Miller Place Union Free School District



CHEMICAL HYGIENE PLAN
2026-2027

Revision Dates:

05/12/2011; 09/28/2016; 07/05/2017; 07/02/2018; 07/09/2019; 06/17/2000; 07/07/2021, 07/06/2022, 07/05/2023, 7/09/2024, 7/02/2025, 07/01/2026

Board of Education
Lisa Reitan, President
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Seth A. Lipshie, Superintendent
Susan G. Craddock, Assistant Superintendent
Dr. Jeremy Koch, Director of Pupil Personnel Services
Bruce Singer, Interim School Business Official
Christopher Herrschaft, Director of Human Resources

Chemical Hygiene Plan 2016-17 revised in consultation with:
Susan G. Hodun, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2017-18 revised in consultation with:
Susan G. Hodun, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2018-19 revised in consultation with:
Susan G. Hodun, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2019-20 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2020-21 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Matthew Baruch, Curriculum Specialist Math & Science
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2021-22 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Matthew Baruch, Curriculum Specialist Math & Science
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2022-23 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Matthew Baruch, Curriculum Specialist Math & Science
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2023-24 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Nick Corleto, Curriculum Specialist Math & Science
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2024-25 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Dennis Warsaw, Director of Facilities
Nick Corleto, Curriculum Specialist Math & Science
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Matt Clark, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2025-26 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Wayne Casey, Director of Facilities
Nick Corleto, Curriculum Specialist Math, Science, Technology, and Business
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Christine Mangiamele, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

Chemical Hygiene Plan 2026-27 revised in consultation with:
Susan G. Craddock, Assistant Superintendent
Wayne Casey, Director of Facilities
Nick Corleto, Curriculum Specialist Math, Science, Technology, and Business
Kevin Slavin, Miller Place High School
Miller Place High School Science Department
Christine Mangiamele, North Country Road Middle School
North Country Road Science Department
Nancy Sanders, President, Miller Place Teachers' Association

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I. Certification and Annual Review and Updates

By signing and dating here, the Chemical Hygiene Officer and Principal certify that this Chemical Hygiene Documentation is accurate and that it effectively provides for the chemical safety of employees and students in this laboratory.

Principal: _____

Signature: _____

Date: _____

Chemical Hygiene Officer:

Signature: _____

Date: _____

By signing and dating here, the Chemical Hygiene Officer certifies that the required annual review (and update if needed) of this Chemical Hygiene Documentation has been completed, and that this document continues to be accurate and to effectively provide for the chemical safety of employees and students in this laboratory.

Reviewed by: _____

Date: _____

Reviewed by: _____

Date: _____

Reviewed by: _____

Date: _____

The Miller Place UFSD Chemical Hygiene Plan represents the coordinated efforts of the Chemical Hygiene Officer, Building Administration, Director of Facilities, and Assistant Superintendent, to improve laboratory chemical safety in the Miller Place UFSD. This plan is most pertinent to the North Country Road Middle School (NCRMS), located at 191 North Country Road, Miller Place, NY 11764, and the Miller Place High School (MPHS), located at 15 Memorial Drive, Miller Place NY 11764, the sites of the secondary level science program.

II. Chemical Hygiene Responsibilities

Responsibility for chemical hygiene rests at all levels including the following:

A. Superintendent of Schools, who has ultimate responsibility for chemical hygiene within each school and must, with other administrators, provide continued support for institutional chemical hygiene and the fiscal support thereof.

B. Assistant Superintendent, who has ultimate responsibility over all building related safety and in-house training requirements, as well as to ensure that all safety equipment, is in proper working order.

C. Director of Facilities:

1. Work with administrators and other employees to develop and implement appropriate chemical hygiene plans and practices.
2. Help develop precautions and adequate facilities.
3. Procurement of and coordination with approved, certified contractors for chemical disposal after chemicals have been removed from inventory. Maintain records of such events.
4. Inspect general ventilation system and hood air exchange rates. Maintain records of such events.
5. Assist with inspections and maintain records.
6. Report any deficiencies to the Assistant Superintendent, CHO (or designee as appointed by the Superintendent), and appropriate Principal.

D. Chemical Hygiene Officer:

1. Work with administrators, and other employees to develop, implement, and update appropriate chemical hygiene plans and practices.
2. Help develop precautions for chemical use in laboratories.
3. Assist in providing regular *Right-to-Know* training for science teachers.
4. Assist with inspections and maintain records.
5. Assist in monitoring the procurement of chemicals for laboratory use.
6. Assist in monitoring the appropriate inventories of laboratory chemicals.
7. Have accessible SDS for chemical substances used in the laboratory.
8. Collection and documentation of laboratory chemicals for disposal by the Director of Facilities.

E. Curriculum Specialist for Math & Science

1. Assist administrators and other employees to develop, implement, and update appropriate chemical hygiene plans and practices.
2. Help develop precautions for chemical use in laboratories.
3. Assist in providing regular Right-to-Know training for science teachers.
4. Assist the administration with records maintenance.
5. Assist the administration in monitoring the inventories of laboratory chemicals.
6. Assist the administration in the maintenance of the SDS for chemical substances used in the laboratory.
7. Assist teachers with the collection and documentation of laboratory chemicals for disposal by the Director of Facilities.

