SAFETY MANUAL
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SECTION 1: GENERAL SAFETY & HEALTH

1.1 LORD FAIRFAX COMMUNITY COLLEGE SAFETY & HEALTH PROGRAM STATEMENT

A. The Occupational Safety and Health Act of 1970 requires employers to provide safe and healthful working conditions and for employees to have an important role in safety and health operations. The safety and health of employees and students is a primary consideration in the operation of LFCC and is an integral component of our mission in this community.

B. Safety and health in our day to day operations is an important part of LFCC’s standard operation procedures. It is every employee’s responsibility to comply with the requirements in this Safety Manual and to perform their job in a manner that advances this commitment to employee safety and health.

C. It is the intent of LFCC to comply with all applicable laws and regulations. To do this, we must constantly be aware of conditions that can produce injuries in all areas of the campus. No employee is expected or required to work at a job he or she knows is not safe or healthful. Cooperation in identifying and detecting hazards and, in turn, controlling them is a condition of employment at LFCC. If an employee identifies or detects a hazard, the employee shall immediately inform his or her supervisor of the hazard if implementation of the required correction is beyond their ability or authority.

D. The personal safety and health of each employee and student is of primary importance. The prevention of occupationally related and/or induced injuries and illnesses is of such consequence that will be given precedence over any other consideration.

E. LFCC shall maintain a safety and health program conformant to the best management practices of an organization of this type. To be successful, such a program must embody proper attitudes toward injury and illness prevention not only on the part of employees and students, but also between each person and his or her co-workers. Only through such cooperative effort can a safety program be established that serves the best interests of all of the stakeholders.

F. Our objective is to have a safety and health program that will reduce the number of injuries and illnesses to an absolute minimum.

Dr. Cheryl Thompson-Stacy
President, Lord Fairfax Community College
1.2 SAFETY PROGRAM

A. Lord Fairfax Community College shall not knowingly permit unsafe conditions to exist, nor will it permit employees or students to engage in unsafe acts. Violations of safety rules and regulations shall result in disciplinary action in accordance with the procedures contained in the latest version of the “Standards of Conduct” Policy No. 1.60 of the Virginia Department of Human Resource Management Policies and Procedures Manual

B. LFCC believes that the safety of employees and physical property can best be ensured by a meaningful program. It is the purpose of this Safety Manual to define and publish the safety and health policies of the college. This Safety Manual is intended to be a guide for safety and health policies and procedures for employees and students. No provision or language contained in this Manual is intended to bind LFCC to any policy or procedure or to any specific course of action based on events and/or incidents that may occur. It is not intended to be an exhaustive list of safety and health policies and procedures and, furthermore, Lord Fairfax Community College has the right to withdraw, suspend, modify or amend these policies or procedures in whole or in part at any time and without notice.

1. Employees: Since the employee on the job is frequently more aware of unsafe conditions than anyone else, employees are encouraged to make recommendations, suggestions, and criticisms of unsafe conditions to their immediate supervisor so that they may be corrected.

2. Faculty and staff are generally responsible for the working conditions within their departments and facilities and shall remain alert to dangerous and unsafe conditions, so that:

   a. Recommendations and corrective action can be taken.
   b. Disciplinary measures can be taken against those who habitually create or indulge in unsafe practices.
   c. Appropriate assessments can be made of new or changed situations which create inherent dangers.
   d. Follow up with employees’ recommendations to improve safety and health conditions in the workplace can be made.

C. In accordance with the policies described herein, it is the responsibility of the Safety Committee to provide support to enhance the safety program at LFCC. See Section 3 of this Manual for a more detailed description of the Safety Committee’s responsibilities.
1.3 **LOSS PREVENTION & CONTROL PROGRAM**

A. Lord Fairfax Community College shall maintain an effective loss prevention and control program to protect the safety and health of employees, and students and for the conservation of property and facilities. The policies, procedures and responsibilities are incorporated in this Manual.

B. LFCC shall provide the necessary resources and enforcement to ensure adherence to, and compliance with, this Manual. It is the responsibility of all employees and students to work together to provide the necessary corrective actions to ensure an injury free workplace and conservation of property.

C. It is the responsibility and duty of all employees and students to adhere to the policies, procedures and programs incorporated in this Manual. Employees and students shall immediately report any potential or real hazards which may cause personal injury or illness and/or property damage or loss. Employees and students are expected to observe all applicable safety requirements, to use safety equipment provided, and to practice safe work practices and procedures at all times.

D. It is the responsibility of the Vice President of Financial & Administrative Services and the Buildings & Grounds Supervisor to administer this loss prevention and control program which shall include, without limitation, the following:

1. Fire protection and emergency preparedness.
2. Smoking regulations.
3. Property and equipment maintenance.
4. Insurance company regulations.
5. Hazardous material evaluation.
6. Confined space policy.
7. Loss prevention and inspection.
8. Security
10. Chemical control programs.
11. Compliance with state and federal regulations.
SECTION 2: SAFETY & HEALTH ADMINISTRATION

2.1 SAFETY ORIENTATION & TRAINING

A. Lord Fairfax Community College shall provide appropriate safety training to individuals based on their job responsibilities.

B. Under the guidance of Human Resources and the Safety Committee, required training and refresher training shall be identified and delivered to all employees.

C. Safety training shall include general safety and health information and specific information about safety requirements for the job to which the employee is assigned.

2.2 SAFETY RULES

A. Safety rules are established to provide a basic understanding of minimum requirements necessary to ensure a safe and healthful work environment and protect employees from injuries and illnesses due to exposures to occupational hazards.

B. Safety and health rules shall be enforced in accordance with the latest version of the “Standards of Conduct” Policy No. 1.60 of the Virginia Department of Human Resource Management Policies and Procedures Manual.

   1. This program applies to full-time and part-time employees.

2.3 ENFORCEMENT OF SAFETY PROCEDURES

A. Each supervisor shall ensure that all safety procedures are followed by his or her employees. Supervisors shall always encourage employees to work safely by complementing them for performing tasks in a safe manner or bringing safety hazards to their attention. Whenever a safety violation is noticed, the supervisor shall quickly correct the employee.

B. If it becomes necessary to administer progressive discipline for safety rule violations, the disciplinary procedures shall be those contained in the “Standards of Conduct” Policy No. 1.60 for Group I Offenses. Disciplinary action taken shall generally follow a progressive discipline process which can result in eventual removal from the job. The only exception to this policy is behavior that could be characterized as “immediately dangerous to life and health.” Such egregious misconduct shall be considered a Group III Offense and may result in discharge upon the first offense.
SECTION 3: SAFETY & HEALTH ORGANIZATION

3.1  SAFETY COMMITTEE - GENERAL

A. The primary objective of the Safety Committee is to provide support to enhance the safety program at Lord Fairfax Community College. In addition to this primary mission, the Safety Committee shall encourage all employees to participate in the safety process for the betterment of all concerned.

B. The personal safety and health of each employee and student is of primary importance. To the greatest extent possible, this Committee shall provide employees a voice to the leadership of the school to ensure that all mechanical and physical facilities required for personal safety and health are provided and maintained in keeping with the standards established for Virginia’s community colleges. In carrying out its primary mission, the committee is committed to:

1. Formulate and disseminate policies, practices and procedures that promote health and safety.
2. Consult with the Vice President of Financial & Administrative Services, the Associate VP of Human Resources and others on any changes in health and safety policies, practices and procedures proposed by the Committee.
3. Assist the college’s administration in planning actions related to occupational health and safety.
4. Act as a problem-solving group to assist in the identification and control of hazards.
5. Help to resolve health and safety issues.
6. Review and update the Safety Manual as appropriate.

3.2  SAFETY COMMITTEE POLICY & PROCEDURES

A. The Safety Committee shall encourage safety awareness among all employees. In addition, the Committee shall monitor safety performance, safety inspections, and administer the safety program. The Committee is charged to:

1. Reduce injuries and illnesses by preventing accidents and near miss incidents and investigate incidents when they do occur.
2. Be aware of conditions in all work areas that can produce injuries.
3. Aid the school in complying with all laws pertaining to safety.
4. Aid in the prevention of occupationally-induced injuries and illnesses.
5. Aid the college in providing all mechanical and physical facilities required for personal safety and health.
6. Establish a program that instills the proper attitudes toward injury and illness prevention not only on the part of employees, but also between each employee and his or her co-workers.
7. Achieve a safety program which is in the best interest of all concerned parties.
B. The principal responsibilities of the Safety Committee shall be as follows:

1. Conduct regular safety meetings.
2. Conduct building safety inspections.
3. Review accident/injury reports.
4. Maintain appropriate records of their activities.

C. This program applies to all of the Lord Fairfax Community College facilities.

3.3 SAFETY INSPECTIONS & CORRECTIVE ACTIONS

A. The Safety Committee shall coordinate regular inspections of campus buildings and grounds using the Building Safety Checklist.

B. Corrective action plans shall be developed for those items noted as needing attention on the Building Safety Checklist. This plan shall include immediate steps to eliminate and/or reduce the potential for accidents in the workplace.

1. The plan shall include a target completion date for items that cannot be corrected immediately. Temporary measures shall be taken to ensure the safety of employees while the corrective action is scheduled to be performed.
2. Corrective actions that cannot be completed immediately shall be reported at the Safety Committee meeting. The Committee shall follow up on resolution of items noted for corrective action included on the Building Safety Checklist.

SECTION 4: ACCIDENT REPORTING, INVESTIGATION & WORKERS’ COMPENSATION

4.1 ACCIDENT REPORTING

A. Any serious or close call incident involving personal injury to an employee shall be reported to Human Resources immediately and be followed up by submission of an Employee Injury Report within two working days.

1. Human Resources and the employee’s supervisor shall work together to investigate each reported injury and shall be responsible for certifying that injuries claimed as work related actually occurred at work.
2. Damage to buildings, equipment, or property shall be reported to the Buildings & Grounds Supervisor.

B. Employees shall not be required to take sick leave for appointments with physicians for treatment and/or examination of compensable injuries provided it is for an approved claim.
1. Initial treatment shall be provided by one of three medical providers approved by Workers’ Compensation.

2. Unless an imminent danger exists to an employee due to a medical emergency, any employee who leaves work during working hours because of an injury must clear it through Human Resources.

4.2 Accident Investigation

A. The primary purpose of accident investigation is preventing future workplace injuries. This document provides a basis for studying and recording the reasons an accident occurred, identifying existing or potential job hazards (both safety and health), and determining the best course of action to take to reduce or eliminate these hazards.

B. The Associate VP of Human Resources is responsible for ensuring that accidents are properly investigated.

   1. Accident investigations shall be started promptly.
   2. The Employee Injury Report form shall be used to gather data to determine causes of accidents and to identify appropriate corrective actions.

C. When new employees are hired, supervisors shall inform them during new employee orientation about the accident investigation procedures and their role and responsibilities concerning accident investigations.

4.3 Workers’ Compensation Management Program

A. All accidents, injuries, and/or claims of accidental injury shall be investigated if the accident/injury is claimed to have occurred on campus and shall be reported to Human Resources in order to ensure that workers’ compensation benefits are provided if appropriate.

B. Injured employees shall comply with the following:

   1. Report the incident immediately to his or her supervisor.
   2. Assist in the completion of the Employee Injury Report within one working day of the incident.
   3. Select a physician from the approved panel of physicians if medical treatment is necessary and inform Human Resources of the choice. The approved panel of physician list is available from Human Resources.
   4. Forward any medical bills, physician reports and/or lost time notes to Human Resources. If the employee is a Virginia Sickness and Disability Plan (VSDP) participant and is going to be out of work, the employee shall contact The Reed Group at 1-877-928-7021 within 24 hours.
   5. Maintain contact with the supervisor and/or Human Resources regarding the amount of time lost and expected return to work date.
   6. Obtain written authorization to return to full or restricted duty from the physician and present authorization to Human Resources.
C. The injured employee’s supervisor shall comply with the following:
   1. Notify Human Resources of the incident immediately.
   2. Assist Human Resources in completing the Employee Injury Report. In the event that the employee is unable to assist Human Resources in completion of the report, the supervisor shall complete as much of the report as possible.

D. Human Resources shall comply with the following:
   1. Work with the employee’s supervisor to conduct an investigation of the incident to include, without limitation, the following:
      a. Interview with the injured employee.
      b. Interviews of all witnesses named by the injured employee.
      c. Evaluation of the area where the incident occurred to determine possible cause(s) and contributing factors and to identify any physical hazards.
   2. Notify the treating physician that the injured employee will be seeking treatment as a workers’ claim and that all bills, physicians’ notes and orders shall be forwarded to LFCC.
   3. Complete the Employers’ First Report of Accident and forward it to the third-party administrator, Managed Care Innovations (MCI), within five (5) days of the incident.
   4. Arrange for a modified duty assignment if it is determined by the treating physician to be necessary.
   5. Maintain a workers’ compensation file separate from the employee’s personnel file and submit the paperwork to MCI in a timely fashion to ensure the employee’s access to all benefits to which he or she is entitled.
   6. Assist supervisors and/or employees with every facet of the worker’s compensation process.

