

## PURCHASE AND STORAGE OF HAZARDOUS CHEMICALS

### 1. DEFINITIONS

Hazardous chemical: “Hazardous chemical” means a chemical which is a physical hazard or a health hazard, as listed by the (Maine Department of Labor) Bureau of Labor Standards.

Health hazard: “Health hazard” means a chemical, which is:

- a. Listed in the Toxic and Hazardous Substance section of the regulations of the Occupational Health and Safety Act labeling standard in the United States Code of Federal Regulations 29, Part 1910, Subpart Z;
- b. Listed in the Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment, American conference of Governmental Industrial Hygienists, latest edition;
- c. A carcinogen or potential carcinogen, listed in The Registry of Toxic Effects of Chemical Substances, published by the national Institute for Occupational Safety and Health, latest edition based on the National Toxicology Program Annual Report on Carcinogens or the International Agency for Research on Cancer Monographs;
- d. Listed as radioactive material in regulations promulgated by the United States Nuclear Regulatory Commission;
- e. Contained on a list established by the director (of the Bureau of Labor Standards) by rule after consultation with the Bureau of Health and which meets any of the following criteria:
  - (1) Has a median lethal oral dose of not more than 500 milligrams per kilogram of body weight;
  - (2) Has a median lethal dermal dose of not more than 1,000 milligrams per kilogram of body weight;
  - (3) Has median inhalation lethal concentration in air of not more than 2,000 parts per million by volume of gas or vapor, or more than 2 milligrams per liter but not more than 20 milligrams per liter of mist, fume or dust; or
  - (4) Has been found by the director (of the Bureau of Labor Standards), based on established scientific principles, to have significant potential to cause adverse, acute or chronic health effects; or

- f. A mixture which is a health hazard based on application of the criteria a through e to the mixture as a whole, or which contains more than 1% by weight or volume of a chemical which is a health hazard or which contains more than 0.1% by weight or volume of a carcinogen identified in accordance with paragraph c.

Material Safety Data Sheet: "Material Safety Data Sheet" (MSDS) means a form containing information concerning a hazardous chemical substantially equivalent in content to Form 20 of the United States Occupational Safety and Health Administration, but which includes both acute and chronic health hazard information.

Physical hazard: "Physical hazard" means a chemical, which is:

- a. Listed in the United States Department of Transportation Hazardous Materials Table, 49 Code of Federal Regulations 172,101;
- b. Contained on a list established by the director (of the Bureau of Labor Standards) after consultation with the State Fire Marshall and which meets any of the following criteria:
  - (1) Is a combustible liquid, i.e., any liquid with a flash point above 100 degrees F, and below 200 degrees F.;
  - (2) Is a compressed gas (other than air), i.e., any chemical having in the container an absolute pressure exceeding 40 PSI at 70 degrees F. or having an absolute pressure exceeding 104 PSI at 130 degrees F. or any liquid having a vapor pressure exceeding 40 PSI absolute pressure at 100 degrees F.;
  - (3) Is an explosive, i.e., any chemical that causes a sudden, almost instantaneous release of pressure, gas and heat when subjected to sudden shock, pressure or high temperature;
  - (4) Is a flammable substance, i.e., any liquid with a flash point of below 100 degrees F., solid that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change or retained heat from manufacturing or processing or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard, or gas which at atmospheric temperature or pressure forms a flammable mixture with air when present at a concentration of 13% or less by volume or that forms a range of flammable mixtures with air wider than 12% by volume regardless of the lower limit;
  - (5) Is an organic peroxide, i.e., an organic compound that contains the

bivalent -O-O- structure and which is a derivative of hydrogen peroxide where one or more hydrogen atoms have been replaced by organic radicals;

- (6) Is an oxidizer, i.e., a chemical that initiates or promotes combustion in other materials thereby causing fire;
  - (7) Is pyrophoric, i.e., a chemical that will ignite spontaneously in air at a temperature of 130 degrees F. or below.
  - (8) Is unstable (reactive), i.e., a chemical which will vigorously react under conditions of shock, pressure or temperature, or
  - (9) Is water reactive, i.e., a chemical that reacts with water to release a gas that is either flammable or presents a health hazard; or
- c. A mixture which is a physical hazard based on applicability of the criteria of paragraphs a and b to the mixture as a whole.

## 2. PURCHASE OF HAZARDOUS CHEMICALS

- A. Requests for the purchase of a hazardous chemical shall include at least the following information:
- 1. The common and chemical name of the chemical;
  - 2. The amount of the chemical needed for the year;
  - 3. The storage requirement, curricular use and waste disposal procedures for the chemical; and
  - 4. The amount and age of any existing quantities of the chemical.
- B. When purchasing hazardous chemicals that have a shelf life of greater than two years, the school unit shall order quantities which can be fully consumed under normal conditions and use within two years of the purchase date. If the hazardous chemical has a shelf life of less than two years, the quantity purchased must be consumable under normal conditions and use within the stated shelf-life period.
- C. In order to assure that multiple quantities of the same chemical do not accrue in the inventories of the different schools of RSU 34, all requests for purchase of chemicals will be reviewed by the Superintendent of Schools or his designee before being ordered.

3. STORAGE OF HAZARDOUS CHEMICALS

- A. Inventory lists of all hazardous chemicals shall be submitted to the Superintendent annually at the close of the year. The Superintendent will submit that inventory to the Director of the Bureau of Labor Standards, Department of Labor.
- B. Chemicals which are beyond their published shelf life or expiration date or which are chemical wastes (including unwanted and unneeded chemical or chemicals) shall be disposed of in accordance with applicable state (38 MRSA Section 1301 et seq. and Chapters 850857 of the Maine Department of Environmental Protection's Hazardous Waste Management Rules) and federal (Title 40 Code of Federal Regulations, Chapter 260-266) laws and regulations.
- C. Quantities of hazardous chemicals in storage shall be limited to that expected to be used in a two-year period.
- D. Hazardous chemicals shall be stored in accordance with the specifications described on the Materials Safety Data Sheets, consistent with an acceptable compatibility classification system and shall be accurately and appropriately labeled in accordance with 26 MRSA Section 1713.
- E. Storage areas shall be secure and accessible only to trained personnel. Storage shall be on steel or wood shelving with acid-resistant paint with safety lips to prevent spillage. Shelves shall be securely anchored to the floor, wall and/or ceiling and shall be clearly labeled to indicate the kind of chemicals that are to be stored there.
- F. It is recommended that an eyewash station, which is capable of providing fifteen (15) minutes of continuous irrigation of both eyes, and a deluge shower be readily accessible from the storage area.
- G. There shall be an ABC fire extinguisher, or its equivalent, of at least 10 pounds and preferably 20 pounds capacity within fifty (50) feet of the storage area.
- H. Material and equipment for spill control shall be provided.
- I. It is recommended that chemical storage areas should be vented to provide four (4) room changes per hour to the outside of the building away from air intakes. Vent shall be in operation whenever school is in session or whenever school personnel are in attendance.

4. MONITORING

- A. The Department of Education shall monitor the school unit's compliance with these rules as part of the Comprehensive School Review required in 20-A MRSA § 4504 (2).
- B. Other monitoring visits may be scheduled at the discretion of the Commissioner.

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