AUBURN
SCHOOL DISTRICT
ENGAGE • EDUCATE • EMPOWER

ACCIDENT PREVENTION PROGRAM

FEBRUARY 2023

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SAFETY AND HEALTH POLICY

It is the policy of the Auburn School District to promote and provide safe, healthful working conditions and practices for all district employees. Safety and health are among our principle responsibilities.

In order to fulfill the conditions of this policy, the district will provide safety information, safety orientations, and appropriate safety training as a means of protecting employee welfare. Our goal is to resolve safety and health problems through prevention.

The District's Executive Administration are wholly responsible for developing an effective safety and health program.

The District has adopted rules and regulations governing the safe performance of assigned work and the use of district equipment. By accepting the mutual responsibility of safe operating practices, we all contribute to the well-being of our personnel and subsequently the best interest of the district.

PROGRAM OVERVIEW

This accident prevention program was developed in order to implement the district's safety and health policy. The elements of this program cover a broad spectrum of areas and are designed to prevent accidents and injuries. Taken individually, the program elements have minimal effect. As an integrated program, and with the support of employees at all levels, the accident prevention program can reduce the number and severity of job related injuries to district employees.

RESPONSIBILITIES

A. Administration

Each administrator is responsible for implementing safety and health procedures within their area of responsibility. Other responsibilities include:

1. Delegating authority to supervisors and holding them accountable for accident prevention and reporting procedures as specified herein.
2. Ensure that safety orientation training, as well as ongoing safety training, is accomplished within their divisions.
3. Ensure that an ongoing program of vehicle safety is implemented within their divisions.
4. Ensure compliance with WAC 296-800-32005, to promptly report fatalities or multiple hospitalization accidents.
5. Provide personal protective equipment required to safely accomplish tasks.

B. Supervisors

The safety and health of the employees they supervise is an essential responsibility of each supervisor. To meet this obligation, supervisors shall:

1. Ensure that all safety and health rules, standards, and procedures are observed.
2. Orient and train employees in safe and efficient work methods and see that they are practiced.
3. Follow-up and act upon suggestions made by employees and the employee safety committee.
4. Conduct monthly inspections of work areas and practices to eliminate potentially hazardous conditions.
5. Conduct an investigation of all accidents, regardless of severity. Complete the "Supervisors Report of Investigation" for every accident/incident with preventive suggestions to the safety committee and the claims coordinator. These reports shall be forwarded within 24 hours, or the next working day, after the supervisor has been informed of the accident.
6. Ensure that personal protective equipment is worn when task dictates.
7. Conduct a Job Safety Analysis when needed.

C. All Employees

Employees are required to:

1. Attend the initial safety orientation/job specific safety training.
2. Know and comply with all safety rules and procedures.
3. Cooperate with co-workers, supervisors, and the safety committee to assist in eliminating accidents.
4. Identify and report potential hazards.
5. Report all accidents to immediately to supervisors regardless of severity or type. (Note: Failure to report an on-the-job injury, occupational illness, vehicle accident or equipment damage, as prescribed, may be grounds for disciplinary action.)
6. Complete an accident/incident report and submit it to the supervisor within 24 hours or the next working day.
7. Serve on safety committees when elected or selected.
8. Obtain and maintain all personal protective equipment in a safe and usable condition, and to wear such equipment when tasks dictate.
9. Participate in provided safety training.
10. Perform all assigned tasks in a safe manner to avoid endangering themselves or their co-workers.