SECTION 5: SAFETY PROCEDURES

5.1 SAFETY PROCEDURES - GENERAL

A. LFCC employees shall comply with the following safety and health requirements when working with and/or around the equipment described herein.

   1. The Buildings & Grounds Supervisor shall be responsible for implementing and enforcing these requirements in areas related to maintenance and shall certify that any affected employees are properly trained before they engage in work activities involving the equipment or tasks.
   2. Instructors and Deans shall be responsible for implementing and enforcing these requirements in areas related to academic programs and shall certify that any affected students are properly trained before they engage in activities involving the equipment or tasks.
B. Employees and students shall not perform work or handle equipment or material if they are not familiar with or have not been trained to perform the task and/or job in a safe manner.

5.2 General Safety Rules & Procedures

A. All employees shall comply with the following general rules and procedures as applicable:

1. Use an appropriate ladder or stool when reaching for high objects. Do not stand on a chair, carton or other substitute for the correct device.
2. Properly store and/or strap down all items. Accidents can be caused by falling objects carelessly placed in elevated locations.
3. Inspect electrical devices for safe operation prior to use and periodically thereafter.
4. Electrical cords that are badly worn or damaged shall be repaired or discarded.
5. Temporary electrical cords shall be routed so as not to cross aisles or walkways.
6. Use machines only for their intended jobs. If the machine has guards, use them.
7. Report defective or worn tools and equipment to the appropriate supervisor.
8. Lock and tag machines and equipment which is being repaired in accordance with LFCC’s Lockout/Tagout Program.
9. Do not disable or override guards or other safety devices.
10. Inform the appropriate supervisor if taking prescription medicines that cause fatigue or drowsiness. Do not operate machines or equipment unless fully alert.
11. Report all injuries and/or “close calls” to the appropriate supervisor and/or Human Resources. (See Section 4 of this Manual for additional information.)
12. Report all unsafe conditions and/or unsafe acts to the appropriate supervisor so that corrective action can be taken.
13. Do not engage in horseplay, scuffling, running and practical joking in work areas where there are hazards.
14. Do not wear open toe shoes and sandals in work areas where there are hazards.
15. Do not wear long hair, dangling jewelry, watches and rings in areas where there are hazards.
16. Wear appropriate personal protective equipment in areas in which hazards exist.

5.3 Specific Safety Rules & Procedures

A. Abrasive wheel equipment is defined as cutting tools with abrasive grains including, without limitation, bench and portable grinders.

1. Only authorized employees shall operate abrasive wheel equipment.
2. Abrasive wheel equipment shall not be used within 35 feet of opened combustible and flammable materials.
3. Gaps between tool rests and the grinding wheel shall be set properly and guards shall be in place.
B. Compressed gas storage tanks and cylinders shall be handled and stored in accordance with the following:

1. Never smoke when carrying, connecting, disconnecting or working around cylinder storage areas.
2. Use gloves when handling propane cylinders.
3. Visually inspect cylinders prior to each use for dents, scrapes and gouges; damage to the valves; debris in the relief valve; damage to or loss of the relief valve cap; leakage at valves or threaded connections; and damage to or loss of gaskets and o-rings.
4. Compressed gas cylinders shall not be dropped, thrown, rolled or dragged.
5. If any defects are found, tag the cylinder, remove it from service and place it in an area reserved for unserviceable cylinders.
6. Secure cylinders with a chain when storing or transporting them.
7. Empty cylinders shall not be left around the workplace, store them in a designated area.
8. Do not store cylinders near sources of heat, open flames, or other sources of ignition.

C. All work performed in confined spaces as defined by OSHA 1910.146 shall be conducted in a safe manner that complies with requirements of the standard.

1. Confined spaces shall be labeled “DANGER – Permit Required Confined Space, Do Not Enter.”
2. LFCC employees shall not be permitted to enter the confined space. Entry shall only be by qualified contractor personnel.

D. Proper care shall be used when handling industrial or laboratory chemicals to avoid damage to health or environment. Employees shall become familiar with MSDS/SDS that accompany a product or are available in the area. Consult these sheets for the proper hand, face, and eye protection and ventilation requirements.

1. If a chemical spill occurs, remove contaminated clothing immediately. Consult the Buildings & Grounds Supervisor for proper procedures for use, cleanup and disposal of chemicals.
2. MSDS/SDS are maintained and available in each Department in accordance with LFCC’s Hazard Communications Program.

E. Ladders shall be maintained in good condition at all times. Inspect ladders before use to make sure they are in good condition. Ladders shall be considered to be defective if there are broken rungs, missing steps or cleats, slippery feet, broken side rails or missing decals.

1. Discard defective ladders; do not give them away or donate them.
2. Display the appropriate decals and safety information prominently on the ladder.
3. Purchase only ladders meeting industrial grade specifications.
4. Use ladders safely in accordance with manufacturers’ recommendations.
5. Make sure the ladder is set on a firm, level base.
6. Set extension ladders against a wall at a one-to-four ratio (the base shall be one foot from the wall for every four feet of height).
7. Extend straight ladders 36 inches above the parapet or edge of roof when gaining access to a roof.
8. Allow only one person on a ladder at time.
9. Do not use metal ladders around electrical lines.
10. Do not use ladders for any reason other than the intended purpose.
11. Do not use stepladders longer than 20 feet or single ladders longer than 30 feet.

F. Machinery and equipment shall be guarded from hazards at the point of operation. Examples of guarding methods include barrier guards, two-handed tripping devices and electronic safety devices.

1. Guards shall be affixed to the machine where possible and secured elsewhere if for any reason attachment to the machine is not possible.
   a. The point of operation of machines whose operation exposes employees to injury shall be guarded.
   b. Fans whose blades are less than 7 feet off the floor shall be guarded.

2. Employees shall not be allowed to operate a machine until they are thoroughly familiar with the installation, operation and removal of guards. Training shall include identification of hazards associated with each machine.

3. Each Department shall conduct periodic inspections of all machine guards to ensure that they are in place and functions properly.

4. Machines having guards include, without limitation, woodworking machinery, abrasive wheel machinery, mechanical power press machinery, mechanical power tool machinery, and portable power tools.

G. Follow proper lifting procedures as follows:

1. Never attempt to lift or move anything that is too heavy to be moved.
2. Never lift with the back. Keep the load close to the body with the back as straight as possible.
3. Keep the feet firmly planted.
4. Bend the knees and use the leg muscles for the lifting.
5. Wear a back brace when heavy lifting is a routine part of daily activity.
6. Empty the container prior to lifting or moving equipment that contains liquid materials.
7. Use an air sled or dolly when moving heavy items even if they are being moved a short distance.

H. Where engineering controls are not adequate, LFCC shall provide protective clothing and equipment, such as face shields, hair nets, caps, safety glasses or goggles, gloves and other devices as required to protect the employee from injury.
1. Eye protection shall be worn when the duties of the job or the hazards of the environment require their use. Activities which may require eye protection include welding, sawing, drilling and using chemicals.
2. Safety gloves shall be worn when handling and/or uncrating equipment, sheet metal or chemicals or cutting lumber.
3. Sturdy, sensible shoes with heavy, non-skid, slip resistant soles and short laces shall be worn. Steel toed shoes may be required for certain jobs.

SECTION 6: BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

6.1 BLOODBORNE PATHOGENS POLICY - GENERAL

A. Occupational exposure to blood and Other Potentially Infectious Materials (OPIM) shall be limited and controlled since any exposure could result in transmission of bloodborne pathogens which could lead to disease or death. Infectious materials include the following:

1. Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.
2. Any unfixed tissue or organs (other than intact skin) from a human (living or dead).
3. HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV-containing culture medium or other solutions, and blood, organs or other tissues from experimental animals infected with HIV or HBV.

B. Except for trained Security and Police Officers, Lord Fairfax Community College employees shall refrain from any activity or action, other than minor first aid, that could result in exposure to bloodborne pathogens as described above.

C. In cases of injuries on school property, universal precautions shall be followed in the administration of immediate response.

D. The “call tree” for notification of an on the job exposure incident/injury at LFCC is as follows:

1. Call 911.
2. Call Campus Police (the school’s designated first responders).
3. Call Student Services (if a student is involved).
4. Call Human Resources (if an employee is involved).
5. Call either the Buildings & Grounds or the Vice President of Financial & Administrative Services.
E. The Health Professions Dean is responsible for all facets of this Plan and has full authority to make necessary decisions to ensure its success. The Health Professions Dean is the only person authorized to amend this policy and is authorized to halt any operation where there is danger of serious personal injury.

F. Lord Fairfax Community College shall review and evaluate this program as appropriate.

6.2 LORD FAIRFAX COMMUNITY COLLEGE BLOODBORNE PATHOGEN PROGRAM

A. The following job classifications at LFCC have potential for occupational exposure to bloodborne pathogens:

1. Job Title:          Task:          Exposure:
                        Nursing Instructor Clinical Instruction Blood, Saliva, OPIM
                        Dental Hygiene Instructor Clinical Instruction Blood, Saliva, OPIM
                        Life Science Instructor Lab Instruction Blood, Saliva, OPIM
                        Buildings & Grounds Facilities Maintenance Blood, Saliva, OPIM
                        Police Emergency Aid Blood, Saliva, OPIM

B. Except for instruction of Health Professions and Life Sciences programs, LFCC does not administer shots or use needles or other sharps in the normal course of its business.

6.3 METHODS OF COMPLIANCE

A. Universal precautions, which is an approach to infection control whereby body fluids are treated as if known to be infectious for HIV, HBV and other bloodborne pathogens, shall be observed to prevent contact with blood or other potentially infectious materials.

1. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered to be potentially infectious materials.

B. Engineering Controls:

1. LFCC shall provide washing facilities which are readily accessible to all employees and students.

   a. Employees shall wash their hands as soon as possible after removing gloves or other personal protective equipment.
   b. Employees shall wash hands and other skin with soap and water or flush mucous membranes with water immediately, or as soon as possible, following contact with blood or other potentially infectious materials.
2. Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.
3. Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials.
4. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.
5. Contaminated sharps shall be placed in appropriate containers immediately, or as soon as possible, after use. The containers shall be:
   a. Puncture resistant.
   b. Labeled or color-coded.
   c. Leak-proof on sides and bottom.
   d. Proper for sharps.
6. Eating, drinking, smoking, applying cosmetics, or lip balm, and handling contact lenses shall be prohibited in first aid and restroom areas where there is reasonable likelihood of occupational exposure.
7. Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, or on countertops where blood or other infectious materials are present.
8. All procedures involving blood or other potentially infectious materials shall be performed in a manner which minimizes splashing, spraying, spattering and generation of droplets.
9. Mouth pipetting/suction of blood or body fluids shall be prohibited.
10. Specimens of blood or other potentially infectious materials shall be placed in containers that prevent leakage during collection, handling, processing, storage, transport or shipping. The containers shall be labeled or color-coded and closed prior to being stored, transported or shipped.
11. If outside contamination of primary containers occurs, the container shall be placed in a second container that prevents leakage during handling, processing or shipping and that is labeled or color-coded as required.
12. If specimens can puncture the primary container, the container shall be placed in a puncture-resistant secondary container that complies with all container requirements.
13. Equipment that may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless decontamination is not feasible.

C. Personal Protective Equipment (PPE): Employees subject to potential occupational exposure shall be provided appropriate PPE such as gloves, gowns, laboratory coats, face shields, masks, eye protection, and mouth pieces.
1. PPE shall be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through to or reach employee clothes, undergarments, skin, eyes, mouth or other mucous membranes under normal conditions of use.
2. Appropriate PPE shall be readily accessible to affected employees.
3. PPE shall be repaired or replaced as needed to maintain effectiveness.
4. Garments penetrated by blood or other potentially infectious materials shall be removed immediately, or as soon as feasible.
5. Prior to leaving work areas, employees shall remove PPE.
6. When PPE is removed, it shall be placed in designated containers for storage, washing, decontamination or disposal.
7. Gloves shall be worn when it can be reasonably anticipated that employee’s hands may contact blood or other potentially infectious materials, mucous membranes and non-intact skin and when performing vascular access procedures.
8. Gloves shall be worn when touching or handling contaminated items or surfaces.
9. Disposable (single use) gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured or their ability to function as a barrier is compromised.
10. Disposable (single use) gloves shall not to be washed or decontaminated for re-use. Disposable gloves shall be discarded in approved containers immediately after use.
11. Utility gloves may be decontaminated for re-use if their integrity is not compromised. Defective or deteriorated gloves shall be discarded.
12. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields or chin-length face shields shall be worn when eye, nose or mouth contamination with blood or other potentially infectious material can be reasonably anticipated.
13. Appropriate clothing such as aprons, lab coats, clinic jackets, and other similar items shall be worn to prevent exposure. Selection of clothing shall be based on anticipated exposure.
14. Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated.

