#### **RSU #63**

a. NEPN/NSBA Code: EBABA

b. Title: Chemical Hygiene Plan

c. Author: Superintendent/Board of Directors

d. Replaces Policy:

e. Date Approved: 09/23/2024 RSU #63

f. Previously Approved: 11/27/2023

g. Policy Expiration:

h. Responsible for Review:

Annual Review (required by state law)
Superintendent, Director of Facilities, &

**Policy Committee** 

i. Date Reviewed: 09/18/2024 Superintendent

09/18/2024 Facilities Manager 09/18/2024 Policy Committee

i. References:

Legal Reference: 29 CFR 1910.1450 & 1910.1020

26 MRSA § 565

ME Hazardous Waste Mgmt. Rules Chap. 800 (3)(A)(4)(xvii)(xviii)

Maine Dept. of Education Regulations Ch.161 Department of Environmental Protection

Waste Rules Chap. 850 & 851

Commissioner's Administrative Letter No. 33,

June 9, 2005 (Chemicals in Schools)

**Cross Referenced Policies: EBCC-Bomb Threats** 

EBAA-Chemical Hazards
EBCD-Emergency School
Closings/Situations
DJB-Purchasing Procedures
GBGAA-Exposure Control Plan

#### k. Narrative:

RSU #63 (the District) is committed to providing a safe environment. All personnel have a right to know about health hazards associated with their work in order to make knowledgeable decisions regarding personal risks. The District Chemical Hygiene Plan includes hazardous conditions or chemicals in the district (classes, kitchens, custodial areas, and bus garage) and required training for personnel in appropriate safe working conditions. **The District does not allow science projects requiring exhaust hoods/ducting.** 

- I. New personnel are to be trained within their first month of employment. All personnel are to receive refresher/updated training as required.
- II. It is important administrators assume responsibility for classroom safety and personnel training. All employees will have access to pertinent safety information through their supervisory staff. The people who work in any given environment are often best able to detect potential hazards in either the facility or work procedures. When safety concerns arise, employees are encouraged to contact their supervisor.

- III. This program is for the benefit and protection of all who use the school facility. It contains information on potential chemical hazards and how they should be handled.
- **IV.** The District does not have a specific science "lab". Throughout this policy, the term "lab" is used to define a room where students are using chemicals.

## V. Responsibilities:

Specific to this Chemical Hygiene Plan (CHP) for the District, employees (teachers, staff), administrators (Superintendent, Principals), and students all have responsibilities to conform to this standard. The District Administration will provide continuing support for institutional chemical hygiene. 29 CFR 1910.1450 (e) (3) (vii) and Appendix A(B)

## A. Administration Responsibilities:

- **1.** The Chemical Hygiene Officer (CHO) for the District is the Facilities Manager.
- **2.** Implement a CHP conforming to the OSHA Lab Standard. *29 CFR 1910.1450*.
- 3. Ensure that employees receive training regarding the CHP.
- **4.** Allocate staff time for regular, formal, chemical hygiene, and housekeeping inspections, including routine inspections of emergency equipment and an annual chemical inventory.
- **5.** Maintain a record of all chemical exposures and provide employee access to these records as well as any medical records.
- **6.** Ensure confidentiality of all personal records.
- 7. Provide resources to ensure that facilities and equipment align with requirements of the plan.
- **8.** Ensure local Fire Departments receive a copy of the annual chemical inventory.
- **9.** Provide training to colleagues, including administrators, teachers, and facilities staff.
- 10. Submit budget for maintenance of equipment and inspections.

### **B.** CHO Responsibilities:

- 1. Work with the administration and staff to develop and implement appropriate chemical hygiene policies and practices.
- **2.** Monitor procurement, use, and disposal of chemicals, including determining facilities and training levels are adequate for any chemicals in use.
- 3. Perform regular safety audits.
- 4. Maintain Safety Data Sheets (SDS) for chemicals.
- **5.** Oversee annual chemical inventory. Provide a copy of the current chemical inventory to the custodians, mechanics, Principals, Superintendent, and local first responders. In the District, this occurs every September and is updated as needed.
- **6.** Maintain legal regulations for chemical safety.
- 7. Coordinate annual review of the CHP by staff.
- **8.** Coordinate annual hazardous waste disposal for the District.
- 9. Oversee maintenance of appropriate spill kit(s) and materials.
- 10. Maintain communication with administration regarding the CHP.