EXECUTIVE SAFETY COMMITTEE

1. The Safety Committee will be composed of employer-selected and employee-elected members (WAC 296-800-13020).
   (a) The term of employee-elected members is a minimum of one year. Should a vacancy occur on the committee, a new member would be elected prior to the next scheduled meeting.
   (b) The number of employer-selected members will not exceed the number of employee-elected members.
2. The safety committee will have an elected chairperson.
3. The safety committee will meet monthly during the school year. The dates of the meetings are normally the third Thursday of each month.
   (a) The District Safety Officer is responsible for determining the date, hour, and location of the meeting.
   (b) The length of each meeting will not exceed one hour except by majority vote of the committee.
4. The District Safety Officer is responsible for overseeing each meeting and writing up the minutes for each meeting. The minutes will be prepared and filed for a period of at least two years and shall be made available for review by noncompliance personnel of the Division of Industrial Safety and Health.
5. Safety committee meetings will address the following:
   (a) A review of the safety and health inspection reports to assist in correction of identified unsafe conditions or practices.
   (b) An evaluation of the accident/incident investigations conducted since the last meeting to determine if the cause of the unsafe acts or unsafe condition involved was properly identified and corrected.
   (c) Periodic evaluation of the district accident prevention program, as implemented, and make recommendations for improvements.
   (d) Evaluate employee safety suggestions.
   (e) Attendance shall be documented.
   (f) All items discussed will be documented.

6. Meeting minutes will be distributed to all staff via email and to each location for posting on the Safety Bulletin Board.

SAFETY BULLETIN BOARD

A. Purpose: The bulletin board is designed to increase the employees' awareness of safety and health issues and to communicate management's safety message.

B. Procedure: In order to have an effective bulletin board, the following issues should be considered:

   a. A specific safety bulletin board or portion of an existing board should be designated and that spot reserved EXCLUSIVELY for safety material.
   b. Postings should be attractively arranged.
   c. Posters, safety committee minutes, and other information that becomes dated or worn should be changed periodically.
   d. Placed in a location where there is greatest employee exposure (lunchroom, break room, near time clock, etc.)
   e. Each facility is responsible for maintaining their bulletin board, as recommended above.

C. The following publications will be posted:
   1. Job Safety and Health Law (F416-081-909)
   2. Notice to Employees Self-Insured (F207-037-909)
   3. Your Rights as a Worker (F700-074-909)
   4. Citation and Notice (as appropriate)
   5. A list of all valid first aid cardholders and location(s) of first aid kit(s)
   6. Current safety committee meeting minutes
   7. District safety officer's contact information for reporting hazards

SAFETY ORIENTATION

Purpose: Orientation of new employees, re-hires, part-time employees, substitutes, temporaries, and those transferred from another department within the district will occur during the first month of employment on the new job. This program will provide an introduction to district policies and rules and will include reviewing the district's written safety and claims management procedures. This employee initial orientation will be conducted by the Human Resources Department and will utilize both physical attendance meetings and online safety training. The district participates in the SafeSchools online training program for providing employee safety and health training to all employees. When possible, the orientation should include a tour of the facilities to acquaint the employee with the entire operation.

Procedure: The immediate supervisor of the employee will provide job specific safety training, covering all aspects of the safety program as it relates to each employee and their assigned duties. This training will be annotated on a "Safety Orientation" checklist. Both the employee and supervisor will sign the checklist, indicating that orientation was conducted. The original sign-off sheet will be sent to the personnel office for file placement and supervisors will retain a copy for their desk files.

ACCIDENT REPORTING AND INVESTIGATION

A. Purpose: Since every accident includes a sequence of contributing causes, it is possible to prevent a recurrence by recognizing and eliminating those causes. The removal of a single cause can prevent a recurrence of an accident/incident. During the supervisor's investigation, they must determine the possible consequences that could take place if the situation is not corrected and take appropriate action based upon those findings (i.e., investigate, report, correct, etc.)

B. Medical Emergency Procedure: An aid car will be called in the event that an employee needs immediate medical attention. The telephone number is **9-911**. A district official will accompany the employee to the doctor or hospital.

