

# **OCCUPATIONAL EXPOSURE TO HAZARDOUS CHEMICALS IN SCIENCE LABORATORIES**

*Policy Code:*

**7265**

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It is the policy of the board to comply with federal regulations and state statutes regarding hazardous chemicals as set forth in the Federal Register, 29 C.F.R. 1910.1450, and the North Carolina Administrative Code, 13 N.C.A.C. 7F .0101, by attempting to limit occupational exposure of employees to hazardous chemicals or other potentially hazardous materials that could cause injury or death.

## **A. UNIVERSAL PRECAUTIONS**

Universal precautions must be used at all times. Because few laboratory chemicals are without hazards, the school system shall establish general precautions for handling all laboratory chemicals. Additional precautions consistent with state and federal standards shall be established for the handling of known hazardous chemicals and unknown substances. The program standards for the control of hazardous chemicals as outlined in the Occupational Safety and Health Act (“OSHA”) rule, “Occupational Exposure to Hazardous Chemicals in Laboratories” (Standard 1910.1450), and the North Carolina Administrative Code and/or the most current standards available must be followed.

## **B. SCHOOL SYSTEM REQUIREMENTS**

The superintendent or designee shall ensure that:

1. a Chemical Hygiene Plan is developed in accordance with OSHA-issued regulations or the most current available federal and/or state standards issued and that all elements of the Chemical Hygiene Plan are met, including, but not limited to, standard operating procedures for handling hazardous chemicals, such as the use of personal protective equipment and hygiene practices; control measures to reduce employee exposure to hazardous chemicals; standards for laboratory protective equipment; identification of laboratory procedures and activities requiring prior approval; proper employee training; and the assignment of a Chemical Hygiene Officer;
2. bulk elemental mercury, chemical mercury compounds, and bulk mercury compounds are not used as teaching aids in science classrooms;
3. labels on incoming containers of hazardous chemicals are not removed or defaced, all safety data sheets received with incoming shipments are maintained and readily accessible to employees, and a current inventory of chemicals is in use and maintained;
4. all employees are trained and apprised of the hazards of chemicals present in their work area and understand how to report unsafe conditions and how to perform proper cleanup;

5. all employees have access to a copy of the Hazardous Chemicals Policy and Chemical Hygiene Plan;
6. science laboratories comply with the OSHA Right-to-Know legislation, bloodborne pathogens regulations (see policy 7260, Occupational Exposure to Bloodborne Pathogens), laboratory standards as provided by the Chemical Hygiene Plan, and other safety rules and guidelines of the profession;
7. records are established and maintained of any measurements taken to monitor employee exposures and any medical consultations or examinations required;
8. the Chemical Hygiene Plan is reviewed annually by a committee appointed by the superintendent and updated as necessary;
9. this policy is reviewed annually and, as needed, updated annually; and
10. a copy of the Chemical Hygiene Plan is submitted to the State Board of Education by January 31 of each school year.

#### C. TESTING

Whenever an event, such as a spill, leak, explosion, or other occurrence resulting in the likelihood of a hazardous exposure, takes place in the work area, the employee exposed to the hazard may receive a medical examination at the school system's expense.

Legal References: 29 C.F.R. 1910.1450; G.S. 115C-47(49); 13 N.C.A.C. 7F .0101; State Board of Education Policy SCOS-017

Cross References: Occupational Exposure to Bloodborne Pathogens (policy 7260)

Other Resources: *Safe, Orderly, and Caring Schools Assessment Inventory*, Safety Provisions – Science Education (North Carolina Department of Public Instruction, Division of School Improvement)

Adopted: April 18, 2016

Revised: May 24, 2017 (legal references only)