#### C. Teacher Responsibilities:

- 1. Plan and conduct operations in accordance with the CHP and safe work practices.
- 2. Develop good personal chemical hygiene habits.
- **3.** Align curriculum with CHP. Teach good personal chemical hygiene habits. Ensure that students meet their safety responsibilities. Prohibit unsupervised work by students.
- **4.** Participate in annual chemical inventory.
- **5.** Plan and conduct each exercise with the least toxic materials. Obtain and review SDS prior to requesting a new chemical.
- **6.** Annually submit a list of materials needed to the CHO.
- 7. Label, use, and dispose of each chemical as required.
- **8.** Maintain safety equipment.
- 9. Maintain spill kits that are consistent with type and amount of chemicals used.
- 10. Maintain communication with CHO.

# D. Student Responsibilities:

- 1. Understand the experimental procedure before starting to work in the laboratory.
- 2. Become familiar with the properties and hazards of the chemicals in use.
- **3.** Obey all safety rules and regulations. Wear appropriate personal protective equipment as instructed.
- **4.** Clean personal work area immediately after use. Obey good housekeeping practices.
- **5.** Do not engage in inappropriate behavior (*i.e.* no horseplay).
- **6.** Conduct only the experiments assigned by the instructor. Never perform unauthorized or unsupervised experiments.
- 7. Never remove chemicals from the classroom.
- **8.** Never work with chemicals unless authorized to do so. Never work alone.
- **9.** Report chemical spills and accidents to teacher immediately.

## **E.** Custodian Responsibilities:

- 1. Understand and follow chemical and hazardous waste management regulations and best practices.
- 2. Clean storage areas with caution.
- **3.** Report chemical spills to CHO and/or administrator. Do not clean up spills without proper training and using the proper materials.

### VI. Basic Safety Rules and Procedures:

"The Chemical Hygiene Plan will include ... standard operating procedures relevant to safety and health considerations to be followed when laboratory work involves the use hazardous chemicals." 29 CFR 1910.1450 (e) (3) (i) and Appendix A (E)

- **A.** Adhere to the intent and procedures of this CHP.
- **B.** Know the safety equipment. Users of chemicals must know:
  - 1. The location of eyewash fountains, safety showers, fire extinguishers, first aid kits and emergency exit;
  - 2. How to respond in case of an emergency; and

- **3.** How to use the safety equipment. Those expected to use the equipment (e.g. fire extinguishers) must receive proper training.
- C. Know the hazards of the materials being used. Read labels carefully to make sure you are using the right chemical. Know how to interpret information from an SDS.
- **D.** No horseplay, games, or pranks near chemicals.
- **E.** Dispose of all waste materials according to instructions. Follow local, state, and federal disposal requirements.
- **F.** Report any chemical accidents or unsafe conditions to the CHO immediately.
- G. Assume any chemical mixture is more toxic than its most toxic component. Substances of unknown toxicity will be assumed to be toxic. Do not underestimate the risk of any chemicals.
- **H.** Do not eat, drink, or apply cosmetics near chemicals.
- **I.** Do not taste any chemical. Do not smell chemicals directly.
- **J.** Do not perform pipette solutions by mouth.
- **K.** Wash hands with soap and water before leaving the classroom, even if you have been wearing gloves.
- L. Promptly flush exposed skin with water. In Holbrook Middle School, a Drench Shower is located in Room 128.
- **M.** Also see the Housekeeping section of this CHP.