D. Housekeeping: Sites where medical instruction is provided shall be maintained in a clean and sanitary condition.

1. All equipment, environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.
2. Work surfaces shall be decontaminated with an appropriate disinfectant immediately, or as soon as possible, after surfaces are overtly contaminated or after spills and at the end of each class if the surface may have become contaminated.
3. Protective coverings, such as plastic wrap, aluminum foil or imperviously backed absorbent paper used to cover equipment and environmental surfaces shall be
removed and replaced as soon as feasible when overtly contaminated or at the end of the each class if it is suspected of being contaminated.

4. All bins, pails, cans and similar receptacles intended for re-use which are likely to become contaminated shall be cleaned on a regular basis and shall be cleaned and decontaminated immediately, or as soon as possible, upon visible contamination.

5. Broken glassware which may be contaminated shall not be picked up directly with the hands, but shall be cleaned up using mechanical means, such as a brush and dust pan, tongs or forceps.

6. Sharps that are contaminated shall not be stored or processed in a manner that requires employees to reach by hand into the containers holding sharps.

7. Regulated waste, such as contaminated sharps, shall be deposited immediately, or as soon as possible, into containers that are closable, puncture-resistant, leak-proof on sides and bottom, and labeled or color-coded.

8. During use, containers for contaminated sharps shall be easily accessible and located as close as possible to areas where the sharps are used.

9. Contaminated sharps containers shall be maintained upright throughout use, shall be replaced routinely and shall not be overfilled.

10. When moving contaminated sharps containers from the areas of use, containers shall be closed immediately prior to removal to prevent spillage or protrusion of contents during handling.

11. If leakage is possible, the contaminated sharps container shall be placed in a secondary container that is closable, of adequate size, prevents leakage during handling and is color-coded.

12. Contaminated sharps containers shall not be opened, emptied, cleaned manually, or used in any other manner that would expose employees to the risk of percutaneous injury.

13. All regulated waste shall be placed in containers that are closable, of adequate size, that prevent leakage during handling and are labeled or color-coded.

14. Regulated waste containers shall be closed prior to removal to prevent spillage or protrusion of contents during handling.

15. If the outside of a regulated container becomes contaminated, it shall be placed in a second container.

E. Contaminated laundry shall be handled as little as possible with a minimum of agitation.

1. Contaminated laundry shall be bagged or containerized at the location of use and shall not be sorted or rinsed in the location of use.

2. To the greatest extent possible, disposable materials shall be used.

3. Contaminated laundry shall be placed and transported in labeled or color-coded bags or containers.

4. Whenever contaminated laundry is wet and presents a reasonable likelihood of soaking through or leaking, it shall be transported in bags or containers that prevent soak through and/or leakage.

5. Employees having contact with contaminated laundry shall wear gloves and other PPE as appropriate.
6.4 **HEPATITIS B VACCINATION & POST-EXPOSURE EVALUATION AND FOLLOW UP**

A. Hepatitis B vaccine and vaccination series shall be available to all employees having occupational exposure to blood and other potentially infectious materials.

B. Post-exposure evaluations and follow-up shall be provided to those having a work related incident involving specific exposure to the eye, mouth, other mucous membrane, non-intact skin or parenteral exposure to blood or other potentially infectious materials.

C. The medical evaluations and procedures including the Hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, shall be provided to the employee under supervision of or by a licensed health care professional. All laboratory tests shall be conducted by an accredited laboratory.

D. Hepatitis B vaccinations shall be made available to all employees having potential exposure within 10 days of initial assignment unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

1. Participation in a pre-screening program is not a prerequisite for receiving the Hepatitis B vaccination.
2. If an employee initially declines the vaccination but later decides to accept it, the vaccination shall be made available.
3. All employees declining vaccinations shall sign the Hepatitis B Vaccine Declination Statement (Appendix C).
4. If a vaccine booster is recommended by the US Public Health Service, it shall be made available.
5. Post-exposure evaluations and follow-up shall be made immediately available to exposed employees following a reported exposure incident.
6. The post-exposure evaluation and follow-up shall include the following:
   a. Documentation of exposure route(s) and circumstances.
   b. Identification and documentation of the source individual, unless not possible or prohibited by state or local law, including:
      1) Testing source individual’s blood as soon as possible after consent is obtained to determine HBV and HIV infectivity.
      2) If consent is not obtained, it shall be established that legally required consent cannot be obtained.
      3) When consent is not required by law, the source individual’s blood, if available shall be tested and results shall be documented.
      4) When the source individual is already known to be infected, testing need not be repeated.
5) Results of tests shall be made available to exposed employees and exposed employees shall be informed of applicable laws and regulations regarding disclosures.

c. Exposed employee’s blood shall be collected as soon as possible and tested after consent is obtained. If he or she consents to baseline blood testing but not HIV testing, the blood sample shall be preserved for at least 90 days.

d. If, within 90 days of exposure, the employee elects to have a blood sample tested for HIV, it shall be tested as soon as possible.

e. Post-exposure prophylaxis, including counseling and evaluation of the reported illness, when medically indicated, shall be offered as recommended by the US Public Health Service.

f. Students that have a potential exposure event will follow the student focused exposure plan for LFCC as outlined in the Student Handbook.

7. The following information shall be provided to the health care professional:

a. A description of the exposed employee’s duties relating to the exposure incident.

b. Documentation of route(s) of exposure and exposure circumstances.

c. The result of the source individual’s blood testing, if available.

d. All medical records relevant to the appropriate treatment of the employee, including vaccination status.

8. The health care professionals’ written opinion shall be obtained and provided to affected employees at the completion of the evaluation.

9. The scope of the written opinion for Hepatitis B vaccination shall be limited to whether HBV vaccination is indicated and if the employee has received it.

10. The written opinion for post-exposure evaluation and follow-up shall be limited to the results of the evaluation and information about the medical conditions resulting from exposure to blood or other potentially infectious materials that require further evaluation and treatment.

11. All other findings or diagnosis shall remain confidential and shall not be a part of the written report.

6.5 COMMUNICATIONS OF HAZARDS TO EMPLOYEES

A. Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious materials and other containers used to store, transport or ship blood or other potentially infectious materials.

1. Standard biohazard labels complying with the following shall be used.

a. Color: Fluorescent orange or orange-red or predominantly so with lettering or symbols in a contrasting color.

b. Attachment: Fixed as close as feasible to the container by string, wire, adhesive or other method that prevents loss or unintentional removal.
c. Labels on contaminated equipment shall state which portions of the equipment are contaminated.
d. Labels are not required for the following:
   1) Regulated waste that has been decontaminated.
   2) Waste in red bags or red containers.
   3) Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transportation and other clinical use.
   4) Containers of blood or other potentially infectious materials that are placed in labeled containers during storage, transport, shipment or disposal.

B. Training shall be provided for all employees having occupational exposure to blood and other infectious materials as follows:

1. Required training shall be provided on initial assignment and annually thereafter.
2. Additional training shall be provided when tasks or procedures are changed or modified and there are new tasks or procedures affecting employee exposures. Additional training shall be limited to addressing the new exposure created.
3. The training program shall include the following elements:

   a. An accessible copy of the applicable standard(s) and an explanation of its contents.
   b. A general explanation of the epidemiology and symptoms of bloodborne diseases.
   c. An explanation of the modes of transmission of bloodborne pathogens.
   d. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure.
   e. An explanation of the use and limitations of methods to prevent or reduce exposure including engineering controls, work practices and PPE.
   f. An explanation of the basis for selection of PPE.
   g. Information on the types, proper use, location, removal, handling, decontamination and disposal of PPE.
   h. Information on the Hepatitis B vaccine, including its efficiency, safety, method of administration and benefits.
   i. Information on the appropriate actions to take and persons to contact in case of an emergency.
   j. An explanation of the procedures to follow if an exposure incident occurs including reporting method and available follow-up.
   k. Information on the post-exposure evaluation and follow-up that is provided for exposed employees.
   l. An explanation of the signs, labels and/or color-coding used.
6.6 RECORDKEEPING

A. Medical records which shall be maintained include the following:
   1. Employee’s name and social security number.
   2. Copy of employee’s Hepatitis B vaccination status including date of vaccination, if applicable, and any medical records relative to employee’s ability to receive vaccination.
   3. Copy of all results of examinations, medical testing, and follow-up procedures.
   4. Copy of the health care professional’s written opinion.
   5. Copy of the information provided to the health care professional.

Programs with students that have a reasonable exposure potential will have medical records maintained that include the following:
   1. Student’s name and social security number.
   2. Copy of student’s Hepatitis B vaccination status including date of vaccination, if applicable, and any medical records relative to student’s ability to receive vaccination.
   3. Copy of all results of examinations, medical testing, and follow-up procedures.
   4. Copy of the health care professional’s written opinion.
   5. Copy of the information provided to the health care professional.

B. Employee and student’s medical records shall be kept confidential and shall not be disclosed or reported to persons inside or outside of LFCC, without the individual’s express written consent, except as required by OSHA Standard 29 CFR 1910.1030 or by other laws.

C. Training records maintained shall include the following:
   1. Dates of training sessions.
   2. Contents or summary of the training sessions.
   4. Names and job titles of all persons attending training sessions.
   5. Training records shall be maintained for at least 3 years from the training date.

D. Records shall be available upon request to employees, NIOSH and OSHA for examination and copying.

E. LFCC shall maintain a sharps injury log.

F. Medical records for employees subject to the Bloodborne Pathogens Exposure Control Plan shall be maintained by Human Resources.
6.7 Exposure Incidents

A. Occupational exposure to blood and other potentially infectious materials may result from the performance of an employee’s duties. However, such exposure is normally limited by engineering controls, work practices, PPE, and training. Despite these controls, employees may be exposed when contact with blood or other potentially infectious materials occurs (exposure incident). In the event of an exposure incident, the following procedures shall be followed:

1. Immediately, or as soon as possible after an exposure incident, the exposed employee shall notify his or her immediate supervisor. Immediate reporting is necessary to ensure that the employee is properly protected and all the necessary facts are promptly obtained.
2. A post-exposure evaluation and investigation shall be completed within 24 hours. Anything that cannot be completed within 24 hours shall be completed as soon as possible.

SECTION 7: Chemical Hygiene Plan

7.1 Chemical Hygiene Plan - General

A. This Plan applies to all LFCC employees and students who are engaged in the laboratory use of hazardous chemicals; which is defined as the use or handling of chemicals in which all of the following conditions are met:

1. Chemical work is carried out on a laboratory scale.
2. Protective laboratory equipment and practices are used.

B. LFCC shall review and update this Plan as appropriate.


D. Many accidents and injuries occur annually in laboratories, resulting in chemical-related illnesses ranging from skin and eye irritation to fatal pulmonary edema. This Plan establishes uniform requirements to ensure that the hazards associated with work in laboratories are evaluated, safety procedures implemented, and that the proper hazard information is provided to all affected staff and students.

E. The Chemical Hygiene Officer is responsible for all facets of this Plan and has authority to make necessary decisions to ensure the success of this Plan. The Chemical Hygiene Officer is the only person who may amend this Plan and who may halt any operation where there is danger of serious personal injury.
1. The Chemical Hygiene Officer shall be the current full time chemistry instructor. The Chemical Hygiene Officer shall designate an alternate and ensure the alternate is kept informed of all changes.

F. Specific duties of the Chemical Hygiene Officer include following:

1. Coordinate with administrators and other employees to develop and implement appropriate chemical hygiene policies and practices.
2. Monitor procurement and use of chemicals in the lab, including verifying that facilities and training levels are adequate for the chemicals in use.
3. Perform regular chemical hygiene and housekeeping inspections.
4. Maintain current knowledge concerning the legal requirements of regulated substances in the laboratory.
5. Maintain overall responsibility for the laboratory operation.
6. Ensure that employees and students know and follow the chemical hygiene rules.
7. Determine the proper level of personal protective equipment required and ensure that the required equipment is available and in working order.
8. Enlist appropriate personnel to participate in investigations.
   Appoint an alternate Chemical Hygiene Officer and ensure communication to all individuals
9. Ensure that employees and students have received appropriate training.

G. The following general precautions for handling laboratory chemicals shall be followed. (Note: In order to minimize exposure, employees and students shall operate under the assumption that any mixture of hazardous chemicals is more toxic than the most toxic component of the mixture.)

