the Information Environmental Compliance Rep, Facility Support Rep,
ES&H Coordinator

Job Training Assessment Links AD-014

1) What potential impacts to the environment are associated with your activities (i.e. types of contamination that could impact air or water, generation of excess waste)?

- Contamination of surface water, chemical spill to soil.

2) What consequences may result if your operations were to impact the environment (i.e. disciplinary action, loss of permits, shutdown of facility)?

- Regulatory noncompliance, fines, violations.

3) What benefits or positive effects would you notice with improved environmental performance (i.e., reduced disposal costs, improved relationships with regulators and public)?

- Satisfy compliance requirements and avoid NYS, EPA or Suffolk County violation/fines.
- Improved relationship of public and regulators.
- Eliminate regulatory burden if non-chemical systems put in place.

4) What role and responsibility do you have for these potential impacts and environmental performance?

- Properly handle and store hazardous chemicals.
- Report all spills in accordance with SOPs.
- Perform shift watch activities related to environmental protection.
- Follow applicable requirements in the following SBMS Environmental Compliance Subject Area (<http://sbms.bnl.gov/>)
 - Liquid Effluents (Section 2)
 - Storage and Transfer of Hazardous Materials (Section 2)

5) What controls or procedures are implemented to reduce the potential for emergency?

- Secondary containment of feed stock.
- Hi/Low Level Detection System/Leak Detection System.
- Walkthrough check-off list.
- Weekly system monitoring by contractor.
- Internal procedures:
 - AGS-OPM 8.18.1 General Water Treatment
 - AGS-OPM 8.18.1.a (Water Treatment Services Agreement with Drew Industrial Division of Ashland Chemical)
 - AGS-OPM 8.18.4 RHIC Dionizer Handling Procedure
 - AGS-OPM 8.20 Handling and Disposal of Hazardous Waste
 - AGS-OPM 8.22 Handling and Disposal of Non-Hazardous and Recyclable Solid Waste

6) How would you respond in an emergency to reduce the potential for environmental impact and what actions could be taken to mitigate? (Refer to existing procedures and documents (i.e. the Local Emergency Plan) where applicable)

- AGS-OPM 10.1, (d) Operator Response to Water Spills

7) What pollution prevention and waste minimization techniques have been or could be considered to reduce or eliminate the potential to impact the environment?

- Evaluate UV based treatment technique to replace chemicals.

8) Are there any key Environmental-specific Competency Requirements (Experience, Education, Qualification) for this position?

- AGS-OPM 8.18.1 General Water Treatment
- Certification for Applicators (PE only).

Fill Out Reading Acknowledgment Form