#### VII. Chemical Procurement: 29 CFR 1910.1450 Appendix A (D)

- **A.** Before a chemical is procured, proper handling, storage, and disposal methods must be known to those responsible for handling the chemical.
- **B.** Purchase the smallest possible amounts. Whenever practical, chemicals should be purchased as pre-diluted solutions to minimize mixing and the chance for improper labeling and storage.
- C. No container will be accepted without an adequate label and SDS.
- **D.** The District will follow its purchasing policy (Policy DJB) and procedures to minimize large quantities of chemicals and/or extremely hazardous chemicals from entering the school.
- E. No chemical will be purchased in quantities greater than a two-year supply. (*Maine Department of Education regulations, Ch. 161*)

- **F.** Requests for procurement of new chemicals will be made through the building Principal. Any concerns about the safety of a requested chemical should be brought to the attention of the CHO.
- **G.** All chemicals will be received by the CHO or their designee.
- **H.** The school will not accept donations of chemicals from outside sources without review by the CHO to ensure the material is:
  - 1. needed by the school,
  - 2. useful to the school's program,
  - 3. a quantity no greater than a two-year supply, and
  - **4.** not hazardous waste from the donating organization.
- I. The school will follow Maine's Hazardous Waste Management Rules, *Chapter* 850 Section (3) (A) (4) (xvii) & (xviii) for applicable exclusions and procedures for transfer.

#### **VIII.** Control Measures:

"The Chemical Hygiene Plan will include... criteria that the employer will use to determine and implement control measures to reduce employee exposure to hazardous chemicals including engineering controls, the use of personal protective equipment, and hygiene practices..." *CFR 1910.1450 (e) (3) (ii)* 

#### A. Engineering Controls:

Engineering controls are the preferred methods of minimizing exposure to chemicals. Controls must be maintained in proper working order. Engineering controls must not be modified unless testing indicates the changes will not reduce protection. Immediately report improper functioning of engineering controls to the CHO.

- 1. Chemicals requiring laboratory hoods will not be used in RSU #63.
- 2. Storage cabinets for flammable and hazardous chemicals will be provided and ventilated as needed in compliance with state and federal regulations. The flammable cabinet will be either directly vented to the outside or not vented with bungs/stoppers left in place.
- 3. All acids will be stored in an acid cabinet.
- **4.** A general ventilation system will be maintained.

### **B.** Protective Clothing and Equipment:

Clothing worn should offer protection from splashes and spills, should be easily removable in case of an accident, and should be fire resistant.

1. Conduct personal protective equipment (PPE) hazard assessment to determine appropriate PPE for conditions, equipment, and chemicals being used. List activities requiring PPE and type of PPE required:

Activity	Type of PPE required
Chemical handling	Chemical goggles and gloves

- 2. Students and staff will wear appropriate PPE to avoid chemical exposure.
  - **a.** Wear eye protection during chemical transfer and handling.

- **b.** Do not wear sandals, perforated shoes, or have bare feet when using chemicals.
- **c.** Shorts and skirts will not be worn unless a disposable apron is worn to protect legs.
- **d.** Gloves appropriate to the materials and task will be provided. All gloves have breakthrough time. The teacher will check manufacturers recommendations.
- 3. The school will provide required PPE for all employees at no cost.
- **4.** PPE for students will be provided as necessary.
- 5. The District will provide training for students at no cost.
- **6.** The user must inspect PPE before each use. Defective personal protective equipment will not be used and will be reported to the CHO by the teacher.
- 7. Fire alarms are located near each building's exterior doors.
- **8.** Work with toxic chemicals will not be conducted in classrooms.
- 9. An emergency phone is located by Room #128 at Holbrook. Dial 100 for the main office.

## C. Housekeeping:

Each instructor is responsible for keeping their workspace clean and is jointly responsible for chemical storage.

- 1. Access to emergency equipment such as showers, eyewash, fire extinguishers, and emergency exits is to be kept unobstructed.
- 2. Work areas are to be kept clean and uncluttered. Chemicals and equipment are to be properly labeled and stored. Work areas are to be cleaned at the end of each operation or each day. All water outlets are to be completely shut off. All items used in the experiment are to be returned to their proper storage location.
- **3.** Dispose of chemical wastes according to <u>Department of Environmental</u> <u>Protection hazardous waste or solid waste rules.</u> (*ref. Chapters 850 and 851*)
- **4.** Any spills are to be cleaned up immediately using proper materials.