1. Eye Contact: Promptly flush eyes with water for a prolonged period (15± minutes) and seek medical attention.
2. Ingestion: Review the MSDS/SDS and encourage the victim to drink large amounts of water and seek medical attention.
3. Skin Contact: Promptly flush the affected area with water and remove any contaminated clothing; use a safety shower when contact is extensive. If symptoms persist after washing, seek medical attention.
4. Clean-Up: Promptly clean up spills, using appropriate protective apparel and equipment and proper disposal.
5. Do not smell or taste chemicals.
6. Inspect gloves before use.
7. Use only those chemicals for which the quality of the available ventilation system is appropriate.
8. Avoid eating, drinking, smoking, gum chewing, or applying cosmetics or lip balm in areas where laboratory chemicals are present. Wash hands before conducting these activities.
9. Do not store, handle, or consume food or beverages in laboratory storage areas and refrigerators.
10. Wash areas of exposed skin thoroughly before leaving the laboratory.
11. Do not play practical jokes or other behavior that might confuse, startle, or distract a fellow worker or student.
12. Do not use mouth suction for pipetting or starting a siphon.
13. Confine long hair and loose clothing.
14. Wear proper shoes and clothing at all times in the laboratory, regardless of whether a lecture or lab is being conducted. Do not wear sandals, perforated shoes, or apparel that is above the knee. No shorts, short dresses, or other type of clothing that is above the knee is permitted.
15. Keep the work area clean and uncluttered, with chemicals and equipment properly labeled and stored. Clean up the work area on completion of an operation or at the end of each class.
16. Ensure that appropriate eye protection, where necessary, is worn by all persons, including visitors, in areas where chemicals are stored or handled.
17. Wear appropriate gloves when the potential for contact with toxic materials exists; inspect the gloves before each use, wash them before removal, and replace them periodically.
18. Use any other protective apparel and equipment as appropriate.
19. Remove laboratory coats and/or aprons immediately upon significant contamination.
20. Seek information and advice about hazards and plan appropriate protective procedures and positioning of equipment before beginning any new operation.
21. Be aware of unsafe conditions and see that they are corrected when detected.

7.2 CHEMICAL INVENTORY

A. A chemical inventory shall be maintained and reviewed on a regular basis by each department. The inventory shall consist of all hazardous chemicals as classified by the Department of Transportation (DOT) and the Environmental Protection Agency (EPA), or which display a 2 or greater number in any section of the National Fire Protection Association (NFPA) diamond. (DOT and EPA Classification Lists are included in Appendix D).

B. Chemicals shall be listed alphabetically according to the name on their MSDS/SDS or, in the absence of a MSDS/SDS, the most commonly used name. Inventory shall include the NFPA hazard classification, if known, and the manufacturer's name. A comment section shall be provided for additional information such as the chemical's location in the space and an indication that the chemical is a known or suspected carcinogen.

1. Inventories shall be computerized whenever possible to provide the capability of sorting according to manufacturer or location.
2. A complete chemical inventory data base is maintained in the Procurement Office.
7.3 **Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS)**

A. Upon completion of the annual chemical inventory, a request shall be sent to manufacturers if MSDS/SDS are missing.
   1. LFCC shall rely on the chemical manufacturer's information to ascertain whether or not the chemical is hazardous.

B. Copies of relevant MSDS/SDS shall be available in each area.

C. MSDS/SDS master files for each chemical are located in the Procurement Office and Maintenance Office.

7.4 **Chemical Storage**

A. When selecting the type of storage for each chemical, the hazards associated with the chemical as well as the reactivity of the chemical shall be considered. General requirements for chemical storage are as follow:

   1. Received chemicals shall be immediately moved to the designated storage area.
   2. The storage area shall be well ventilated and illuminated.
   3. All materials shall be stored at, or below eye level where practical and feasible.
   4. Materials shall be arranged so that larger items, particularly in breakable containers are situated closer to the floor.
   5. Materials shall be segregated by their hazard characteristics, classification, and compatibility.
   6. Storage areas shall be well defined and labeled with appropriate markings and labels.
   7. Storage areas shall be accessible during normal working hours and shall be under the control of the Chemical Hygiene Officer.
   8. Storage of materials at the point of use shall be limited to those amounts necessary for one activity. The container used for point of use storage shall be properly labeled and of a minimum size to make it convenient for use.
   9. Materials shall never be unduly exposed to light or heat.
   10. Specially monitored and labeled refrigerators shall be used for chemical storage only. No food intended for human consumption shall be permitted in these refrigerators.
   11. Flammable liquids shall be stored in flammable storage cabinets with self-closing doors and ventilation in accordance with NFPA standards.
   12. Safety cans with spring loaded spouts shall be used to transport flammable liquids.
B. Toxic chemicals, including carcinogens, shall be stored in ventilated storage areas in unbreakable chemical resistant secondary containers. These containers shall be labeled "CAUTION: HIGH CHRONIC TOXICITY OR CANCER-SUSPECT AGENT." Carcinogens and suspected carcinogens shall be noted in the comments section of the Chemical Inventory.

C. Mineral acids shall be separated from flammable and combustible materials. Separation is defined by NFPA 49 as storage within the same fire area but separated by as much space as practicable or by intervening storage. Acid resistant trays shall be placed under bottles of mineral acids.

D. Acid sensitive materials such as cyanides and sulfides shall be separated from acids and protected from contact with acids.

E. Cylinders of compressed gases shall be strapped (above the midpoint) or chained to a wall or bench top and shall be capped when not in use. Cylinders shall be stored on a clean dry surface. No ignition sources shall be allowed in the vicinity of compressed gas cylinders. The storage area shall be maintained free of combustible debris.

7.5 LABELING REQUIREMENTS

A. Hazardous chemicals which are not immediately used in the laboratory and that are not in their original container shall be labeled. These labels shall include the following:

1. The GHS hazard pictograms/NFPA i.e., whether the chemical is a health hazard, flammable, explosive, oxidizer, irritant, gas under pressure, corrosive, fatal/toxic, or environmental hazard.

7.6 ENGINEERING CONTROLS

A. The engineering controls installed in each laboratory are intended to minimize exposure to chemical and physical hazards. Employees and students shall notify the Chemical Hygiene Officer of deficiencies in the operation of these controls. If at any time, any employee does not understand the operation of an exposure control mechanism he or she shall contact the Chemical Hygiene Officer immediately.

B. Fume hoods shall be utilized for all chemical procedures which might result in release of hazardous vapors, fumes, or dusts. As a general rule, fume hoods shall be used for all procedures involving substances which are appreciably volatile and have a permissible exposure limit (PEL) less than 50 ppm.

1. No employee or student shall utilize any hood without first receiving training on the use of the hood.
2. The following work practices shall apply to the use of hoods.


a. Confirm adequate ventilation in accordance with the manufacturer’s recommendations or by an equally adequate method to confirm proper functionality of the hood.
b. Keep the sash of the hood closed at all times except when adjustments within the hood are being made. At these times, maintain the sash height as low as possible.
c. Confirm adequate hood ventilation performance prior to opening chemical containers inside the hood.
d. Minimize storage of chemicals and equipment inside the hood.
e. Minimize interference with the inward flow of air in the hood at all times.
f. Keep the hood operating when it is not in active use if hazardous chemicals are contained inside the hood or if it is uncertain whether adequate general laboratory ventilation will be maintained when the hood is non-operational.
g. Do not use the hood as a means of disposing of volatile chemicals under any circumstances.

3. The Chemical Hygiene Officer shall verify the adequacy of hood ventilation prior to the introduction of new chemicals.

C. Eyewash fountains shall be inspected monthly by the Maintenance Department. The Buildings & Grounds Supervisor shall maintain records of these inspections.

D. Safety showers shall be inspected, tested, and flushed annually by the Maintenance Department. The Buildings & Grounds Supervisor shall maintain records of these inspections.

E. Fire Extinguishers: Fire extinguishers shall be inspected monthly by the Maintenance Department.

F. Storerooms: All chemical storerooms shall be maintained in an orderly fashion and be well ventilated.

1. Chemical storeroom locations are 229 & 230 Science and Health Professions Building at the Middletown Campus. Chemical storerooms at the Fauquier Campus are rooms 104A and 105A.

G. Ventilated storage cabinets for chemicals shall be provided as needed and shall have a separate exhaust duct.

1. Ventilated storage cabinets are located in rooms 229 & 230 of the Science and Health Professions Building located on the Middletown Campus.
7.7 **Personal Protective Equipment (PPE)**

A. Employees shall be required to wear gloves when there is the potential for direct skin contact with hazardous chemicals.

B. When used, lab coats or chemical protective aprons shall be worn only in the laboratory area and shall be buttoned or tied back to protect clothing.

C. In areas where there is a reasonable probability that chemical splashes could occur, an impervious apron appropriate for the task shall be worn.

D. All PPE shall be removed immediately upon leaving the work area, or as soon as possible thereafter.

E. Masks and eye protection or chin-length face shields shall be worn to protect against splashes or sprays of blood, infectious materials, or hazardous chemicals if there is a potential for eye, nose, or mouth contamination.

F. Hand protection shall be required as follows:

1. Chemical-resistant gloves shall be worn as described in the MSDS/SDS.
2. Rubber gloves shall be washed prior to being removed. Disposable gloves will be disposed of properly.
3. Thermal-resistant gloves shall be worn as appropriate for operations involving hot materials and materials contained in exothermic reaction vessels. Gloves shall be made of a non-asbestos material and shall be replaced when damaged or deteriorated.

7.8 **Contaminated Waste Removal/Disposal**

A. To ensure that minimal harm to people, other organisms, and the environment results from the disposal of waste laboratory chemicals, the waste management policies contained in this Manual specify how waste is to be collected, segregated, stored, and transported.

B. Disposal of Materials in Drains: Only those chemicals that are reasonably soluble in water are suitable for drain disposal. A compound is considered to be water soluble if it dissolves to the extent of at least 3 percent. These compounds shall be flushed with at least 100 volumes of excess water. The following materials shall not be disposed of in drains:

1. Organics with boiling points less than 50 C.
2. Hydrocarbons, halogenated hydrocarbons, nitro compounds, mercaptans, and most oxygenated compounds that contain more than five carbon atoms such as Freon.
3. Organics that are explosives such as azides and peroxides.
4. Concentrated acids or bases.
5. Highly toxic, malodorous or lachrymatory substances.

C. Disposal of waste shall be coordinated by the alternate Chemical Hygiene Officer. Each department shall contact the alternate Chemical Hygiene Officer as necessary to arrange for disposal of waste material.

7.9 **Administrative Controls**

A. Each laboratory instructor shall be responsible for the safe operation of their laboratory.

B. Spill containment kits are located in the appropriate areas. Chemical spills shall be contained using the Think C.L.E.A.N.E.R. principle as follows:

1. **C**ontain the spill.
2. **L**eave the area.
3. **E**mergency Decontamination: Eye wash, shower, medical care.
4. **A**ccess MSDS or SDS for follow-on emergency procedures.
5. **N**otify supervisory staff of incident.
6. **E**mergency Response Notification (911) if needed.

7.10 **Medical Requirements**

A. All medical examinations and consultations shall be performed by or under the direct supervision of a licensed physician. A board-certified physician in occupational medicine shall be used whenever possible in accordance to Workers Compensation.

B. All employee's shall be sent for a medical evaluation as follows:

1. Whenever signs and symptoms associated with a hazardous chemical develop.
2. Whenever environmental monitoring reveals an exposure level routinely above the action level.
3. Whenever an event, such as a spill, leak, or explosion, which results in hazardous chemical exposure takes place in the work area.

C. LFCC shall provide the following information to the physician:

1. Identity of the hazardous chemical(s) to which the employee may have been exposed.
2. Description of the conditions under which the exposure occurred; including quantitative exposure data (if available).
3. Description of the signs and symptoms of exposure.
4. Copy of the MSDS/SDS for the chemical(s) involved.

D. LFCC shall request that the physician provide a written opinion. This opinion shall not reveal specific findings or diagnosis unrelated to the exposure but shall include, without limitation, the following:
1. Recommendation for further medical follow-up.
2. Results of the medical examination and any associated tests.
3. Enumeration of any medical conditions revealed in the course of the examination that may place the employee at increased risk as a result of exposure to a hazardous chemical found in the workplace.
4. Confirmation by the physician that the employee has been informed of the consultation/examination results and any medical condition that may require further examination or treatment.

7.12 Training

A. LFCC shall provide information and training to ensure that employees are aware of the hazards of chemicals present in their work area.

B. Chemical hazard information shall be provided at the time of an employee's initial assignment to a work area where hazardous chemicals are present and prior to assignments involving new exposure situations.

C. Refresher training shall be provided in order to reestablish employee proficiency and introduce new or revised practices and procedures, as necessary.
   1. Additional training shall also be provided whenever LFCC has reason to believe that there are deviations from or inadequacies in an employee's knowledge of proper lab safety practices or procedures.