C. Documentation Procedures:

1. All accidents/incidents involving major/minor injuries and "near-misses" are to be reported to the immediate supervisor as soon as possible after the accident. The employee and their supervisor (if available) will call the WCT Nurse to report the details of the accident/incident. The phone number is: 1-833-WCT-NURS (1-833-928-6877). The employees report is made to a healthcare professional and is completely confidential. This phone number is available 24/7. Once the triage process is complete, the vendor will transfer the information to the Puget Sound Workers Compensation Trust (PSWCT) and the Report of Accident/Incident form will be completed and forwarded to the district's Human Resources Department for processing.
2. If the employee reports to the WCT Nurse that they have been injured and require medical attention, the WCT Nurse will direct the employee to seek treatment as soon as possible and will initiate an injury claim, SIF-2 form for processing by the PSWCT. You must report that you are injured and seeking medical attention to the WCT-Nurse so that the injury claim process can be started and correctly reported to support future medical services.
3. The Human Resources Department will forward the accident/incident report to the employees supervisor who will investigate and submit a properly completed Supervisor's Report of Investigation.
4. Injury Categories:
   a. Minor Injuries - (Requiring doctor/outpatient care.) After emergency actions are taken following an accident, an investigation of the accident will be conducted by the immediate supervisor, in conjunction with any witnesses to the accident to determine the cause. The findings of the investigation shall be documented on the Supervisor's Report of Investigation form.
   b. Major Injuries - (Fatality or multiple hospitalizations). The district Risk Manager and employee's supervisor shall be notified immediately by the employee or the person in charge at the location and an investigation under the direction of the district will be conducted. In addition to the district investigator, the inspection party will include the claims manager,

supervisor of the injured person(s), a representative from the safety committee (supervisor-staff), and an employee representative.

c. If there is a Fatality, or if one or more employees are hospitalized, the district Risk Manager or the Director of Human Resources will report the accident to the nearest office of the Department of Labor and Industries, phone number **1-800-423-7233** within eight hours of the occurrence of the accident. The report shall relate the circumstances, the number of fatalities and the extent of any injuries. Note: Any equipment involved in an accident resulting in an immediate fatality is not to be moved until a representative of the Department of Labor and Industries or the local Police Department investigates the accident and authorizes its removal. If, however, it is necessary to move the equipment to prevent additional accidents or to remove the victim, the equipment may be moved as required.

d. "Near Misses" - (likelihood of personal injury or property damage) to the greatest extent possible, all "near-miss" accidents shall be investigated by the administrator/supervisor. Documentation will be made on the Supervisor's Report of Investigation form. A "near-miss" accident is defined as an unplanned event where damage resulted but there was no personal injury to employees, **or** where damage did not result but the likelihood of personal injury to the employee was great. If the conditions that permitted the "near-miss" or "close-call" to exist are not eliminated, they will continue to be an issue, which may result in future accidents and/or personal injury to the employee(s).

SAFETY AND HEALTH EDUCATION TRAINING

A. Purpose: On-going safety and health education programs will be provided for all employees in an effort to increase awareness of accident causal factors. These programs will also improve morale by demonstrating management's concern for the individual employee and to promote acceptance of safety and health regulations by presenting accident prevention as a positive, desirable, and integral part of all activities.

B. Procedure: The school district will provide a systematic accident prevention-training program for the employee. This program will provide on-the-job training in work areas and will familiarize each employee with the district's safety and health requirements.

C. General Safety and Health Training:

Back Injury Prevention	Bloodborne Pathogens
Slip and Fall Prevention	Repetitive Trauma/Ergonomics
Fall Protection and Ladder Safety	Personal Protective Equipment
Eye Safety/Hand Safety	Respiratory Protection
Hearing Conservation	Machinery Operation
Sprain/Strain Prevention	Hazardous Chemical Safety
Confined Space	Lockout/Tagout

D. Specific Safety and Health Training:

AHERA required Designated Person course (8 hours)
AHERA Custodial and Maintenance Worker course (2 hours)
OSHA/WISHA Forklift Operator course
DOE Hazardous Material Handler course
WISHA Hazard Communication Standard and SDS training
EPA Pesticide Applicator Licensing and Certification
Chemical Hygiene Officers training

OCCUPATIONAL INJURY AND ILLNESS RECORDKEEPING

Purpose: Occupational Injury and Illness Logs are maintained and posted in accordance with federal and state standards. They are posted annually to inform employees of the number and type of illnesses and injuries suffered at each place of employment.

Procedure: Educational entities have been granted a partial exemption from the requirement to maintain occupational injury and illness records. The district, however, may be selected to participate in a survey for statistical purposes. In that case, the district will be notified by the U.S. Department of Labor of its selection during the year prior to the survey in order to record data.

