

1.8 Hazard Communication Procedure

1. Purpose

This procedure implements hazard communication in the Collider–Accelerator (C-A) department in accordance with BNL Standards Based Management System (SBMS), “[Chemicals, Working With](#)”. Hazard communication applies to work with hazardous materials and chemicals.

2. Responsibilities

- 2.1 Line Supervisors are responsible for implementing the requirements of this procedure.
- 2.2 The ES&H Coordinator is responsible for assisting in evaluating hazardous materials.

3. Prerequisites

None

4. Precautions

Exposure to hazardous materials may have serious consequences on worker health. It is important to ensure that work with all hazardous materials is fully evaluated and proper handling precautions are followed.

5. Procedure

- 5.1 Prior to introducing a new hazardous material into the workplace, the line supervisor shall ensure that a copy of the Material Safety Data Sheet (MSDS) has been forwarded to the MSDS Manager in Safety & Health Services Division for inclusion in the on-line MSDS database.
- 5.2 The line supervisor may request an evaluation of any new hazardous material introduced into the workplace. The means to initiate this is through Enhanced Work Planning, [OPM 2.28](#) or [OPM 2.29](#). In order to reduce the hazard, engineering controls should be considered first, then substitution, administrative controls, and lastly personal protective equipment (PPE).
- 5.3 Line supervisors shall ensure that all new hazardous chemicals are approved by the ESH Coordinator. The Coordinator will advise on the hazards, protective measures, and work planning required for use of the particular chemical. As a

reminder, it is not permitted to order chemicals on credit cards. All chemicals shall receive barcodes from the Chemical Management System, unless chemicals are Area Static Inventory.

- 5.4 Newly acquired chemicals need to be checked for CMS bar codes unless chemical is on Area Static Inventory list. Contact CMS Team for bar codes.
- 5.5 BNL Hazard Communication training is required for all personnel/guests/experimenters working with hazardous materials in the C-A Department. This training is available in Computer Based Training through the BNL Training page. Special training modules may be required for working with lead, beryllium, or other hazardous materials specifically named in OSHA 1910, Subpart Z. Supervisors may evaluate their areas and workers periodically by using the informal checklist in [C-A-OPM-ATT 1.8.a](#). This checklist is intended as a reminder of the regulations involved in working with chemicals and is not required to be filed.
- 5.6 The Work Permit, and/or MSDS, will identify any monitoring requirements, and/or PPE, for working with the hazardous material. Guidance on glove selection for select chemicals in use at C-A can be found at [Glove Guidance](#).
- 5.7 The line supervisor is responsible for arranging required monitoring and PPE through the ES&H Coordinator prior to commencing work with the hazardous material.
- 5.8 All hazardous materials shall be labeled in accordance with [ES&H Standard 2.1.0](#) and SBMS Subject Area [“Chemicals Working With”](#). Secondary containers shall be labeled with the NFPA diamond, with the hazard ratings filled in, the name of the chemical. For information on tanks and piping requirements, refer to the [SBMS - Storage and Transfer of Hazardous Material](#).
- 5.9 Flammable liquids shall be used and stored in accordance with [ES&H Standard 4.10.2](#). Most flammable liquids in common use at C-A are Class IB (e.g., acetone, alcohol’s). These have a storage limit of 120 gallons outside of a flammable storage cabinet. For other chemicals, consult the ES&H Manual.
- 5.10 Respirator medical approval forms and OSHA respirator questionnaires are available from the ES&H Coordinator.
- 5.11 Line supervisors should annually review the list of chemicals assigned to them on the Chemical Management System (CMS). Any changes to the inventory should be sent to the CMS team for updating.

- 5.12 Line supervisors for workers being transferred or leaving shall ensure that all chemicals assigned in the CMS have been transferred, or disposed of, in accordance with [C-AOPM 8.20](#), Handling and Disposing of Hazardous Waste, or [C-A-OPM 8.20.2](#), Radioactive Waste Disposal.
- 5.13 Any spill of hazardous material should be reported using the BNL emergency number 2222 or 911. If the workers are trained, they can attempt to mitigate the spill using spill response equipment in the area. The [SBMS –Spill Response](#) area has more guidelines for spill reporting
- 5.14 When chemicals are used up or sent as hazardous waste, ensure CMS is notified with chemical bar code no. Forms to do this are available in SBMS Subject Area, or contact Environmental Coordinator.

6. **Documentation**

None

7. **References**

- 7.1 [ES&H Standard 2.1.0](#), “Hazard Communication Program”.
- 7.2 [ES&H Standard 4.10.2](#), “Flammable Liquids: Storage and Use”.
- 7.3 [SBMS –Spill Response](#).
- 7.4 [SBMS - Storage and Transfer of Hazardous Material](#).
- 7.5 C-A [OPM 2.28](#), “Enhanced Work Planning”.
- 7.6 C-A [OPM 2.29](#), “Enhanced Work Planning for Experiments”.
- 7.7 C-A [OPM 8.20](#), “Handling and Disposing of Hazardous Waste”.
- 7.8 C-A [OPM 8.20.2](#), “Radioactive Waste Disposal”.
- 7.9 [Glove Guidance](#).
- 7.10 [SBMS, “Chemicals, Working With”](#).

8. **Attachments**

- 8.1 [C-A OPM-ATT 1.8.a “Hazard Communication Compliance Checklist”](#).