D. Information presented in initial and refresher training shall address, without limitation, the following:
   2. The applicable details of LFCC’s Chemical Hygiene Plan.
   3. The permissible exposure limits (PEL) for OSHA regulated substances or recommended exposure limits for other hazardous chemicals where there is no applicable OSHA standard.
   4. Signs and symptoms associated with exposures to hazardous chemicals used in the laboratory.
   5. The location and availability of reference material on the hazards, safe handling, storage and disposal of hazardous chemicals found in the laboratory including, without limitation, MSDS/SDS.
   6. Methods and observations that may be used to detect the presence or release of a hazardous chemical.
   7. Visual appearances or odors of routinely used hazardous chemicals when being released.
8. Protective measures used to protect employees from exposure to hazardous chemicals, such as appropriate work practices, relevant emergency procedures, and appropriate personal protective equipment to be used.

E. LFCC shall certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training.

7.13 HOUSEKEEPING

A. Floors shall be cleaned regularly.

B. Each employee is responsible for the cleanliness and orderliness of their work area.

C. Buildings & Grounds shall be notified of any housekeeping issues.

7.14 RECORDKEEPING

A. LFCC shall establish and maintain an accurate record for each employee. All records shall be kept, transferred, and made available in accordance with 29 CFR 1910.20. Exposure records for hazardous chemicals and harmful physical agents shall be maintained for 30 years. Medical records for employees exposed to hazardous chemicals and harmful physical agents shall be maintained for the duration of employment plus 30 years.

B. Records shall be maintained as follows:

1. Accident records shall be written and retained by Human Resources.
2. Inventory for high-risk substances shall be housed in Police and Security at the Middletown Campus. The Fauquier Campus will house inventory in the Chemical Storage Area.
3. Environmental monitoring records shall be maintained by the Buildings & Grounds Supervisor.
4. Medical consultation records shall be maintained by Human Resources.
5. Training attendance records shall be maintained by Human Resources.
6. OSHA 101 forms shall be maintained and kept for 5 years by Human Resources.
7. OSHA 300 forms shall be maintained by Human Resources.
8. OSHA 3165 poster shall be posted within each work area by Human Resources.
9. Records of equipment inspections shall be maintained by the Buildings & Grounds Supervisor.
7.15 **Procurement of Chemical Materials**

A. Chemicals purchased by LFCC shall be used in a responsible manner from receipt on campus through disposal.

B. Requests for new materials or material quantities in excess of normal usage quantities shall be routed through the Chemical Hygiene Officer for approval. The Chemical Hygiene Officer shall review the request and, if approved, shall forward it to the Procurement Officer.

C. When any chemical is received, the MSDS or SDS shall be reviewed for any requirements personal protective equipment. Employees and students shall be trained regarding the hazards, and equipment required to safely use the material prior to use.

7.16 **Receiving of Chemical Materials**

A. All chemicals shall be received through a central location by the Buildings & Grounds Supervisor.

B. Shipping and receiving records shall be maintained by the Buildings & Grounds Supervisor.

C. No material shall be received without a SDS.

7.17 **Laboratory Equipment & Glassware**

A. Laboratory equipment and glassware shall be used only for its intended purpose.

B. Glassware shall be handled and stored with care to minimize breakage.
   1. Damaged glassware shall not be used and properly discarded.
   2. Broken glassware shall be immediately disposed of in a rigid container.

C. All laboratory equipment shall be inspected on a periodic basis.

7.18 **Laboratory Activities During Off Hours**

A. Employees and students shall not be permitted to work after-hours in the lab except with permission from the Chemical Hygiene Officer.

B. Individuals shall not work alone in labs.

C. No laboratory operations are performed without proper supervision by approved faculty and laboratory staff.

7.19 **Chemical Spills, Releases & Accidents**

In the event of a chemical spill or other accident, cleanup shall be directed by the Chemical Hygiene Officer in accordance with the MSDS or SDS.
7.20 **DEFINITIONS**

A. Acute: An adverse effect with symptoms of high severity coming quickly to a crisis.

B. Carcinogen: A substance capable of causing cancer.

C. Chemical Agents: A wide variety of fluids that have a high potential for body entry by various means. Some are more toxic than others and require special measures of control for safety and environmental reasons.

D. Chronic: An adverse effect with symptoms that develop slowly over a long period of time or that frequently recur.

E. Combustible: Able to catch on fire and burn.

F. DOT: Department of Transportation.

G. EPA: Environmental Protection Agency.

H. Flammable: Capable of being easily ignited and of burning with extreme rapidity.

I. Infectious Agents: Sources that cause infections either by inhalation, ingestion, or direct contact with the host material.

J. Laboratory Scale: Work with chemicals that can easily and safely be manipulated by one person excluding the commercial production of chemicals for sale.

K. Laboratory Use: A workplace where relatively small quantities of hazardous chemicals are used on a non-production basis.

L. LC 50: The concentration of a substance in air that causes death in 50 percent of the animals exposed by inhalation. A measure of acute toxicity.

M. LD 50: The dose that causes death in 50 percent of the animals exposed by swallowing a substance. A measure of acute toxicity.

N. MSDS: Material Safety Data Sheet.

O. Mutagen: Capable of changing cells in such a way that future cell generations are affected. Mutagenic substances are usually considered suspect carcinogens.

P. OSHA: Occupational Safety and Health Administration, the regulatory branch of the Department of Labor concerned with employee safety and health.
Q. PEL: Permissible Exposure Limit. This is the legally allowed concentration in the workplace that is considered a safe level of exposure for an 8-hour shift, 40 hours per week.

R. pH: A measure of how acidic or caustic a substance is on a scale of 1 to 14. A pH of 1 indicates that a substance is acidic; a pH of 14 indicates that a substance is basic.

S. Physical Agents: Workplace sources recognized for their potential effects on the body. Heat exposure or excessive noise levels are examples of this risk group.

T. SDS: Safety Data Sheet.

U. Sensitizers: Agents to repeated exposure over time creating an allergic reaction at some point in time.

V. Sterility: Changes made in male or female reproductive systems resulting in inability to reproduce.

W. Teratogens: A substance that causes a deformity in newborns if a significant exposure exists during pregnancy.

X. TLV: Threshold Limit Value. The amount of exposure allowable for an employee in an 8-hour day.
SECTION 8: HAZARD COMMUNICATION PROGRAM

8.1 HAZARD COMMUNICATION - GENERAL

A. Scope: This policy applies to the selecting, handling, storing, using, and disposal of all hazardous materials at LFCC from receipt through use; and to all hazardous waste from generation to final disposal.

B. It is the policy of LFCC to manage all hazardous materials and waste in a manner consistent with applicable laws and regulations through the waste management policies contained in this Manual.

C. The purpose of this policy is to protect employees, students and the community from the effects of exposure to hazardous materials.

D. The Safety Committee has the authority to establish, support and maintain the procedures necessary to ensure compliance with this Program (see Section 3: Safety & Health Organization).

1. The Vice President of Finance and Administrative Services has authorization to take immediate corrective action in cases of eminent risk of exposure to hazardous material.
2. All LFCC employees and students have the right to review and access SDS’s, inventories of chemicals to which they may be exposed, and the Hazard Communication Program.

8.2 PROCEDURES

A. Each Department is responsible for ensuring that MSDS/SDS are provided by the manufacturer or distributor for all hazardous substances obtained by their Department and for providing a copy of all MSDS/SDS to the Procurement Office.

1. MSDS/SDS forms shall be available to all employees and students in their work area. Each Department is responsible for maintaining and updating these files.
2. The Buildings & Grounds Supervisor shall forward any MSDS/SDS received with incoming shipments to the Department in receipt of the shipment and to the Procurement Office.
3. Master MSDS/SDS files shall be kept in the Procurement Office and the Maintenance Office.

B. Labeling Requirements: These labeling requirements apply to all containers of chemicals used at LFCC, as well as to containers of chemicals and hazardous materials being shipped off site. The labeling program shall follow the guidelines in the Chemical Hygiene Plan (Section 7). In addition, the following procedures apply:
1. No unmarked container of chemicals shall be used unless the container is portable and the chemical is for immediate use and under the control of the person who transfers it from a labeled container.
   a. Container means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.
   b. Pipes or piping systems, and engines, fuel tanks, or other operating systems in vehicles, are not considered to be containers for purposes of this policy.
   c. Immediate use means that the hazardous chemical shall be used only during the class in which it is transferred.

2. LFCC shall provide a container labeling kit to any employee requesting one.
   a. Employees shall not remove or deface labels on incoming containers of hazardous chemicals.
   b. Labels for containers of hazardous chemicals shall be defaced after use.

3. Label Information for a Single Chemical (Non-Mixture): LFCC shall provide the appropriate hazard rating and chemical compatibility charts required to label containers. The label shall include, without limitation, the following:
   a. The personal protective equipment required to use or handle the chemical.
   b. The DOT hazard class i.e., whether the chemical is flammable, toxic, irritating, corrosive, water reactive, or is an oxidizer.
   c. The chemical name as reflected on the MSDS/SDS.

4. Label Information for Mixtures: LFCC shall provide the appropriate hazard rating and chemical data to label containers. The MSDS/SDS of the chemicals used to create the mixture shall be consulted to determine labeling requirements.
   a. If a mixture has been tested by an approved laboratory as a whole to determine its hazardous characteristics, the results of such testing shall be used to determine whether the mixture is hazardous and to provide the appropriate labeling information.
   b. If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do all its components which comprise one percent (by weight or volume) or greater of the mixture. Scientifically valid data such as that provided on the MSDS/SDS shall be used to evaluate the physical hazard potential of the mixture. The Chemical Hygiene Officer shall be consulted to provide any hazard analysis assistance required.
5. Labels are not required on the following:
   a. Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling. Requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency.
   b. Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) and regulations issued under that Act, when they are subject to the labeling requirements under that Act by the Food and Drug Administration;
   c. Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol Tobacco, and Firearms.
   e. Any containers of chemicals and hazardous materials being shipped off site designated as hazardous waste.

C. Each Department shall maintain an inventory of all hazardous materials used, handled, or stored in that Department. The chemical names on the inventory shall correspond with those in the MSDS/SDS.

1. When a product is no longer in use or a MSDS/SDS is replaced, the old MSDS/SDS shall be archived and the Procurement Officer shall be notified.
2. The Procurement Officer shall supply Departments with an annual inventory of the hazardous materials located in their area. Each Department shall check this list against their MSDS/SDS Manual and physical inventory and advise Procurement Officer of any changes or updates.

D. All hazardous materials shall be stored in accordance with rules for incompatible chemicals as defined in the MSDS/SDS.

1. Hazardous chemicals shall be kept in the laboratories in the smallest containers practical. Quantities stored shall be kept to a minimum.
2. Flammable chemicals shall be stored in fireproof cabinets that are designated for these chemicals only.
3. Compressed gas cylinders shall be stored away from traffic, heat sources and anything flammable. Cylinders shall be fastened and secured in an upright position.
E. All environmental and occupational waste requiring special handling based on local, state and federal regulations shall be disposed of properly.

1. Infectious waste shall be disposed of as follows:
   a. Contained in leak-proof plastic bags. When there are multiple bags, each bag shall be sealed separately.
   b. Delivered to Room No. 231 in Science and Health Profession Building at the Middletown Campus. Rooms 104A &105A are designated at the Fauquier Campus.
   c. The Chemical Hygiene Office shall be notified when infectious waste needs to be picked up.

2. Contaminated sharps shall be collected at the point of generation in puncture resistant sharps containers, and those containers shall be picked up by a qualified, licensed contractor. A manifest of the waste disposal shall be kept by the alternate Chemical Hygiene Officer with the invoice file.

3. Any paints or thinners that are identified as hazardous shall be disposed of in 55 gallon drums and shall be removed from campus by a qualified, licensed contractor. A manifest of the removal will be kept by the alternate Chemical Hygiene Officer with the invoice file.

F. See Section 6 of this Manual for exposure control measures for bloodborne pathogens and for more detailed information concerning handling and disposing of infectious materials.

G. Personal Exposure or Spill Response: LFCC shall ensure that required emergency materials are available as specified on the MSDS/SDS.

1. PPE as identified on the MSDS/SDS required for each hazardous substance shall be worn.
2. When there is an incident of exposure the employee or student shall follow these guidelines:
   a. Follow the recommendation on the MSDS/SDS.
   b. Notify immediate supervisor or department head of incident and, if necessary, Human Resources shall complete an incident or injury report and record on the OSHA 300 Log.
   c. All incidents that require special spill precautions or assistance to clean up shall be reported to Campus Security.

