

SUPERCONDUCTING MAGNET DIVISION

ENVIRONMENTAL MANAGEMENT PROGRAM

FY 2004

Submitted by: J. Durnan SMD EMS Management Representative

Date: April 2004

Revision: B

1. Objective(s):

- A. COMPLIANCE – Ensure Resource Conservation and Recovery Act (RCRA) and Radiological Waste compliance.
- B. COMPLIANCE – Meet Federal and State Air Program Requirements including the disposal of any remaining Ozone Depleting Substances (ODS) (EWMSD Environmental Objectives & Targets FY 2004, Sect. 2[d]).
- C. COMPLIANCE – Schedule and conduct Regulatory Compliance assessments to evaluate compliance to applicable regulations on a three-year cycle (ESD Environmental objectives & Targets FY2004, Sect. 2[e]).
- D. POLLUTION PREVENTION – Integrate pollution prevention (P2) into the work planning process to reduce generation of hazardous waste streams. (FY04 Critical Outcome, Appendix B, 3.4.3, Pollution Prevention; EWMSD Environmental Objectives & Targets FY04, Sect. 3[a]).
- E. POLLUTION PREVENTION – Integrate pollution prevention (P2) in design and construction to evaluate and implement P2 opportunities. Expand awareness and involvement in the BNL P2 Program (FY04 Critical Outcome, Appendix B, 3.4.3, Pollution Prevention; EWMSD Environmental Objectives & Targets FY04, Sect. 3[b]).
- F. POLLUTION PREVENTION – Reduce or prevent generation of non-routine waste, including spills (FY04 Critical Outcome, Appendix B, 3.4.3, Pollution Prevention; EWMSD Environmental Objectives & Targets FY04, Sect. 3[c]).

2. Target(s):

- A. (1) Review the list of Satellite Accumulation Areas (SAA's) by June 25, 2004 and communicate any updated information to the Environmental & Waste Management Services Division (EWMSD). (2) Set a goal of zero compliance violations in SAA's.
- B. By March 31, 2004, involve Environmental Compliance Representatives (ECR's) in review of applicable Clean Air Act regulatory requirements for the emission sources covered by BNL's Title V permit to ensure that compliance assurance documentation is consistent with recommendations in the Facility Use Agreements environmental data base.
- C. (1) Participate in the Liquid Effluent audit in the second quarter 2004. (2) Participate in the Laboratories Self Assessment of Records Management conducted by Information Service Division March 2004 (FY04 Required Assessment). Participate in the RCRA Subject Area assessment planned for Sept. 2004.
- D. (1) Analyze all waste generating activities for pollution prevention solutions. (2) Review all ECR's and Magnet design for pollution prevention opportunities.
- E. Evaluate any spills for proper spill clean up and evaluate corrective actions to prevent future spills.

3. Environmental Performance Indicator(s):

- Annual Air Emission Estimate/log book entries
- Tier I inspection results.
- 90 Day Accumulation Area inspection results
- Work Planning and Control Assessment (as part of the Divisional Self-Assessment Program).
- Waste Control Form summaries.
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4. Program Description:

Superconducting Magnet Division (SMD) operations include Electronic Assembly, Mechanical Assembly, Tinning, Cryogenic Systems Maintenance and Staff Shops operations. These operations include the use of solders, epoxies, oils, cutting fluids and cleaning operations that use hazardous materials that must be disposed of properly. Hood and vacuum systems used in these operations which were originally considered permitted sources by the New York State Department of Environmental Conservation (NYS DEC) are now classified as trivial sources under the BNL site wide [Title V Air Emission permit with New York State](#) (Note that the magnet coil coating operation is a permitted source but is not in operation). The Facility Review Project (FRP) is a site-wide program that identified, tracked and manages historical and/or legacy environmental issues. These issues have been dispositioned as being incorporated into an existing site environmental program, identified as requiring no further action or have corrective actions developed. SMD does not actively manage these issues. When work is proposed on SMD facilities, which may impact these issues, the division insures that the appropriate subject area manager is informed and pollution prevention and clean-up opportunities are evaluated. This environmental management program and associated operational controls are instituted to manage operations in accordance with applicable regulatory requirements and to evaluate feasibility of pollution prevention opportunities that eliminate or reduce the generation of these wastes. The responsibility for implementing these tasks lies within the SMD's Production, Electrical, Magnetic Testing support groups and the ESH&Q staff. The program plan extends through FY04 and is in effect until superceded.

5. Potential Environmental Impact(s):

- Land
- Air

6. Significant Aspect: (see table of "Criteria for Significant Aspects" for description of letter designation)

- Hazardous and Regulated Industrial Waste
- Atmospheric Emissions
- Storage and Use of Chemicals
- Legacy Issues – Facility Review Project

7. Legal and Other Requirements:

- Hazardous Waste Management
- Non-radioactive Airborne Emissions

8. Operational Controls: See Associated Operational Control Forms

- [AM-522-EAO](#)
- [AM-524-SSO](#)
- [AM-525-MAO](#)
- [AM-527-SSP](#)

<ul style="list-style-type: none"> • AM-530-CSM • Legacy Issues –Facility Review Project • Relevant SBMS Subject Areas 		
<p>9. Budget:</p> <ul style="list-style-type: none"> • Operating Budget • EMS Budget 		
10. Structure, Authorities, Responsibilities		
Tasks	Person Responsible	Completion Dates
A. Prepare and submit an updated listing of Satellite Accumulation Areas (SAA).	SMD EMR	06/04
B. Track and report the number of SAA non-compliances	SMD EMR	ONGOING
C. Prepare and submit the waste generation forecast for FY05, report progress against waste goals, and, where appropriate, suggest P2 opportunities.	SMD EMR	09/04
The ESD Subject Matter Expert shall review all emission points for compliance and documentation.	ESD Subject Matter Expert	03/04
Facilitate and participate in applicable assessments (Liquid Effluents, RCRA, and Document Control) and complete Compliance Assessment Cards in accordance with the Environmental Assessments SA	SMD ECR – Liquid Effluents	05/04
	RCRA	09/04
	ITD Manager – Document Control	03/04
A. Maintain records and, where appropriate, suggest P2 opportunities.	SMD EMR	09/04
B. Review routine operations and ECR's and, where appropriate, suggest P2 opportunities.		
The ECR shall facilitate the submission of a P2 proposal for Bldg. 924 air-oil coolers containment and disposal of legacy Cosmotron cooling water.	SMD ECR	09/04

Approved:

Signature on File

May 7, 2004

Michael Harrison

Date

Superconducting Magnet Division Head