F. Principals:

1. Are responsible for chemical hygiene in the building.
2. Work with administrators and other employees to develop, implement, and update appropriate chemical hygiene plans and practices.
3. Report any deficiencies to the CHO (or designee as appointed by the Superintendent) and Director of Facilities.

G. Science Teacher:

1. Read, understand, and follow the chemical hygiene plan.
2. Assure that laboratory lessons are in accordance with the District's Chemical Hygiene Plan.
3. Will not allow students in the laboratory preparation rooms/chemical storage areas and never leave students unsupervised in the laboratory.
4. Will complete the Science Laboratory Checklist (Miller Place Science Laboratory Safety Checklist, Appendix A1 and A2) at monthly department meetings in collaboration with the building administration. Checklist will be maintained by the building administration.
5. Determine the required levels of protective apparel and equipment as per the SDS.
6. All chemicals in secondary containers are Globally Harmonized System (GHS) compliant as to the contents. Food stuffs used in the laboratory should be labeled "SCIENCE USE ONLY."
7. Before daily work in the laboratory ends, chemicals are discarded or properly returned to storage and the work area is cleaned.
8. All laboratory chemicals should be stored securely in locked laboratory preparation rooms and cabinets. Keys should be kept in teacher's personal possession during the school day.
9. Materials for waste disposal, including empty chemical containers, should be moved to bottom shelves of the blue corrosive cabinet(s) in MPHS prep rooms or boxed in NCRMS yellow flammable cabinets.
10. Report any deficiencies to the Principal, CHO (or designee as appointed by the Superintendent), and/or Director of Facilities.
11. Will attend training as provided.

12. Have students and parents sign safety contract and reinforce safety procedures during class (Appendix B and C).

H. Contact Information

Title	**Name**	**Phone**
Emergency		911
Poison Control		1-800-222-1221
CHEMTREC*	https://www.chemtrec.com	1-800-424-9300
Principal, MPHS	Kevin Slavin	631-474-2732 631-474-2723, x302
MPHS School Nurse	Kimberlee Gelibter	631-474-2481
Principal, NCRMS	Christine Mangiamele	631-474-2714 631-474-2710, x438
NCRMS School Nurse	Erin Southworth	631-474-7258
Curriculum Specialist Math, Science, Technology, Business	Nick Corleto	631 474 2700 x374
Chemical Hygiene Officer	Nick Corleto	631 474 2700 x374
Director of Facilities	Wayne Casey	631-474-8527 (office) 631-316-4120 (cell)
Assistant Superintendent	Susan Craddock	631-474-2700, x728 631-655-8895 (cell)
Superintendent		631-474-2700, x722
*CHEMTREC serves as a round-the-clock resource for obtaining immediate critical response information for incidents involving hazardous materials and dangerous goods.		

III. The Laboratory Facility

A. General Design: The laboratory facility should have:
   1. Adequate, well-ventilated prep rooms/storerooms and classrooms.
   2. Laboratory fume hoods and sinks in chemistry classrooms.
   3. Other safety equipment including eyewash stations and emergency showers in chemistry.
   4. Arrangements for waste disposal.

B. Maintenance: Chemical hygiene related equipment (hoods, etc.) should undergo regular inspection and maintenance as scheduled by the Director of Facilities.

C. Usage: The work conducted and its scale must be appropriate to the physical facilities available and especially to the quality of ventilation.

D. Ventilation:
   1. A general ventilation system should provide a source of air for breathing (a recommended 4 changes/hour minimum) and for input to local ventilation devices.
      a) The ventilation system should ensure that laboratory air is continually replaced preventing increase of air concentrations of toxic substances during the working day;
      b) The ventilation system should not be relied on for protection from toxic substances released into the laboratory. Instead, other local ventilation devices such as hoods or exhaust fans should be used when working with these substances;
      c) There should be direct airflow into the laboratory from non-laboratory areas and out to the exterior of the building.
   2. Hoods: A laboratory hood shall be used when working with chemicals that give off toxic fumes. If this is not possible, work with substances of unknown toxicity should be avoided or another type of local ventilation device should be provided.
   3. Other Local Ventilation Devices: Ventilation of storage cabinets, canopy hoods, snorkels, etc. should be provided as needed. It is recommended that each specific ventilation device should have a separate exhaust duct.
   4. Modifications: Any alteration of the ventilation system should be made only if thorough testing indicates that worker protection from airborne toxic substances should continue to be adequate.
   5. Performance: Normally a rate of 4-12 room air changes/hour is adequate general ventilation if local exhaust systems such as hoods are used as the primary method of fume control.
   6. Quality: General airflow should not be turbulent and should be relatively uniform throughout the laboratory with no high velocity or static areas. Airflow into and within hoods should not be excessively turbulent. The hood face velocity should be adequate (typically 60-100 linear feet per minute).