#### D. Hazardous Material Handling and Storage:

Follow all federal, state, and local regulations for material handling and storage and waste disposal.

- 1. At Holbrook Middle School, science chemicals will be stored in Room 128. The 8<sup>th</sup> grade Science Teacher will oversee the chemical storage.
- **2.** All used chemicals and hazardous waste will be stored in the Holbrook garage for no more than three months.
- **3.** All chemicals will be stored according to chemical compatibility. Use appropriate shelving or cabinets. If metal clips are used to hold shelves, they should be inspected for corrosion and replaced as necessary.
- **4.** Store flammable liquids in approved fire cabinets. Where possible, vent flammable cabinets to the outdoors. If not possible to vent to the outdoors, do not vent the cabinet at all (leave the bungs/stoppers in place).
- 5. Do not store chemicals on the floor (except gas cylinders) or above eye level.
- **6.** Gas cylinders will not be used in RSU #63 school buildings. Gas cylinders used in the bus garage must be properly secured from falling, segregated according to compatibility, and stored upright & away from heat sources.

- 7. Standard refrigerators should never be used to store chemicals.
- **8.** Restrict access to chemical storage areas through signage and secure locks. No student or unauthorized faculty should be allowed unsupervised in the storage area
- **9.** Make sure shelves holding containers are secure. Attach anti-roll lips on shelves to prevent chemicals from falling.
- **10.** Before opening newly received chemicals, immediately read the warning label to be aware of any special storage precautions like refrigeration or inert atmosphere storage.
- 11. Storage of chemicals is not allowed in classrooms or areas outside the designated chemical storage room, such as in aisles, stairwells, hallways, floors, or on desks.
- 12. Maintain a complete inventory of chemicals in the chemical storage room. In compliance with state law, inventory science chemicals in September (update as needed). File the inventories with the Holden Fire Dept., the Eddington Fire Dept., and with the CHO.
- 13. During the inventory, any chemicals identified as expired, outdated, unlabeled, unknown, or unwanted must be listed for disposal. See Waste Disposal Section XI.
- **14.** Mark the acquisition dates on all peroxide forming chemicals; test them for peroxides or dispose of them after six months.
- **15.** Provide spill cleanup supplies (absorbents & neutralizers) in any room used for chemical storage or use.
- **16.** Chemicals should be dated upon receipt, dated when to be disposed of where appropriate, and dated when opened.
- 17. Science chemical containers should be checked for rust, corrosion, leakage, and for container integrity by the 8<sup>th</sup> grade science teacher at least once a month.
- **18.** Chemical labels should state name of chemical, be firmly attached to the container, list hazards, and name responsible party (manufacturer).
- 19. Chemical labels must be readable and free from chemical encrustation.
- **20.** Maintain a clear access to and from the storage areas. Where possible, two separate exits will be provided in chemical storage areas.
- **21.** Highly toxic chemicals (LD 50 mg/kg), whose containers have been opened, will be stored in secondary containers.

### **E.** Inspections:

- 1. The day custodian is responsible for activating safety showers and eyewash fountains once per week to flush the lines and to verify proper operation. Eyewash fountains are located Room 128 at Holbrook Middle School, and in the kitchens and custodial areas in all three schools.
- 2. The day custodian is responsible for making sure fire extinguishers are the correct type (ABC), at recommended pressure, are easily accessible, and are inspected monthly. Fire extinguishers should be securely mounted on the wall with a sign indicating their location posted above the fire extinguisher.
- 3. Users should inspect personal protective equipment prior to each use.

