

Course Title: Superconducting Magnet Division Facility Specific Information for Small Scale/Bus-Bar Tinning (Process/Operation)

Course Number AM-ENV-FS5

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, ES&H Coordinator or the Environmental Compliance Representative.

You may print this material as a handout and use it as a reference aid.

This specific training course is linked to your job-training assessment (JTA). You must read and acknowledge this material as part of the qualification to perform electronic assembly work. Please fill out the Read and Acknowledgement form at the end of the course material and return it promptly to your Training Coordinator.

Environmental Process Evaluation Title: Environmental Training for Small Scale/Bus-Bar Tinning

Environmental Aspect: (These are the processes you do that can impact the environment) Regulated Industrial Waste, Hazardous Waste Generation, and Atmospheric Discharges

Contacts for the Information (current contacts are found on the Division's ESHQ Web page):

[Environmental Compliance Rep](#)
[Facility Support Rep](#)
[ES&H Coordinator](#)
[Training Coordinator](#)

Job Training Assessment Links: AM-06, AM-20, AM-33 (Superconducting Magnet)

Course Objective: **Because your work activities have been identified as having significant potential to impact the environment, this course has been designed to provide you with the job-specific information that you must know to protect the environment.**

- 1) What potential impacts to the environment are associated with your activities?
 - Soil Contamination from improper disposal (i.e. disposing of solder trailings in normal trash).
 - Using non-approved chemicals that can damage the environment (i.e. halogenated spray solvents that damage the ozone layer).
 - Air pollution onsite/offsite.

- 2) What consequences may result if your operations were to impact the environment?
 - Regulatory noncompliance, fines, violations.
 - Disciplinary actions for willful violations.
 - Loss of permits.
 - And possible shutdown of facility.

- 3) What benefits or positive effects would you notice with improved environmental performance?
 - Satisfying compliance requirements.
 - More money for Department projects because of reduced disposal costs.
 - Less clean-up expenses for Dept.
 - Avoid NYS or EPA violations/fines.
 - Good work practices.

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

- To ensure Industrial wastes are handled according to lab procedures
- To take action when controls fail (such as calling x2222 if spills occur).
- Store solder tailings in a closed container (recycling containers or satellite accumulation areas).
- To suggest possible Pollution Prevention ideas.
- Dispose of cleaning solvents, epoxies and solder tailings as required.
- Complete logbook for all hood use.
- Follow applicable requirements in the following SBMS Environmental Compliance Subject Area (<http://sbms.bnl.gov>)
 - [Hazardous Waste Management \(Section 1\)](#)
 - [Non-Radiological Airborne Emissions \(Section 2\)](#)

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

- Satellite Accumulation Area to store solder tailings.
- Tier I inspections.
- Flammable chemicals stored in approved flammable cabinet.
- Completion of log book when using hood.
- SMD OPM 2.12, "[Work Control and Planning](#)"
- SMD OPM 8.1.1.22, "[Operation of Bus Soldering Line](#)"

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]

- No specific emergency scenario is likely but, as Laboratory requirements state, call x2222 if an emergency does occur.

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

- Recycling scrap metal and wire spools.
- Evaluate less hazardous substitutes for solvents.

Suggestions or comments about pollution prevention or waste minimization are always welcome by SMD management.

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

- [Hazardous Waste Generator](#) (HP-RCRIGEN3)
- [Environmental Protection Training](#) (GE-ENV-GET)

[**Click Here to Fill Out Reading
Acknowledgment Form**](#)