7. Evaluation: Quality and quantity of ventilation should be evaluated on installation and then regularly monitored by an approved, certified contractor. Results should be provided and stored by the CHO & Director of Facilities.

IV. Components of the Chemical Hygiene Plan

A. Employee Exposure

Any chemical substance used during laboratory classes should not exceed the permissible exposure limits (PEL's) specified in the SDS.

B. Science Teacher Training and Information

The Miller Place UFSD should provide all employees involved with laboratory work with training and information to ensure they are apprised of the hazards of chemicals. The employees shall be trained on the applicable details of the Chemical Hygiene. This training can be held during the annual Right-to-Know session for the science teachers.

1. The information and training to be included in the training session can include:
   a) Location and availability of Chemical Hygiene Plan and SDS in MPHS prep rooms and NCRMS prep rooms.
   b) Physical and health hazards associated with chemicals used in work areas.
   c) The measures employees/students can take to protect themselves.

C. Chemical Procurement, Distribution, and Storage

1. *Procurement*: Information on proper handling, storage and disposal should be known to those who will be involved with laboratory chemicals. Containers should be affixed with GHS identifying labels and SDS should be properly filed in building main offices, MPHS prep rooms, NCRMS prep rooms, CHO's (or designee as appointed by the Superintendent) office, MPHS and NCRMS Head Custodians' offices and Facilities Department office.
2. *Prep rooms/Storerooms*: All laboratory chemicals should be stored in locked preparatory rooms or cabinets. The storage room should provide enough space for proper arrangement of chemicals by compatibility groups and should also provide proper ventilation and fire protection. Stored chemicals should be examined at least annually by department staff for replacement, deteriorations and container integrity.
3. *Distribution*: When a chemical is hand carried, precautions should be taken to avoid any breakage or chemical exposure to the individual. Carts are recommended for use when student traffic is minimal.
4. *Laboratory Storage*: Amounts should be as small as practical for use on bench tops and in hoods. Exposure to heat or direct sunlight should be avoided.

D. Housekeeping, Maintenance, and Inspections

1. *Cleaning*: Building custodians should clean floors regularly.
2. *Inspections and Maintenance:* building administration will conduct housekeeping and chemical hygiene inspections for the purposes of identifying

any potential hazards in the classroom laboratory or classroom laboratory prep rooms during monthly department meetings. Science teachers should regularly inspect eye wash stations, safety showers, and other safety equipment. Records of inspections should be maintained by the building administration (See Appendix A1 and A2).

3. Hazard Prevention:
    a) Conduct periodic in-house safety and health inspections with an emphasis on identifying safety hazards.
    b) Carry out regular fire or emergency drills and review the results.
    c) Have actions planned in case of an emergency (e.g., equipment should be turned off, planned escape routes, designated meeting place outside the building and designated person to authorize the re-entry into the building).
    d) Have the appropriate equipment and materials available for spill control.
    e) Keep up-to-date emergency phone numbers posted next to the telephone.
    f) Reduce risk by using diluted substances instead of concentrates.
    g) If feasible, use smaller quantities of hazardous materials for laboratory demonstrations.
    h) Use video streaming, virtual labs, or other methods rather than experiments involving extremely hazardous substances.
    i) Substitute with a less hazardous substance.
    j) Analyze accidents to prevent repeat performances.
    k) Purchase chemicals in minimum quantities, wherever feasible.
    l) Do not use damaged glassware.

E. Medical Program

1. The district shall provide all who work with chemicals an opportunity to receive medical attention as needed.
2. Emergency First Aid Procedures:
    a) Eye Contact: Flush eyes with copious amounts of water for at least 15 minutes and seek medical attention.
    b) Ingestion: Read the label for directions and immediately seek medical attention. Contact the 24-hour National Emergency Poison Control Center at 1-800-222-1222, or call 911.
    c) Skin Contact: Flush the affected areas with copious amounts of water and remove any contaminated clothing. If symptoms persist after flushing, seek medical attention.

F. Protective Apparel and Equipment

These should be included in the laboratory area:

1. Protective apparel compatible with the required degree of protection for substances being handled, to be made available by science teachers. This should include splash goggles, laboratory aprons, and gloves.
2. An easily accessible safety shower and/or eyewash.
3. A fire extinguisher/fire blanket in close proximity to the laboratory.
4. Fire alarm and telephone for emergency use should be available nearby.
5. Spill/cleanup materials should be available.

G. Records

The school district should establish and maintain the following records:

1. Accident records should be written and retained in the Personnel office. These should include injuries and property damage.
2. Science teacher training records should be kept in the building main office (administration) and/or CHO's (or designee as appointed by the Superintendent).
3. Air monitoring results and waste disposal records should be kept on file in the Facilities Department office.
4. Medical records should be retained by the school district, in accordance with the requirements of State and Federal regulations. Current student records should be kept in the nurse's office for each building.