- 4. In addition to daily walk-through inspections, the day custodian is responsible for conducting safety inspections in each classroom weekly to monitor housekeeping and to make sure safety equipment is working.
- **5. Keep records of inspections**. Inspection records are maintained in a manual kept in the CHO's office. Inspection records include:

Inspection Description	Date Inspected	Inspected By

# IX. Medical Program:

"The Chemical Hygiene Plan will include provisions for medical consultation and medical examinations in accordance with paragraph (g) of this section." *CFR 1910.1450* (e) (3) (vi) and (g)

**A.** Medical Consultation and Examination

When employees or supervisors suspect that an employee or student has been exposed to a hazardous chemical to a degree and in a manner that might cause harm to the victim, the victim is entitled to a medical consultation and examination without cost or loss of pay to the victim. *Medical records will be retained according to state and federal laws in accordance with 29 CFR 1910.1020*. The events and circumstances that might result in overexposure to a chemical are:

- 1. A hazardous chemical leaked, was spilled, or otherwise released in an uncontrolled manner.
- 2. A hazardous chemical was spilled on the skin or splashed in the eye.
- **3.** A person displays signs or symptoms that might indicate overexposure to a hazardous chemical including, but not limited to, rash, headache, nausea, coughing, dizziness, tearing, irritation or redness of eyes, irritation of nose or throat, or the loss of motor dexterity or judgment.
- **4.** The District has arranged for Occupational Health and Rehab to provide medical consultation/examination in the event of chemical exposure.

#### **B.** Exposure Assessment:

1. All chemical exposure incidents will be documented on an accident report form along with any action taken. If no further action is taken, the reason for that decision should be included. In the District, the CHO is responsible for investigating chemical exposure incidents.

#### **C.** First Aid:

1. Personnel trained in first aid should be available during work hours. The following individual/s has/have received first aid training and is expected to render first aid: **The school nurse.** 

- 2. The closest emergency rooms with medical personnel are the EMMC on State Street in Bangor, ME and St. Josephs Hospital on Broadway in Bangor, ME
- X. Signs and Labels: (in accordance with 29CFR1910.1450 Appendix A (D) (8)):
  The following signs and/or labels should be posted prominently in the Holbrook 8<sup>th</sup> grade science classroom:
  - A. Emergency telephone numbers of emergency personnel, emergency facilities, administration, and the laboratory instructor.

Rescue: 911

Fire: 911 Poison Control: 1-800-222-1222

CHO: (207) 561-9238

Dept of Public Safety: (207) 945-4636 and/or 911

Clean Harbors for an emergency spill: 1-800-526-9191 or (207) 234-4008.

- **B.** Labels on all chemicals and other containers indicating the contents (including waste receptacles) and associated hazards.
- C. Location of exits, safety showers, eyewash station, fire extinguisher, and other safety equipment.
- **D.** Warnings at areas or equipment where special or unusual hazards exist.
- **E.** Additional labeling will be done as necessary.
- XI. Spills and Accidents: (29CFR1910.1450 Appendix A (D)(9))
  - A. In the event of a spill, staff must immediately contact the CHO before beginning clean up. The CHO or other authorized person will access the nature of the spill using the School's Emergency Plan to determine the appropriate response.

    The Emergency Response Plan for Holbrook Middle School is located in the

Principal's Office and the Central Office.

- **B.** The responsible staff will evacuate all persons from the spill or accident area until certain that the spill is not hazardous to people in the general area.
- C. The CHO is responsible for reviewing the Employee's Incident Report and Supervisor's Incident Report (provided by the Maine School Management Association. The CHO will maintain copies of the accident report.
- **D.** Each student, teacher, and staff member must know immediately what to do and where to go in case of any emergency.
- **E.** In the District, the CHO and nurse are responsible for promptly addressing the needs of people who may have been exposed.
- **F.** The CHO must report the spill to the Dept of Public Safety (1-800-452-4664).
- **G.** All waste generated from a chemical spill will be treated as hazardous waste.

H. Custodians and faculty cannot respond to chemical spills unless appropriate training and equipment has been provided. The following list identifies those people who are trained to conduct spill response at this school and the date their training was conducted:

Employees trained in spill response	Date trained
Ryan Porter, Eddington Elementary	02/21/2020
Holbrook	
Ken Robichaud, Holden Elementary	02/21/2020
Keith Kennedy, Jake Morgan, Bus Garage	02/21/2020

XII. Waste Disposal: "Aim: To ensure that minimal harm to people, other organization, and the environment will result from the disposal of waste laboratory chemicals" *CFR* 1910.1450 Appendix A (D) (11)

Environmental regulations also govern chemical waste disposal. Reference: <u>Department of Environmental Protection Rules</u>, Chapters 850 and 851.