HAZARD REPORTING

Purpose: To provide each employee the opportunity to report, without fear of reprisal, any unsafe act, conditions, or procedures that they may observe.

Procedure: Employees will report hazards to either their immediate supervisor or building administrator via any type of communication method available, including but not limited to: email, phone (standard or mobile), text message, 2-way radio, written message, in person. They can also report to the District Safety Officer (John Lobdell) or District Safety Committee members if the supervisor is not available. Hazards may be submitted in writing, in person and may be submitted anonymously. The supervisor or safety committee will review, confirm, and take corrective actions on valid hazards. The originator will be notified of any action planned or implemented for the abatement of the hazard. Action on hazard reports will be covered in the safety committee meeting minutes.

HAZARD COMMUNICATIONS PROGRAM

Purpose: The District Hazard Communication Program was developed to ensure that employees are informed of the chemical hazards associated with products used in their work areas.

Procedure: All employees will be provided training on the District Hazard Communications Program during the initial orientation/job safety training conducted by their supervisor. Employees will be informed of any hazard that may exist in relation to the products they will use in the performance of their jobs. The Safety Data Sheets (SDSs) will be used to show potential health hazards, first aid treatment, required personal protective equipment and actions to take in the event of a spill. Whenever a new product is introduced into the work area, the above training items will be covered with all affected personnel. Copies of SDSs for all products used in a work location will be maintained in that location.

Hazard Communication Program (HAZCOM)

This district is committed to the prevention of exposures that result in injury and/or illness; and to comply with all applicable state health and safety rules. To make sure that employees know about information concerning the dangers of all hazardous chemicals used by the district, the following hazardous chemical communication program has been established.

List of hazardous chemicals

A list of all hazardous chemicals will be kept in the front of the SDS binder at each building/location. There must be enough information on the list to match each chemical to its SDS. The list is updated annually, and old lists are to be kept on file. Archived lists for each site will be filed by year or otherwise indicate dates of use of each chemical.

Safety Data Sheets (SDS)

An SDS will be obtained for every hazardous product or chemical at the time the product/chemical is obtained. No product or chemical will be stored or used without an SDS.

Copies of SDS for all hazardous products and chemicals in use will be kept in the SDS binder at each school, building or classroom/lab, and at the Support Services Center office. At district high schools and middle schools, there will be an SDS binder at each of the following specific locations:

- Custodial Office
- Construction shop, Metal/Welding/Machinery shop (High and Middle Schools)
- Automotive Technology lab (AHS only)
- STEM labs and Robotics labs (High and Middle Schools)
- Horticulture labs (AHS, AMHS only)
- Art rooms (for ceramics) (High and Middle Schools)
- Jewelry labs (AHS, AMHS, ARHS)

- Visual Communications labs (AHS, AMHS, ARHS)
- Chemistry, Biology and Physics classrooms/labs (High and Middle Schools)
- Home Science/Culinary Arts labs (AHS, AMHS, ARHS)
- Support Services Center and the Transportation Center.

If any vehicle regularly carries hazardous products or chemical (for maintenance, cleaning, etc.) an SDS will be maintained in the vehicle for the hazardous chemical carried. SDS will be available to all employees during each work shift.

Container Labeling

Labels of containers of hazardous chemicals must be easy to read and in-place on every container. Labels must have:

1. The name of the chemical or common name (adequate information for finding the SDS) and:
2. General information about the health and physical hazards of the chemical.

Original labeled containers will be used at all times when possible. lf the original label becomes difficult to read, it will be promptly replaced.

Whenever a quantity of material is transferred into a non-labeled container for use, it shall be only in a quantity that will be used during the shift by the person making the transfer. If the chemical is kept in the container past the end of the shift, it must be labeled. This specifically applies to chemistry lab experiencments and art and jewelry waste products (i.e., Fixative).

If quantities of materials are to be used in containers other than the original labeled container they must be clearly labeled.

No containers will be kept without a label accurately describing the contents.