H. Signs and Labels

Prominent signs and labels of the following types should be posted:

1. Employees are required to notify administration and/or nurse in case of emergency.
2. GHS compliant labels showing contents of all containers.
3. Location signs for safety showers, eyewash stations and fire extinguishers.
4. Any secondary container containing a chemical or mixture of chemicals must have a GHS compliant label indicating its contents. SDS can be used to access more detailed information regarding safe handling, etc.

I. Safety Data Sheets (SDS)

The school district must maintain SDS on hazardous chemicals present in the District and should ensure that they are readily accessible. Copies of SDS should be properly filed in building main offices, MPHS prep rooms, NCRMS prep rooms, CHO (or designee as appointed by the Superintendent) office, MPHS and NCRMS Head Custodian offices and Facilities Department office.

J. Emergency Plan

1. It has been established and communicated to science teachers.
2. There is a fire alarm pull system to alert people in all parts of the facility if necessary.
3. All accidents or near accidents should be carefully analyzed.
4. Ventilation failure during laboratory class:
   a) Chemical usage should stop. Containers should be closed;
   b) The teacher (who is directly involved) calls for the orderly evacuation of the lab classroom and adjoining rooms. This includes notifying teachers in adjoining rooms and contacting building main office. The school building Main office should contact the Head Custodian, Director of Facilities, and CHO (or designee as appointed by the Superintendent);
   c) The teacher should open windows to dilute contaminated air and leave doors leading into hallways closed;
   d) Fume hoods should remain on until odor is no longer present;

e) The teacher and students should wait outside the lab classroom until the District-Wide Comprehensive School Safety Plan is properly implemented.

5. Hazardous Materials Spill in Laboratory:
   a) Spill procedures will include approved containment, clean-up and transportation methods. Spill kits should be available in science prep rooms.
   b) The teacher (who is directly involved) should call for the orderly evacuation of the lab classroom and any adjoining rooms. This includes notifying teachers within adjoining rooms and contacting the building Main office. The building main office should contact the Head Custodian, Director of Facilities. The teacher should open windows to dilute contaminated air. The teacher should leave the doors leading into the hallways closed;
   c) Fume hoods/general ventilation should remain on until odor is no longer present;
   d) The teacher and students should wait outside the lab classroom until the District-Wide Comprehensive School Safety Plan is properly implemented.

K. Waste Disposal Program
   1. Before work in the laboratory ends, chemicals for which a science teacher was responsible for, should be discarded or returned to storage.
   2. Materials for waste disposal, including empty chemical containers, should be moved to bottom shelves of blue corrosive cabinet in MPHS prep room(s) or boxed in NCRMS cabinets.
   3. The District should arrange regular disposal of used/expired chemicals through an approved, certified contractor. Copies of reports should be kept by Director of Facilities.

L. Basic Rules and Procedures for Working with Chemicals

The Chemical Hygiene Plan requires *science teachers and students* (See Appendix B and C for student responsibilities) to know and follow its rules and procedures. Notify nurse/building main office in case of an emergency.

1. ***Accidents and spills*****:** *Eye contact*: promptly flush eyes with water for a prolonged period and seek medical attention. *Ingestion:* Encourage the victim to drink large amounts of water. *Skin contact:* Promptly flush the affected area with water and remove any contaminated clothing. If symptoms persist after washing, seek medical attention. *Clean up:* Promptly clean up spills, using appropriate protective apparel and equipment and proper disposal.
2. ***Avoidance of "routine" exposure*****:** Develop and encourage safe habits to avoid unnecessary exposure to chemicals by any route; do not smell or taste chemicals. Inspect gloves and test fume hoods before use.
3. ***Avoid underestimation of risk:*** Even for substances of no known significant hazard, exposure should be minimized; for work with substances that present special hazards, special precautions should be taken. One should assume that

any mixture will be more toxic than its most toxic component and that all substances of unknown toxicity are toxic.

4. ***Choice of chemicals*****:** Use only those chemicals for which the quality of the available ventilation system is appropriate. Use the least hazardous materials and process available to teach the desired laboratory experience.
5. ***Eating*****:** Eating in areas where laboratory chemicals are present is prohibited. Avoid storage, handling and consumption of food or beverage in storage areas, refrigerators, glassware or utensils that are also used for laboratory operations.
6. ***Equipment and glassware*****:** Handle and store laboratory glassware with care to avoid damage; do not use damaged glassware. Use extra care with Dewar flasks and other evacuated glass apparatus; shield or wrap them with tape to contain chemicals and fragments should implosion occur. Use equipment only for its designated purpose.
7. ***Exiting:*** Wash areas of exposed skin well before leaving the laboratory.
8. ***Horseplay:*** Avoid practical jokes or other behavior that might confuse, startle, or distract another worker.
9. ***Do not hold or use a pipette by mouth***.
10. ***Personal apparel:*** It is recommended that long hair and loose clothing be confined. Closed toe shoes are preferable.
11. ***Personal housekeeping:*** Keep the work area clean and uncluttered, with chemicals and equipment being properly labeled and stored; cleanup the work area on completion of an operation or at the end of each day.
12. ***Personal protection:*** It is recommended that all persons, including visitors, in areas where chemicals are stored or handled, should wear appropriate eye protection. Contact lenses may be worn in the laboratory provided specially marked, non-vented safety goggles are available to contact lens wearers.
    a) Wear appropriate ***gloves*** when the potential for contact with toxic or corrosive materials exists; inspect the gloves before each use, wash them before removal, and replace them periodically.
    b) Use any other ***protective and emergency apparel*** and equipment as appropriate.
13. ***Students*** should never be allowed in the chemical storage areas. Doors of chemical storage areas should be closed and locked.
14. ***Transport of chemicals***: In order to minimize accidents during the transport of chemicals to lab classrooms, lab carts should be used. Teachers should plan on transporting chemicals when hallway traffic is minimal.
15. ***Provide adequate ventilation:*** The best way to prevent exposure to airborne substance is to prevent their escape into the work atmosphere by use of hoods and other ventilation devices.
    a) ***Use of hood***: Use the hood for operations that might result in release of toxic chemical vapors or dust. As a rule of thumb use a hood or local ventilation device when working with an appreciably volatile substance with a Threshold Limit Value (TLV) of less than 50 parts per million (ppm). Confirm adequate hood performance before use; keep hood closed at all times except when adjustments within the hood are being made; keep