H. Training: Supervisors and/or Department Heads shall be responsible for providing training for each employee and student who regularly comes in contact with hazardous materials. This training shall take place at the time of their assignment and as new hazardous products/substances are introduced. Training requirements shall be reviewed as required.
1. Following completion of the training program employees and students shall be able to comply with the following:
   a. Describe the requirements of the Hazard Communication Program.
   b. Identify the general chemicals and hazardous materials present on Campus.
   c. Recognize the physical and health effects of these chemicals and hazardous materials.
   d. Describe steps taken to lessen or prevent exposure to chemicals.
   e. Understand potential exposure sources and routes of exposure.
   f. Describe the methods and observation techniques used to determine the presence or release of hazardous materials in the work area.
   g. Demonstrate how to read labels and MSDS/SDS to obtain appropriate hazard information.
   h. Understand appropriate response procedures, including notification procedures, should an exposure occur.
   i. Apply the correct procedure in the transfer and storage of all hazardous materials in the work environment.
   j. Locate and use the personal protective equipment within the department.
   k. Understand how to lessen or prevent exposure to hazardous substances through usage of control, work practices and personal protective equipment.
   l. Understand emergency and first aid procedures to follow if employees are exposed to hazardous substance(s).
   m. Understand methods and observation techniques used to determine the presence or release of hazardous substances in their work area.
   n. Use spill containment procedures within their work environment.
   o. Demonstrate the use of the correct procedure for disposing of hazardous material used routinely on the job.

I. Hazardous Non-Routine Tasks: No LFCC employee or student shall be required or allowed to perform tasks for which he or she not fully trained. Prior to beginning work, all such non-routine tasks shall be evaluated and the related hazard(s) shall be assessed and adequate protective measures shall be developed.

J. Informing Contractors: LFCC’s Contract Representative, who serves as the liaison between the College and the contractor, shall provide information on hazardous substances located on campus that the contractor may come in contact with.

  1. The Contractor shall be responsible for training their employees.


8.3 Definitions

A. Hazardous Material: Any substance which, when used as intended in the normal work process, poses a health or safety hazard rating of two or higher to employees or the environment. These include:

1. Any material that is flammable at less than 140 degrees Fahrenheit.
2. Any material that is corrosive (burns skin or eyes on contact.)
3. Any material that is reactive (unstable, explodes, or releases toxic vapors if exposed to other chemicals, or water).
4. Those chemicals and hazardous substances identified by the Environment Protection Agency (EPA) regulations.
5. Substances whose allowable concentration in work place air are established or proposed to be established by the American Conference of Government Industrial Hygienists.
6. All the substances considered hazardous by the National Institute of Occupational Safety and Health.
7. Medical and infectious waste.

B. Waste: Any material that is no longer needed and which requires disposal.

8.4 Performance Standards

Employees in Health Professions, Buildings & Grounds, Life & Physical Sciences, Automotive, Welding, Machining Technology, Heating and Air Conditioning, and Electronics are aware of the location of their Department specific MSDS/SDS.
SECTION 9: JOB SAFETY ANALYSIS PROGRAM

9.1 JOB SAFETY ANALYSIS – GENERAL

A. Preventing workplace injuries is the principle purpose of this Program. This Program shall provide a basis for identifying existing or potential job hazards (both safety and health), determining personal protective equipment (PPE) requirements and establishing the best means to perform the job to reduce or eliminate these hazards.

1. Lord Fairfax Community College shall review and update this policy as appropriate.

9.2 HIGH RISK JOBS & PROGRAMS

A. The following have been identified as High Risk Jobs:
   1. Maintenance Mechanic.

B. The following have been identified as High Risk Instructional Programs:

1. Electronic Equipment Servicing
2. Electrical Electronics Engineering Technology
3. Welding Technology
4. Air Conditioning & Refrigeration
5. Precision Machining Technology
6. Automotive Analysis & Repair
7. Building Trades Technology
8. Industrial Electrical Principles
9. Industrial Electronics Principles
10. Maintenance Mechanics
11. Integrated Systems Technology

9.3 TRAINING

A. The purpose of the training program is to ensure that employees and students are sufficiently informed about the hazards to which they may be exposed and thus be able to participate actively in their own protection.

B. The training program shall include a means for adequately evaluating its effectiveness. This shall be achieved by using combinations of the following:

1. Surveys.
2. Injury and illness statistics.
3. Observation of work practices.
C. Training for employees and students shall consist of both general and specific job training as follows:

1. Employees shall be given formal training regarding the hazards associated with their jobs and with their equipment. This training shall include information on the varieties of hazards associated with the job, the risk factors causing or contributing to them, and the means of recognizing and reporting suspected hazards.

2. Students shall be given training regarding the hazards associated with their classes and/or their equipment. This training shall include information on recognizing and reporting suspected hazards.

   a. Training shall be conducted at the beginning of each semester.

3. New employees shall receive hands-on training prior to being placed on a job. This training program shall include, without limitation, the following:

   a. Care, use, and handling techniques pertaining to tools.
   b. Use of special tools and devices associated with work stations.
   c. Use of appropriate guards and safety equipment, including PPE.
   d. Use of proper lifting techniques and devices.

D. Maintenance personnel shall be trained in the prevention and correction of job hazards through job and work station design and proper maintenance, both in general and as applied to the specific conditions of the facility.

1. Employee training shall include instruction and, where necessary, hands-on training in the following:

   a. A description and identification of the hazards associated with particular jobs, tasks, machines, and workstations.
   b. Specific safeguards; including how the safeguards provide protection and the hazards for which they are intended.
   c. The proper use of safety devices.
   d. The proper installation, operation, and removal of safety devices.
   e. Procedures to follow if the device is damaged, missing, or unable to provide adequate protection.
   f. Recognition of applicable hazards associated with guarding devices.
   g. Procedures for removal of a guard from service.
   h. Personal protective equipment requirements.

E. Refresher training as required to reestablish employee proficiency and introduce new or revised safe work practices, methods, procedures, and use of PPE shall be provided as appropriate.
F. LFCC shall certify that training/retraining of employees and students has been accomplished and is being kept up to date. The certification shall contain each employees or student’s name and dates of training. Training documentation is kept within the department.

9.4 **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

A. Where work practices and engineering controls do not eliminate all job hazards, employees shall wear appropriate personal protective equipment (PPE).

B. PPE includes, without limitation, items such as, caps, hair nets, face shields, safety goggles, glasses, hearing protection, and gloves.

1. PPE shall be appropriate for the particular hazard.
2. PPE shall be maintained in good condition.
3. PPE shall be properly stored when not in use, to prevent damage or loss.
4. PPE shall be kept clean, fully functional and sanitary.

C. PPE can present additional safety hazards if not used properly. Supervisors and instructors shall ensure that employees and students wear appropriate clothing and that PPE is worn so as not create additional hazards.

9.5 **TOOL SELECTION, EVALUATION & CONDITION**

A. The greatest hazards posed by tools generally result from misuse and/or improper maintenance. Employees shall verify the following when selecting tools:

1. The tool is correct for the type work to be performed.
2. Guards are installed properly and in good condition.
3. Grounding methods are sufficient when working in wet conditions.
4. Potential for injury or damage when using tools which create sparks or heat has been considered when working around flammable substances.
5. Impact tools such as chisels, wedges, or drift pins do not have mushroomed heads which can shatter on impact.
6. Wooden handles are not lose or splintered which can result in the heads of tools flying off.
7. Cutting tools are sharp.
8. The tool is being used on the proper working surface.
9. There is sufficient clearance for tools requiring swinging motions such as hammers, axes, picks, etc.
9.6 Hazard Prevention & Control

Engineering solutions, where feasible, are the preferred method of control for workplace hazards; therefore, whenever possible, hazards shall be eliminated by redesigning the work station, work methods, or tools to reduce the hazards associated with the demands of the job. The use of PPE shall be a last choice.

9.7 Notification of Employees & Students

Affected employees and students shall be notified when they are placed in jobs or programs where it is known or suspected that unresolved job hazards exist. These jobs and programs are listed in 9.2 above.

SECTION 10: LOCKOUT/TAGOUT POLICY

10.1 Lockout/Tagout Policy - General

A. This Policy covers the servicing and maintenance of machines and equipment in which the unexpected energization or startup of the machine or equipment, or release of stored energy could cause injury to employees.

1. Equipment located in academic areas is covered by the safety procedures developed by each Department. These procedures are included in Appendix G of this Manual.

B. In general, normal operations are not covered by this Policy; however, servicing and/or maintenance which takes place during normal operations is covered under the following conditions:

1. If an employee is required to remove or bypass a guard or other safety device.
2. If an employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is performed or where an associated danger zone exists during a machine operating cycle.

C. Minor tool changes and adjustments, and other minor servicing activities, which take place during normal operations, are not covered if they are routine, repetitive, and integral to the use of the equipment, provided that the work is performed using alternative measures which provide effective protection.

D. This Policy does not apply to work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or startup of the equipment are controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance.
E. LFCC shall review and update this Policy as appropriate.

1. This Policy shall be communicated to all personnel that are affected by it.
2. Administration and enforcement of this Policy is the responsibility of the Buildings & Grounds Supervisor.

10.2 Program Implementation

A. Employees shall use procedures described herein for affixing appropriate lockout/tagout devices to energy isolating devices, and for disabling machines or equipment to prevent unexpected energization, start-up or release of stored energy.

B. Lockout: If an energy isolating device is capable of being locked out, use an appropriate lockout device, unless it can be demonstrated that tagout device will provide full employee protection.

C. Tagout: If an energy isolating device is not capable of being locked out, use a tagout system.

D. Future Requirements: Whenever replacement or major repair, renovation or modification of a machine or equipment is performed, and whenever new machines or equipment are installed, energy isolating devices for such machines or equipment shall be designed to accept a lockout device.

10.3 Full Employee Protection

A. When a tagout device is used on an energy isolating device which is capable of being locked out, the tagout device shall be attached at the same location that the lockout device would have been attached.

B. No lockout/tagout is required under the following conditions:

1. The machine or equipment has no potential for stored or residual energy or reaccumulation of stored energy which could endanger employees after shut down.
2. The machine or equipment has a single energy source, which can be readily identified and isolated.
3. The isolation and locking out of the energy source will completely deenergize and deactivate the machine or equipment.
4. The machine or equipment is isolated from the energy source and locked out during servicing or maintenance.
5. The servicing or maintenance does not create hazards for other employees.
10.4 Energy Control Procedures

A. The lockout/tagout procedures for each machine and piece of equipment shall outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance including, without limitation, the following:

1. A statement of the intended use of the procedure.
2. Procedures for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy (manufacturer’s recommendations shall be followed whenever possible).
3. Procedures for the placement, removal and transfer of lockout/tagout devices and the person(s) responsible for implementing the procedures.
4. Requirements for testing a machine or piece of equipment in order to verify the effectiveness of lockout/tagout devices and other energy control measures.

B. Lockout/tagout procedures for specific machines and pieces of equipment are included in Appendix E of this Manual.

10.5 Protective Materials & Hardware

A. Appropriate lockout/tagout devices shall be provided for isolating, securing or blocking of machines or equipment from energy sources based on the individual machine/equipment procedures.

B. Lockout/tagout devices shall be singularly identified, shall be the only devices(s) used for controlling energy, shall not be used for other purposes, and shall comply with the following:

1. Lockout/tagout devices shall be capable of withstanding the environment in which they will be used for the maximum period of time that exposure is expected.
2. Tagout devices shall be fabricated and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible.
3. Tagout devices shall not deteriorate when used in corrosive environments such as areas where acid and alkali chemicals are handled and stored.

C. Lockout/tagout devices shall be standardized within each facility using at least one of the following criteria: color, shape or size. Additionally, in the case of tagout devices, print and format shall be standardized.

D. Lockout devices shall be substantial enough to prevent their removal without the use of excessive force or unusual techniques.
E. Tagout devices, including their means of attachment, shall be substantial enough to prevent inadvertent or accidental removal. Means of attachment shall be non-reusable, attachable by hand, self-locking and non-releasable; and shall conform to the general design and basic characteristics of a one-piece, all-environment-tolerant nylon cable tie.

F. Lockout/tagout devices shall indicate the identity of the employee applying the device.

G. Tagout devices shall warn against hazardous conditions that may occur if the machine or equipment is energized and shall include a legend such as the following:

Do Not Start, Do Not Open, Do Not Close, Do Not Energize, Do Not Operate.

10.6 Training

A. LFCC shall provide training to ensure that the purpose and function of the Lockout/Tagout Policy are understood and that the knowledge and skills required for the safe application, usage and removal of the energy controls are acquired by employees. Training shall include the following:

1. Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.
2. Each affected employee shall be instructed in the purpose and use of the energy control procedure.
3. All other employees who work in an area where energy control procedures are utilized, shall be instructed regarding the procedures and the prohibitions related to attempts to restart or reenergize machines or equipment which are locked or tagged out.

B. When tagout systems are used, employees shall be made aware of the following limitations of tags:

1. Tags are warning devices affixed to energy isolating devices, and do not provide the same physical restraint on those devices that locks do.
2. A tag which is attached to an energy isolating device shall not be removed without authorization of the person responsible for it, and it shall never be bypassed, ignored, or otherwise defeated.
3. Non-legible or missing tags shall be reported to the Buildings & Grounds Supervisor immediately.