- **A.** Each year, the 8<sup>th</sup> grade Science Teacher will complete an inventory of stored chemical wastes (including virgin chemical stock identified as waste) and submit it to the CHO.
- **B.** The CHO will coordinate hazardous waste disposal. Waste will be collected for disposal at least twice a year.
- C. Indiscriminate disposal by pouring waste down the drain or adding them to the trash is unacceptable. It is not permissible to neutralize quantities of > 500 milliliters of corrosive hazardous waste or evaporate, distill, filter, or burn other waste chemicals.
- **D.** If large quantities of hazardous chemical waste are being stored or if a container is full, a hazardous waste pick-up will be scheduled by the CHO within 10 days of the call to Clean Harbors for a container to be picked up.
- **E.** The CHO is responsible for all hazardous waste manifests and associated paperwork.
- **F.** No waste pick-ups will be scheduled during regular school hours.
- G. All chemical wastes destined for hazardous waste disposal must be stored in the designated, signed hazardous waste storage area, the Holbrook Middle School garage, in appropriate DOT approved shipping containers and segregated for compatibility. All containers must have the following information on the label:
  - 1. "Hazardous Waste"
  - 2. The chemical contents
  - **3.** The date that waste was first put in
  - 4. The date the container was filled

**H.** When a hazardous waste pick-up is needed, this school will contact Clean Harbors at 1-800-526- 9191 or (207) 234-4008 to transport and dispose of hazardous waste.

**NOTE**: Most schools are usually considered Small Quantity Generators by the Dept. of Environmental Protection. Schools that do not know their regulator status should check with DEP at (207) 287-7703.

Non-hazardous liquid may be disposed of down the drain without the permission of the CHO. Corrosive hazardous waste, which is hazardous only due to pH (i.e. no contaminants of heavy metal, solvents, etc.) and which is less than 500 milliliters in quantity, may be neutralized to a non-hazardous waste prior to disposal. Non-hazardous liquid chemicals may also be solidified for solid waste disposal (i.e. put in the trash). Custodians must be notified of any chemical put in the trash for disposal.

### XIII. Information and Training: (29CFR 1910.1450 (f))

- **A.** All employees will be trained on the hazards of the chemicals and how to work safely with them. They will receive training at the time of employment and prior to assignments involving new exposure situations.
- **B.** Teachers are responsible for teaching students about hazards and safe practices.
- C. The CHO is responsible for ensuring that all employees receive information and training annually to ensure they are aware of the hazards of chemicals that are present in their work area. This training must include the following:
  - 1. The contents of OSHA Lab Standard and appendices information.
  - **2.** Location and availability of CHP, chemical safety reference materials, including Safety Data Sheets, and the Permissible Exposure Limits for OSHA regulated substances.
  - **3.** In Holbrook Middle School:
    - **a.** A copy of the CHP is kept in the Principals' office, Superintendent's office, and room 128.
    - **b.** Safety Data Sheets are kept in the custodian's office.
    - **c.** Additional safety information is located in the kitchen and custodian areas.
  - **4.** Signs and symptoms associated with exposure to hazardous chemicals.
  - **5.** Methods and observations that may be used to detect the presence or release of a hazardous chemical (visual appearance, odor, monitoring equipment and etc.)
  - **6.** Knowledge of the hierarchy of protective measures such as engineering controls, work practices, personal protective equipment, and emergency procedures to protect workers from overexposure to hazardous chemicals.
  - 7. Emergency procedures to be used in case of a spill or exposure, including clean up methods and equipment needed.
  - **8.** Use of fire extinguishers and other emergency equipment.

XIV. Annual Chemical Hygiene Plan Audit (29CFR 1910.1450 (e) (4))

The CHO will conduct an audit of all phases of the Chemical Hygiene Plan each year. They will provide audit results to the Superintendent and Principals, who are responsible for taking corrective action.

\*MSMA INCIDENT REPORT FORMS TO BE USED\*