materials stored in hoods to a minimum and do not allow them to block vents or air flow. Leave the hood "on" when it is not in active use if toxic substances are stored in it or if it is uncertain whether adequate general laboratory ventilation will be maintained when it is "off".

16. ***Vigilance:*** Be alert of unsafe conditions and ensure that they are corrected when detected.
17. ***Working alone***: Avoid working alone in a building; do not work alone in a laboratory if the procedures being conducted are hazardous. Students are not to be in a laboratory unsupervised at any time.

V. Annual Chemical Hygiene Plan Audit

29CFR1910.1450 (e)(4)

_____ will conduct an audit of all
(Name and/or position)

phases of the Chemical Hygiene Plan each year. He/she will provide the Chemical

Hygiene Plan Audit results to _____
(*Name(s) and/or position(s)*)

who is/are responsible for taking the appropriate corrective action as necessary.

VI. Resources

A. 29 CFR 1910.1450- Occupational Exposure to Hazardous Chemicals in Laboratories.
B. 29 CFR 1910.151- Medical Services and First Aid
C. ANSI Standard Z358.1- Eye Safety Devices
D. New York State Building Codes- Ventilation Systems for Toxic fumes.

VIII. Appendices

Appendix A

Miller Place Union Free School District Science Laboratory Safety Checklist			
Building:	Date of Safety Inventory:		
Class/Prep Room:	Administrator:		
Note: Building administration will initial as appropriate and maintain monthly records of inventories.			
	Yes	No	Not Applicable
Eyewash Station (expiration date if applicable):			
• Access to station clear			
• Water flowing			
• Water in tank			
Fire extinguisher in:			
• Classroom			
• Prep Room			
Fire blanket in:			
• Classroom			
• Prep Room			
Gas shutoff(s) off in:			
• Classroom			
• Prep Room			
Spill control kit present			
First Aid kit present			
SDS inventory in prep room			
Clear prep room counters			
Prep rooms – free from slip, trip, fall hazards			
Chemicals/materials stored properly			
Hood ventilation turns on			
Safety shower releases water			

Appendix B

Miller Place High School Student Safety Contract (09/01/2026)

PURPOSE

Science is a hands-on laboratory class. You will be doing many laboratory activities which require the use of equipment and hazardous chemicals. Safety in the science classroom is the main priority for students, teachers, and parents. To ensure a safe science classroom, a list of rules has been developed and provided to you in this student safety contract. These rules must be followed at all times. Two copies of the contract are provided. One copy must be signed by both you and a parent or guardian and returned to the teacher before you can participate in the laboratory. The second copy is to be kept in your science notebook as a constant reminder of the safety rules.

GENERAL RULES

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ask the instructor before proceeding.
3. Never work alone. No student may work in the laboratory without an instructor present.
4. When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
5. Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.
6. Perform only those experiments authorized by the instructor. Never do anything in the laboratory that is not called for in the laboratory procedures or by your instructor. Carefully follow all instructions, both written and oral.
7. Unauthorized experiments are prohibited.
8. Be prepared for your work in the laboratory. Read all procedures thoroughly before beginning the laboratory.
9. Never fool around in the laboratory. Horseplay, practical jokes, and pranks are dangerous and prohibited.
10. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Bring only your laboratory instructions, worksheets, and/or reports to the work area. Other materials (back- packs, purses.) should be stored in the classroom area.
11. Keep aisles clear. Push your chair under the desk when not in use.
12. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, and fire blanket. Know where the fire alarm and the exits are located.
13. Always work in a well-ventilated area. Use the fume hood when working with volatile substances or poisonous vapors. Never place your head into the fume hood.
14. Be alert and proceed with caution at all times in the laboratory. Notify the instructor immediately of any unsafe conditions you observe.
15. Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water and those solutions designated by the instructor. Solid chemicals, metals, laboratory safety lighters, filter paper, and all other insoluble materials are to be

disposed of in the proper waste containers, not in the sink. Check the label of all waste containers twice before adding your chemical waste to the container.