C. LFCC shall certify that training of employees has been accomplished and is being kept up to date. The certification shall contain each employee’s name and dates of training.
10.7 Application of Control

A. The lockout/tagout procedures shall include the following elements:

1. Lockout/tagout shall be performed only by the authorized employees who are performing the servicing or maintenance.
2. Affected employees shall be notified of the application and removal of lockout/tagout devices. Notification shall be given before the controls are applied, and after they are removed.
3. Before an authorized or affected employee turns off a machine or equipment, the employee shall have knowledge of the type and magnitude of energy involved, the hazards of the energy to be controlled, and the method or means to control the energy.
4. The machine or equipment shall be turned off or shut down using the procedures established for that specific machine or equipment. An orderly shutdown shall be used in order to avoid any additional or increased hazard(s) to employees as a result of the equipment stoppage.
5. All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located and operated in such a manner as to isolate the machine or equipment from the energy source(s).

B. Lockout Device Application: Lockout devices shall be affixed to each energy isolating device in a manner that will hold the energy isolating devices in a "safe" or "off" position.

C. Tagout Device Application: Tagout devices shall be affixed in a manner that clearly indicates that the operation or movement of energy isolating devices from the “safe” or “off” position is prohibited.

1. Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.
2. Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

D. Stored Energy: Following the application of lockout/tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected or restrained.

1. If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.
E. Verification of Isolation: Prior to starting work on machines or equipment that have been locked out or tagged out, the authorized employee shall verify that isolation and deenergization of the machine or equipment have been accomplished.

10.8 RELEASE FROM LOCKOUT/TAGOUT

A. Before lockout/tagout devices are removed and energy is restored to the machine or piece of equipment, the authorized employee shall verify the following:

1. That nonessential items have been removed from the work area.
2. That the machine or equipment components are operationally intact.
3. That all employees have been safely positioned or removed from the work area.

B. After the lockout/tagout device has been removed and before the machine or piece of equipment is started, affected employees shall be notified that the lockout/tagout device has been removed.

C. The lockout/tagout device shall be removed from the energy isolating device by the employee who applied the device.

   1. When the authorized employee who applied the lockout/tagout device is not available to remove it, that device may be removed under the direction of the Buildings & Grounds Supervisor.

10.9 TESTING OF MACHINES, EQUIPMENT, OR COMPONENTS

A. In situations that require the lockout/tagout device to be temporarily removed from the energy isolating device so that the machine or equipment can be energized for testing or to position the machine or equipment, the following procedures shall be used:

   1. Clear the machine or equipment of tools and materials.
   2. Remove employees from the machine or equipment area.
   3. Remove the lockout/tagout device as specified in the individual equipment procedures.
   4. Energize and proceed with testing or positioning.
   5. Deenergize all systems and reapply energy control measures in accordance with equipment procedures and continue the servicing and/or maintenance.

10.10 NON-LFCC PERSONNEL (CONTRACTORS, ETC.)

A. Whenever outside servicing personnel are engaged in activities covered by this Policy, LFCC and the contractor shall coordinate with each other regarding their respective lockout/tagout procedures.
B. Each contractor shall ensure that their employees understand and comply with the restrictions and prohibitions of the contractor’s energy control program.

10.11 GROUP LOCKOUT/TAGOUT

A. When servicing and/or maintenance is performed by a group or team, procedures which afford a level of protection which is equivalent to that provided by an individual lockout/tagout device shall be utilized.

B. Group lockout/tagout devices shall be employed in accordance with the procedures governing individual devices and with the following requirements:

1. An authorized employee shall be responsible for a set number of employees working under the protection of a group lockout/tagout device.

2. Provision for the authorized employee to ascertain the exposure status of individual group members with regard to the lockout/tagout of the machine or equipment shall be made.

3. When more than one crew or team is involved, an authorized employee shall be responsible for overall job-associated lockout/tagout control and shall coordinate affected work forces and ensure continuity of protection.

4. Each authorized employee shall affix a personal lockout/tagout device to the energy control device when he or she begins work, and shall remove those devices when their work is complete.

10.12 DEFINITIONS

A. Affected Employee: An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

B. Authorized Employee: A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee’s duties include performing servicing or maintenance covered under this section.

C. Capable of Being Locked Out: An energy isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

D. Energized: Connected to an energy source or containing residual or stored energy.
E. Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following:

1. A manually operated electrical circuit breaker.
2. A disconnect switch.
3. A manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently.
4. A line valve; a block; and any similar device used to block or isolate energy.
5. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.

F. Energy Source: Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

G. Hot Tap: A procedure used in the repair, maintenance and services activities which involves welding on a piece of equipment (pipeline, vessel, or tank) under pressure, in order to install connections or appurtenances. It is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

H. Lockout: The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

I. Lockout Device: A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in a safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

J. Normal Production Operations: The utilization of a machine or equipment to perform its intended production function.

K. Servicing and/or Maintenance: Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

L. Setting Up: Any work performed to prepare a machine or equipment to perform its normal production operation.
M. Tagout: The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

N. Tagout Device: A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

SECTION 11: SLIPS, TRIPS & FALLS SAFETY PROGRAM

11.1 SLIPS, TRIPS & FALLS - GENERAL

This Slips, Trips, & Falls Safety Program shall be administered by the Office of Human Resource Management and shall be reviewed and updated as appropriate.

11.2 HOUSEKEEPING POLICY

A. All offices, work stations, work areas, passageways, storerooms, restrooms, and service rooms shall be kept clean, orderly, sanitary, and free of known hazards.

B. All floors shall be maintained in a clean, orderly and, so far as possible, dry condition. C. Sufficient illumination shall be provided in all areas. Lighting deficiencies shall be reported to the Buildings & Grounds for correction.

D. Each employee shall be responsible for maintaining their immediate work area in a clean and orderly manner, and for notifying the Buildings & Grounds of conditions which are beyond their control.

E. Supervisors shall ensure that machines and equipment under their control are properly maintained.

F. All walls shall be painted, and maintained in a clean and orderly manner.
   1. Postings shall be confined to bulletin boards and other appropriate areas.

G. Emergency exits shall be kept free of obstacles at all times. Any employee who finds an emergency door blocked shall immediately report the condition to the Buildings & Grounds Supervisor for correction. Exit lights and signs shall be maintained in proper condition at all times, and immediately reported if deficient.

H. Non-hazardous spills shall be contained and resolved immediately.
11.3 **AISLES AND PASSAGEWAYS**

A. Where mechanical handling equipment, such as tow motors, are used, sufficient safe clearances shall be maintained for aisles at loading docks, through doorways and wherever turns or passage must be made. Aisles and passageways shall be kept clear with no obstruction that could create a hazard across or in the aisles.

B. Permanent aisles and passageways shall be appropriately marked.

11.4 **COVERS AND GUARDRAILS**

Covers and/or guardrails shall be provided to protect personnel from the hazards of open pits, tanks, vats, ditches, etc.

11.5 **GUARDING FLOOR AND WALL OPENINGS & HOLES**

A. Stairway floor openings shall be guarded by a standard railings. Railings shall be provided on all exposed sides (except at entrances to stairways).

B. Ladderway floor openings or platforms shall be guarded by a standard railing with standard toeboards on all exposed sides (except at the entrance to the opening), with the passage through the railing either provided with a gate or offset so that a person cannot walk directly into the opening.

C. Temporary floor openings shall have standard railings, or shall be constantly attended.

11.6 **DEFINITIONS**

A. Floor Hole: An opening measuring less than 12 inches but more than 1 inch in its least dimension, in any floor, platform, pavement, or yard, through which materials but not persons may fall; such as a belt hole, pipe opening, or slot opening.

B. Floor Opening: An opening measuring 12 inches or more in its least dimension, in any floor, platform, pavement, or yard through which persons may fall; such as a hatchway, stair or ladder opening, pit, or large manhole. Floor openings occupied by elevators, dumb waiters, conveyors, machinery, or containers are excluded.

C. Handrail: A single bar or pipe supported on brackets from a wall or partition, as on a stairway or ramp, to furnish persons with a handhold in case of tripping.

D. Platform: A working space for persons, elevated above the surrounding floor or ground; such as a balcony or platform for the operation of machinery and equipment.
E. Runway: A passageway for persons, elevated above the surrounding floor or ground level, such as a footwalk along shafting or a walkway between buildings.

F. Standard Railing: A vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or runway to prevent falls of persons.

G. Standard Strength and Construction: Any construction of railings, covers, or other guards that meets the requirements of 29 CFR 1910.23.

H. Stair Railing: A vertical barrier erected along exposed sides of a stairway to prevent falls of persons.

I. Toeboard: A vertical barrier at floor level erected along exposed edges of a floor opening, wall opening, platform, runway, or ramp to prevent falls of materials.

J. Wall Hole: An opening less than 30 inches but more than 1 inch high, of unrestricted width, in any wall or partition; such as a ventilation hole or drainage scupper.

K. Wall Opening: An opening at least 30 inches high and 18 inches wide, in any wall or partition, through which persons may fall; such as a yard-arm doorway or chute opening.

SECTION 12: HIGH RISK INSTRUCTIONAL PROGRAMS

A. GENERAL

To document policies, procedures and best practices for High Risk Instructional Programs, addressing student supervision in labs, instructor currency, written safety manuals, guidelines for personal projects, safety components in instructor evaluations, security of labs, and use of labs for non-instructional purposes, and lab organization and cleanliness.

B. SCOPE

This procedure applies to all high risk instructional academic and workforce development programs at all Lord Fairfax Community College (LFCC) locations that put students in a learning environment that can cause immediate, grievous, and unique bodily harm.

C. OVERVIEW: Chancellor’s Memo for High Risk Instructional Programs, November 13, 2014

Based on the conclusions of a VCCS Internal Safety Audit conducted in March 2014, the Chancellor issued a memo stating “Each college will need to identify which programs put students at risk of ‘immediate, grievous, and unique bodily harm’.” In addition, colleges were instructed to “Create and emphasize safety policies to address student supervision in labs, instructor currency, written safety manuals, guidelines for
personal projects, safety components in instructor evaluations, security of labs, use of labs for non-instructional purposes, and lab organization and cleanliness.”

The following procedures have been established by LFCC to ensure that best practices for High Risk Instructional Programs are identified and addressed. A High Risk Instructional Program is defined as any program that puts students in a learning environment that can cause immediate, grievous, and unique bodily harm.

As of February 2015, the following programs at LFCC have been identified as high risk:

- Associate of Science (chemistry and biology labs)
- Industrial Maintenance Tech Basic Career Studies Certificate (welding and electrical labs)
- Industrial Maintenance Tech Intermediate Career Studies Certificate & Multi-Craft Technician (Workforce Solutions) (welding and electrical lab components)
- HVAC Career Studies Certificate and Workforce Solutions
- Welding (Workforce Solutions)
- Plumbing (Workforce Solutions) – lab component

12.1 **SUPERVISION OF STUDENTS IN LABS**

Instructors of High Risk Instructional Programs shall manage supervision of students in labs according to these procedures. Appropriate supervision of students is necessary to ensure safe procedures are practiced to prevent accidents and to respond immediately in case of an accident. In certain circumstances, students will work under the supervision of college personnel, such as lab technicians.

If a student needs additional time on equipment to perform work, the instructor shall be present to supervise.

If the instructor must leave the lab for any reason during class time, students shall stop working and power down equipment. Any exceptions shall be documented and have approval from the dean or director of the program.

12.2 **INSTRUCTORS SHOULD STAY CURRENT IN THEIR INDUSTRY**

Instructors of industrial technology and science programs are encouraged to stay current with the latest practices and requirements related to safety. Options available to achieve this goal include, without limitation, the following:

1. Obtain certification through professional organizations, when available.
2. Participate in continuing professional education.
3. Read and study textbooks that are written or endorsed by industry organizations.

4. Maintain a business related to the program the instructor is teaching.

5. Utilize advisory councils for support and information.

12.3 **SAFETY IN LABS AND CLASSROOMS**

LFCC provides these written procedures related to safety in labs and classrooms. Lab safety protocols shall be current and shall be followed by instructors, staff, and students to establish class rules and set expectations.

Procedures based on industry standards may not be sufficient. Safety standards promulgated by OSHA and other standards-setting bodies are designed for experienced professionals; therefore, these standards may not be adequate for inexperienced students. For example, while industry standards only require nonflammable clothing while welding, colleges should consider requiring welding smocks or aprons to further protect students. Additionally, industry standards do not forbid welding or machining while alone, but students should not be left unsupervised in the labs.

12.4 **PERSONAL PROJECTS IN LABS**

Personal projects shall only be allowed during the course of the semester if their use provides a learning experience to the entire class and does not benefit one individual person.