16. Labels and equipment instructions must be read carefully before use. Set up and use the prescribed apparatus as directed in the laboratory instructions or by your instructor.
17. Keep hands away from face, eyes, mouth and body while using chemicals or preserved specimens. Wash your hands with soap and water after performing all experiments. Clean all work surfaces and apparatus at the end of the experiment. Return all equipment clean and in working order to the proper storage area.
18. Experiments must be personally monitored at all times. You will be assigned a laboratory station at which to work. Do not wander around the room, distract other students, or interfere with the laboratory experiments of others.
19. Students are never permitted in the science storage rooms or preparation areas.
20. Know what to do if there is a fire drill during a laboratory period; containers must be closed, gas valves turned off, fume hoods turned off, and any electrical equipment turned off.
21. Handle all living organisms used in a laboratory activity in a humane manner. Preserved biological materials are to be treated with respect and disposed of properly.
22. When using knives and other sharp instruments, always carry with tips and points pointing down and away. Always cut away from your body. Never try to catch falling sharp instruments. Grasp sharp instruments only by the handles.
23. If you have a medical condition (e.g., allergies etc.), check with your physician prior to working in lab.

CLOTHING

24. Any time chemicals, heat, or glassware are used, students will wear laboratory goggles. There will be no exceptions to this rule!
25. Contacts may be worn in the laboratory provided specially marked, non-vented safety goggles are available to contact lens wearers.
26. Dress properly during a laboratory activity. Long hair, dangling jewelry, and loose or baggy clothing are a hazard in the laboratory. Long hair must be tied back and dangling jewelry and loose or baggy clothing must be secured. Shoes must completely cover the foot. No sandals allowed.
27. Lab aprons are available for your use.

ACCIDENTS AND INJURIES

28. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the instructor immediately, no matter how trivial it may appear.
29. If you or your lab partner are hurt, immediately yell out “Help! Emergency!” to get the instructor’s attention.
30. If a chemical splashes in your eye(s) or on your skin, immediately flush with running water from the eyewash station or safety shower for at least 20 minutes. Notify the instructor immediately.
31. If mercury thermometers are broken, mercury must not be touched. Notify the instructor immediately.

HANDLING CHEMICALS

32. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless specifically instructed to do so. The proper technique for smelling chemical fumes will be demonstrated to you.
33. Check the label on chemical bottles twice before removing any of the contents. Take only as much chemical as you need.
34. Never return unused chemicals to their original containers.
35. Never use mouth suction to fill a pipette. Use a rubber bulb or pipette pump.
36. When transferring reagents from one container to another, hold the containers away from your body.
37. Acids must be handled with extreme care. You will be shown the proper method for diluting strong acids. Always add acid to water, swirl or stir the solution and be careful of the heat produced, particularly with sulfuric acid.
38. Handle flammable hazardous liquids over a pan to contain spills. Never dispense flammable liquids anywhere near an open flame or source of heat.
39. Never remove chemicals or other materials from the laboratory area.
40. Take great care when transporting acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

HANDLING GLASSWARE AND EQUIPMENT

41. Carry glass tubing, especially long pieces, in a vertical position to minimize the likelihood of breakage and injury.
42. Never handle broken glass with your bare hands. Call the instructor. Inserting and removing glass tubing from rubber stoppers can be dangerous. Always lubricate glassware (tubing, thistle tubes, thermometers, etc.) before attempting to insert it in a topper. Always protect your hands with towels or cotton gloves when inserting glass tubing into, or removing it from, a rubber stopper. If a piece of glassware becomes "frozen" in a stopper, take it to your instructor for removal.
43. Fill wash bottles only with distilled water and use only as intended, e.g., rinsing glassware and equipment, or adding water to a container.
44. When removing an electrical plug from its socket, grasp the plug, not the electrical cord. Hands must be completely dry before touching an electrical switch, plug, or outlet.
45. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
46. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
47. If you do not understand how to use a piece of equipment, ask the instructor for help.
48. Do not immerse hot glassware in cold water; it may shatter.

HEATING SUBSTANCES

49. Exercise extreme caution when using a gas burner. Take care that hair, clothing and hands are a safe distance from the flame at all times. Do not put any substance into the flame unless specifically instructed to do so. Never reach over an exposed flame. Light gas (or alcohol) burners only as instructed by the teacher.
50. Never leave a lit burner unattended. Never leave anything that is being heated or is visibly reacting unattended. Always turn the burner or hot plate off when not in use.

51. You will be instructed in the proper method of heating and boiling liquids in test tubes. Do not point the open end of a test tube being heated at yourself or anyone else.
52. Heated metals and glass remain very hot for a long time. They should be set aside to cool and picked up with caution. Use tongs or heat-protective gloves if necessary.
53. Never look into a container that is being heated.
54. Do not place hot apparatus directly on the laboratory desk. Always use an insulating pad. Allow plenty of time for hot apparatus to cool before touching it.
55. When bending glass, allow time for the glass to cool before further handling. Hot and cold glasses have the same visual appearance. Determine if an object is hot by bringing the back of your hand close to it prior to grasping it.

ELECTRICITY AND ELECTRONIC EQUIPMENT

56. Do not touch a person in contact with a live electrical circuit. Call for help. Disconnect the power first or you may be seriously injured.
57. Do not move any injured person unless they are in further danger. Call for help.
58. Know the meaning of electrical terms.
59. Follow the directions for using all electrical equipment. Failure to do so can cause severe injury to you or may damage equipment.
60. Check all electrical equipment <u>before</u> <u>using</u> to see that there are no exposed or frayed wires. Do not use.
61. Never handle electrical equipment with wet hands. To do so decreases the body's resistance to current flow, thus increasing the risk of severe or fatal shock. Dry skin may have a resistance as high as 500,000 ohms, while wet skin may be as low as 100ohms.
62. Students must not work around electrical equipment without their shoes on.
63. Extension cords pose potential problems; refrain from using them if possible.
64. Even when disconnected, some electrical equipment can cause shocks. Never remove the cover of a device without assessing the potential danger. A Van de Graaf generator should not be used unless an insulated stool is also used.
65. All electrical devices should be properly grounded. The three-prong grounded service outlets offer the best protection against shock.
66. Hold the plug firmly (not the wire) when inserting or removing it from the electrical outlet. Pulling the wire may result in a short. Repair broken plugs immediately.
67. Locate the master switch to control the electricity at each station.
68. When assembling an electrical circuit, make the live connection last, or when disassembling the circuit remove the live connection first.
69. Do not use multi-connection plugs; circuits can quickly become overloaded.
70. Never short circuit a dry cell or storage battery. Wires heat quickly and can cause severe burns. Never heat dry or wet cells or throw one into an open flame. An explosion could occur and produce severe skin burns.
71. Charge capacitors to a voltage that does not exceed their rated value.

    CAUTION: CAPACITORS COULD HAVE A HIGH INITIAL CURRENT.

LASER SAFETY

We use He-Ne lasers to demonstrate a wide range of optical phenomena. Their low output (found to range from 0.19 to 3.0 milliwatts) does not mean that these devices should be used without regard for safety issues. The low output of He-Ne beams is capable of burning the retinal area of the eye, producing a blind spot. Sufficient energy is deposited in .01 seconds under direct viewing of a laser beam to cause retinal damage.

72. Never look directly into the beam. Should beams of higher power than the He-Ne type is used, avoid placing any portion of the body in the beam's path that does not have a dissipating lens, as the possibility of skin burns increases with beam output power.
73. Never look at the reflected beam. Shiny objects that may scatter the beam introduce unnecessary risks to the eye of both student and teacher. Commonly available welders' goggles may not offer sufficient protection against the reflected beam.
74. Block or turn off the beam when not in use.
75. Be sure lasers are properly grounded when in use. Under no conditions should a student remove the external cover while a laser is in operation; the voltages used are lethal.
76. Students must strictly adhere to the safety rules. Students wearing corrective lenses may accidentally come into contact with a reflected beam. For example, if a student sitting along a line opposite that of the beam's direction leans into the beam, the near side of one of the lenses may catch the beam and reflect it into the eye.

Miller Place UFSD Student Safety Contract (09/01/2026)

AGREEMENT

I, _____, (student's name) have read and agrees to follow all of the safety rules set forth in this contract. I realize that I must obey these rules to ensure my own safety, and that of my fellow students and instructors. I will cooperate to the fullest extent with my instructor and fellow students to maintain a safe lab environment. I will also closely follow the oral and written instructions provided by the instructor. I am aware that any violation of this safety contract that results in unsafe conduct in the laboratory or misbehavior on my part, will result in disciplinary action.

Do you wear contact lenses? Yes _____ No _____

Are you color blind? Yes _____ No _____

Do you have allergies? Yes _____ No _____

Please list: _____

_____

_____

Student Signature: _____ Date: _____

Dear Parent or Guardian:
We feel that you should be informed regarding the school's effort to create and maintain a safe science classroom/ laboratory environment. With the cooperation of the instructors, parents, and students, a safety instruction program can eliminate, prevent, and correct possible hazards.

You should be aware of the safety instructions your son/daughter will receive before engaging in any laboratory work. Please read the list of safety rules above. No student will be permitted to perform laboratory activities unless this contract is signed by the student and parent/ guardian and is on file with the teacher. Your signature on this contract indicates that you have read this Student Safety Contract, are aware of the measures taken to ensure the safety of your son/daughter in the science laboratory, and will instruct your son/daughter to uphold his/her agreement to follow these rules and procedures in the laboratory.