12.5 **SAFETY REQUIREMENTS IN INSTRUCTOR EVALUATION FORMS**

LFCC shall incorporate safety components in the evaluation of instructors and/or in student evaluations of instructors. Instructors should be evaluated on whether they are teaching and practicing current, appropriate safety standards, as well as receiving current professional training in their field.

12.6 **CLASSROOM AND LAB RULES OF BEHAVIOR**

LFCC shall require all students in High Risk Instructional Programs to sign a Code of Conduct (see Appendix A: Code of Conduct for Safety in Labs), which lists rules of behavior for students and indicates that they will follow and practice all safety policies taught in class.

The Code of Conduct shall include requirements related to student behavior in general and be consistent with existing college policies.

12.7 **INSTRUCTORS SHALL BE FAMILIAR WITH EMERGENCY EQUIPMENT**

Instructors in High Risk Instructional Programs shall be familiar with emergency equipment used in their labs and be proficient in the use of that emergency equipment.
12.8 **Students Shall Pass a Safety Test Before Working In Labs**

Students in High Risk Instructional Programs are required to pass safety tests before working in labs. If possible, safety tests shall be based on those issued by industry governing bodies or professional organizations.

12.9 **Utilize Advisory Councils To Examine Safety-Related Topics**

LFCC shall require active involvement of advisory councils for High Risk Instructional Programs. Advisory councils shall meet at least annually, shall provide input on curriculum, and shall discuss safety topics seen in current industry.

12.10 **Students Shall Receive Emergency Training**

In order to reduce the likelihood of confusion and panic during extreme situations, LFCC shall require the inclusion of student emergency training and awareness in classes with specific risks of fire, electrocution, or injury.

Students shall be trained in the use of fire blankets, fire extinguishers, emergency kill-switches, and other emergency response equipment. Instructors may also include basic first aid and use of an AED if such training is appropriate for a particular class.

12.11 **Stress Importance Of Safety In Syllabi**

Syllabi for all High Risk Instructional Programs shall indicate that safety is an important component of the course. Furthermore, the syllabi shall indicate where safety standards originate, such as professional organizations and governing bodies.

12.12 **Include A Listing Of All Safety Equipment In Course Syllabi**

Requirements for use of safety equipment and PPE shall be listed in the Code of Conduct and/or syllabi for High Risk Instructional Programs. The Code of Conduct and the syllabus, where appropriate, should also detail which equipment is required and which equipment is recommended but not required.

12.13 **Labs Shall Be Clean And Organized And Display Safety Signage**

All labs shall be kept organized, neat, and clean. Appropriate safety signage shall be displayed.

12.14 **Require Equipment Inspections**

Instructors for all High Risk Instructional Programs shall inspect equipment before the start of the semester to detect problems and ensure safe use. Documentation of inspections shall be kept in order to track timing of inspections and necessary maintenance.

12.15 **Enforce Practices Written In Course Syllabus**

Instructors for all High Risk Instructional Programs shall enforce practices written in the Code of Conduct and/or syllabus.
APPENDIX A: BUILDING SAFETY CHECKLIST
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<tr>
<th>Safety Item</th>
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<th>Comments</th>
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<tr>
<td>No burned out bulbs</td>
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<td>No Tripping hazards such as defective tiles, boards, or carpet</td>
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<td>All Facilities and machines in good working condition.</td>
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<td>All Item storage space is adequate. Boxes are not stacked too high or too</td>
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<td>tight and are clearly labeled with their contents.</td>
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<td>No Spills and fallen debris present.</td>
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<td>Electrical cords and phone cords do not cross walkways or otherwise pose</td>
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<td>a tripping hazard</td>
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<td>All office chemicals are clearly labeled and stored properly</td>
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<td>All office furnishings arranged in a manner that provides unobstructed</td>
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<td>areas for movement</td>
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<td>All stairs, steps, flooring, and carpeting are well maintained</td>
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<td>All Glass doors/window doors have some type of marking to keep people from</td>
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<td>walking through them</td>
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<td>All floor height differentials clearly marked</td>
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<td>Throw rugs and mats are secured to prevent slipping hazards</td>
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<td>Wastebaskets or other objects are not in walkways</td>
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<td>Exits are not blocked</td>
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<td>Filing cabinets/drawers cannot easily be pulled clear of the cabinet</td>
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<td>Ventilation grates are not blocked with file cabinets</td>
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<tr>
<td>Filing cabinet drawers closed and not left opened</td>
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<td>Heavy objects are not on top of file cabinets and bottom drawers are full for stability</td>
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<td>At least 18 inches are between the top shelf items and the ceiling</td>
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<td>All desks are in good condition (i.e., free from sharp edges, nails, etc.)</td>
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<td>No desks are blocking exits or passageways</td>
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<td>All seating is in good working condition (no broken rollers, stable back support)</td>
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<td>All chairs not in area to roll over electrical cords</td>
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<tr>
<td>Any electrical equipment/small appliances do not pose an overload hazard</td>
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Date: ___________________________  Inspection Completed By: ___________________________
APPENDIX B: HEPATITIS B VACCINE DECLINATION STATEMENT
HEPATITIS B VACCINE DECLINATION STATEMENT

This Form must be filled out when an employee who is eligible for the Hepatitis B vaccine decides not to have the vaccination. The completed form should be placed in the employee’s records and retained for the duration of their employment plus thirty (30) years.

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

The employee should date, print and sign their name:

Date __________________________

Type/Print __________________________________________________________

Signature __________________________
APPENDIX C: EMPLOYEE INJURY REPORT
Incident Investigation Report

**Instructions:** Complete this form as soon as possible after an incident that results in serious injury or illness. (Optional: Use to investigate a minor injury or near miss that could have resulted in a serious injury or illness.)

<table>
<thead>
<tr>
<th>This is a report of:</th>
<th>Death</th>
<th>Lost Time</th>
<th>Dr. Visit Only</th>
<th>First Aid Only</th>
<th>Near Miss</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date of incident:</th>
<th>This report is made by:</th>
<th>Employee</th>
<th>Supervisor</th>
<th>Team</th>
<th>Other</th>
</tr>
</thead>
</table>

**Step 1: Injured employee (complete this part for each injured employee)**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Sex:</th>
<th>Male</th>
<th>Female</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department:</th>
<th>Job title at time of incident:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part of body affected:** (shade all that apply)

- Nature of injury: (most serious one)
  - Abrasion, scrapes
  - Amputation
  - Broken bone
  - Bruise
  - Burn (heat)
  - Burn (chemical)
  - Concussion (to the head)
  - Crushing Injury
  - Cut, laceration, puncture
  - Hernia
  - Illness
  - Sprain, strain
  - Damage to a body system:
  - Other ________

<table>
<thead>
<tr>
<th>This employee works:</th>
<th>Regular full time</th>
<th>Regular part time</th>
<th>Seasonal</th>
<th>Temporary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months with this employer:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Months doing this job:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 2: Describe the incident**

<table>
<thead>
<tr>
<th>Exact location of the incident:</th>
<th>Exact time:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What part of employee’s workday?**

- Entering or leaving work
- Doing normal work activities
- During meal period
- During break
- Working overtime
- Other ________

| Names of witnesses (if any): | | |
|-----------------------------|---|---|---|
| | | | |
### Step 3: Why did the incident happen?

<table>
<thead>
<tr>
<th>Unsafe workplace conditions: (Check all that apply)</th>
<th>Unsafe acts by people: (Check all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Inadequate guard</td>
<td>○ Operating without permission</td>
</tr>
<tr>
<td>○ Unguarded hazard</td>
<td>○ Operating at unsafe speed</td>
</tr>
<tr>
<td>○ Safety device is defective</td>
<td>○ Servicing equipment that has power to it</td>
</tr>
<tr>
<td>○ Tool or equipment defective</td>
<td>○ Making a safety device inoperative</td>
</tr>
<tr>
<td>○ Workstation layout is hazardous</td>
<td>○ Using defective equipment</td>
</tr>
<tr>
<td>○ Unsafe lighting</td>
<td>○ Using equipment in an unapproved way</td>
</tr>
<tr>
<td>○ Unsafe ventilation</td>
<td>○ Unsafe lifting</td>
</tr>
<tr>
<td>○ Lack of needed personal protective equipment</td>
<td>○ Taking an unsafe position or posture</td>
</tr>
<tr>
<td>○ Lack of appropriate equipment / tools</td>
<td>○ Distraction, teasing, horseplay</td>
</tr>
<tr>
<td>○ Unsafe clothing</td>
<td>○ Failure to wear personal protective equipment</td>
</tr>
<tr>
<td>○ No training or insufficient training</td>
<td>○ Failure to use the available equipment / tools</td>
</tr>
<tr>
<td>○ Other: _____________________________</td>
<td>○ Other: _____________________________</td>
</tr>
</tbody>
</table>

**Why did the unsafe conditions exist?**

**Why did the unsafe acts occur?**

**Is there a reward (such as “the job can be done more quickly”, or “the product is less likely to be damaged”) that may have encouraged the unsafe conditions or acts?**

- Yes
- No

If yes, describe:

**Were the unsafe acts or conditions reported prior to the incident?**

- Yes
- No

**Have there been similar incidents or near misses prior to this one?**

- Yes
- No
### Step 4: How can future incidents be prevented?

**What changes do you suggest to prevent this incident/near miss from happening again?**

- Stop this activity
- Guard the hazard
- Train the employee(s)
- Train the supervisor(s)
- Redesign task steps
- Redesign work station
- Write a new policy/rule
- Enforce existing policy
- Routinely inspect for the hazard
- Personal Protective Equipment
- Other: ____________________

What should be (or has been) done to carry out the suggestion(s) checked above?

Description continued on attached sheets: ☐

### Step 5: Who completed and reviewed this form?

<table>
<thead>
<tr>
<th>by:</th>
<th>Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Date</td>
</tr>
</tbody>
</table>

Names of investigation team members:

Reviewed by: 

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D: DOT HAZARD CLASSIFICATION LIST,
EPA HAZARD CLASSIFICATION LIST
### DOT HAZARD CLASSIFICATION LIST

<table>
<thead>
<tr>
<th>Hazard Classification</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Radioactive material</td>
<td>CO-60 or I-130</td>
</tr>
<tr>
<td>2. Flammable liquids</td>
<td>Alcohol</td>
</tr>
<tr>
<td>3. Non-flammable compressed gases</td>
<td>Nitrogen</td>
</tr>
<tr>
<td>4. Flammable gases</td>
<td>Oxygen</td>
</tr>
<tr>
<td>5. Oxidizer</td>
<td>Nitric acid</td>
</tr>
<tr>
<td>6. Corrosive material</td>
<td>Hydrochloric acid</td>
</tr>
<tr>
<td>7. Irritating material</td>
<td>Lacramator</td>
</tr>
<tr>
<td>8. Poison A</td>
<td>Heptachlor</td>
</tr>
<tr>
<td>9. Poison B</td>
<td>Phenol</td>
</tr>
<tr>
<td>10. Organic peroxide</td>
<td>Benzoyl peroxide</td>
</tr>
<tr>
<td>11. ORM-A*</td>
<td>Formaldehyde</td>
</tr>
<tr>
<td>12. ORM-B*</td>
<td>Mercury</td>
</tr>
<tr>
<td>13. ORM-D*</td>
<td>Bleach</td>
</tr>
<tr>
<td>14. ORM-E*</td>
<td>Ferric sulfate</td>
</tr>
<tr>
<td>15. Etiological agents</td>
<td>Microorganisms</td>
</tr>
</tbody>
</table>

*ORM=Other Regulated Material
EPA HAZARD CLASSIFICATION LIST

1. IGNITABLE WASTE: Flash point < 140 F
   Flammable solids (10)
   Oxidizers (11)
   Flammable gases (8)
   Some combustible liquids (9)
   Flammable liquids (5)
   Pyrophoric liquids (6)

2. CORROSIVES: Any liquid of pH 2 below or 12.5 (12) or higher

3. REACTIVE: Explosives A, B, or C (1, 2, or 3) Water reactive
   Cyanide or sulfide
   Organic peroxides (16)
   Poison B (15)

4. (EXAMPLE ONLY) EXTRACTION PROCEDURE (EP) TOXIC

   8 Metals:
   Arsenic
   Cadmium
   Chromium
   Mercury
   Silver
   Lead
   Beryllium
   Thallium

   4 Pesticides:
   Lindane
   Endrin
   Toxaphene
   Methoxychlor

   2 Herbicides:
   2, 4 D
   2, 4, 5 T

   Poison A and some poison B (14 and 15)
   Irritating material (13)
   Radioactive material (4)
   ORM-A-B-C (17, 18, and 19)
   ORM-E (21)

NOTE: Numerals in parentheses indicate chemical categories on the DOT list.
APPENDIX E: LOCKOUT/TAGOUT PROcedures FOR SPECIFIC BUILDINGS