Parent/Guardian Signature: _____ Date: _____

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Appendix C

North Country Road Middle School Student Safety Contract (09/01/2026)

PURPOSE

Science is a hands-on laboratory class. However, science activities may have potential hazards. We will use some equipment that may be dangerous if not handled properly. Safety in the science classroom is an important part of the scientific process. To ensure a safe classroom, a list of rules has been developed and is called the Science Safety Contract. These rules must be followed at all times. Additional safety instructions will be given for each activity. No science student will be allowed to participate in science activities until this contract has been signed by both the student and a parent or guardian and returned to the teacher. An additional copy should be kept your notebook.

SAFETY RULES

1. Conduct yourself in a responsible manner at all times in the science room. Horseplay, practical jokes, and pranks will not be tolerated.
2. Follow all written and verbal instructions carefully. Ask your teacher questions if you do not understand the instructions.
3. Do not touch any equipment, supplies or other materials in the science room without permission from the teacher.
4. Perform only authorized and approved experiments. Do not conduct any experiments when the teacher is out of the room.
5. Never eat, drink, chew gum, or taste anything in the science room.
6. Keep hands away from face, eyes, and mouth while using science materials or when working with chemicals. Wash your hands with soap and water before leaving the science room.
7. Wear safety glasses or goggles when instructed. Never remove safety glasses or goggles during an experiment. There will be no exceptions to this rule!
8. Keep your work area and the science room neat and clean. Bring only your laboratory instructions, worksheets, and writing instruments to the work area.
9. Clean all work areas and equipment at the end of the experiment. Return all equipment clean and in working order to the proper storage area.
10. Follow your teacher's instructions to dispose of any waste materials generated in an experiment.
11. Report any accident (fire, spill, breakage, etc.), injury (cut, burn, etc.), or hazardous condition (broken equipment, etc.) to the teacher immediately.
12. Consider all chemicals used in the science room to be dangerous. Do not touch or smell any chemicals unless specifically instructed to do so.
13. Always carry all science equipment with both hands. Hold the arm with one hand; place the other hand under the base.
14. Never open storage cabinets or enter the prep/storage room without permission from the teacher.
15. Do not remove chemicals, equipment, or supplies from the science room without permission from the teacher.

16. Handle all glassware with care. Never pick up hot or broken glassware with your bare hands.
17. Use extreme caution when using laboratory safety lighters, a burner, or hot plate. Only light burners when instructed and do not put anything into a flame unless specifically instructed to do so. Do not leave a lit burner unattended.
18. Dress properly - long hair must be tied back, no dangling jewelry, and no loose or baggy clothing.
19. Learn where the safety equipment is located and how to use it. Know where the exits are located and what to do in case of an emergency or fire drill.

Miller Place UFSD Student Safety Contract (09/01/2026)

AGREEMENT

I, _____, (student's name) have read and agrees to follow all of the safety rules set forth in this contract. I realize that I must obey these rules to ensure my own safety, and that of my fellow students and instructors. I will cooperate to the fullest extent with my instructor and fellow students to maintain a safe lab environment. I will also closely follow the oral and written instructions provided by the instructor. I am aware that any violation of this safety contract that results in unsafe conduct in the laboratory or misbehavior on my part, will result in disciplinary action.

Do you wear contact lenses? Yes _____ No _____

Are you color blind? Yes _____ No _____

Do you have allergies? Yes _____ No _____

Please list: _____

_____

_____

Student Signature: _____ Date: _____

Dear Parent or Guardian:
We feel that you should be informed regarding the school's effort to create and maintain a safe science classroom/ laboratory environment. With the cooperation of the instructors, parents, and students, a safety instruction program can eliminate, prevent, and correct possible hazards.

You should be aware of the safety instructions your son/daughter will receive before engaging in any laboratory work. Please read the list of safety rules above. No student will be permitted to perform laboratory activities unless this contract is signed by the student and parent/ guardian and is on file with the teacher. Your signature on this contract indicates that you have read this Student Safety Contract, are aware of the measures taken to ensure the safety of your son/daughter in the science laboratory, and will instruct your son/daughter to uphold his/her agreement to follow these rules and procedures in the laboratory.

Parent/Guardian Signature: _____ Date: _____

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Appendix D

Important School Contacts in the Event of an Emergency

Title	Name	Phone
Emergency		911
Poison Control		1-800-222-1221
CHEMTREC*	https://www.chemtrec.com	1-800-424-9300
Principal, MPHS	Kevin Slavin	631-474-2732 631-474-2723 x302
MPHS School Nurse	Kimberlee Gelibter	631-474-2481
Principal, NCRMS	Christine Mangiamele	631-474-2714 631-474-2710 x438
NCRMS School Nurse	Erin Southworth	631-474-7258
Curriculum Specialist Math, Science, Technology, Business	Nick Corleto	631 474 2799 x374
Chemical Hygiene Officer	Nick Corleto	631 474 2700 x374
Director of Facilities	Wayne Casey	631-474-8527 (office) 631-316-4120 (cell)
Assistant Superintendent	Susan Craddock	631-474-2700, x728 631-655-8895 (cell)
Superintendent		631-474-2700, x722
*CHEMTREC serves as a round-the-clock resource for obtaining immediate critical response information for incidents involving hazardous materials and dangerous goods.		