Employee information and Training

The Supervisor will make sure that before starting work, each new employee attends a health and safety orientation that includes information and training on the following, and including information about specific chemicals the employee may be exposed to on site:

- An overview of the requirements contained in the Hazard Communication Standard;
- Hazardous chemicals present at his or her workplaces;
- Physical and health risks of the hazardous chemical; The symptoms of overexposure;
- How to determine the presence or release of hazardous chemicals in his or her work area;
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices, and personal protective equipment;
- Steps the employer has taken to reduce or prevent exposure to hazardous chemicals;

- Procedures to follow if employees are overexposed to hazardous chemicals;
- How to read labels and review SDS to obtain hazard information; and
- The location of the SDS binder and written hazard communication program.

Whenever there is a change in chemicals used, the supervisor will make sure all employees receive information or refresher training.

Staff Responsibilities

1. Building Administrators and Supervisors

a. Maintain a list of hazardous chemicals used or stored in their work area.
b. Submit new safety data sheets (SDS) to the SDS manager for database inclusion.
c. Obtain/maintain copies of (SDS), as required, for each hazardous product or chemical used or stored in the work areas and make accessible to employees during each work shift.
d. Review SDS received to make sure it is current and complete. lf an SDS appears to be outdated or incomplete, send a letter to the manufacturer requesting a current and complete SDS.
e. Make this written Hazard Communication Program available, upon request, to all employees.

2. Supervisors

a. Ensure hazardous chemicals are properly labeled.
b. Ensure that all new products and chemicals introduced or used in work areas under their responsibility have SDSs readily accessible to employees of these locations.
c. Ensure that employees under their supervision who work with hazardous products or chemicals and/or whose work area contains hazardous products or chemicals, receive the general hazard communication training when hired, and receive work area specific training prior to their initial assignment of working with and/or being exposed to hazardous chemical(s) in work area. This includes any new products or chemical hazards introduced in the work area subsequent to initial training, those associated with non-routine tasks, and those introduced by non-District personnel (subcontractors, vendors, etc.).
d. Ensure that employees are trained in the use of any recommended PPE.
e. Ensure that employees are provided with PPE at no cost and are provided with training for the proper use.

3. SDS Manager or Safety Officer

a. Maintains a district-wide file of safety data sheets (i.e., the master file) for all hazardous products and chemicals on each site.
b. Maintains a list of all hazardous products and chemicals (i.e., the master list) used and stored on site in a central computer file.
c. Provides a summary of this Hazard Communication Program to subcontractors who will perform work onsite. This may be accomplished by attachment to the contract or at pre-construction meetings.
d. Archives the chemical lists and SDS from prior years to maintain a record.

4. Human Resources

a. Develops and presents general hazard communication training.
b. Provides all new employees with general hazard communication training.

5. SDS Manager, Building Administrators and Supervisors

a. Ensures containers of chemicals received, distributed, or transferred to other containers have the appropriate hazard communication labeling.
b. Forwards SDSs received with shipments to SDS manager for further distribution.

6. Subcontractors

a. The project manager shall enclose a summary of this Hazard Communication Program in subcontracts involving work on site by contractors. Alternatively, this summary may be provided to subcontractors in pre-construction meetings.
b. Contractors performing work on-site shall include a copy of their hazard communication program in their site safety and health plan if they intend to bring any hazardous chemicals to the premises. SDSs for these hazardous chemicals shall be maintained by the subcontractor and be made available to district staff upon request.

7. Science Teachers

a. Science teachers shall follow procedures in this policy as it applies to an inventory and SDS for chemicals in their classrooms. In addition, they will be provided with general Hazard Communication and operation specific training as a part of their job. The building administrator will coordinate training.
b. All science teachers will comply with the District Chemical Hygiene Plan.

8. All Employees.

a. All employees shall attend district Hazard Communication training and become familiar with the program and the location of the chemical list and safety data sheets. Employees will become familiar with the hazards of chemicals they work with and will not use new chemicals until they have reviewed the SDS and reviewed the hazards with their supervisor.

Hazard Communication Standard Pictogram

As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

HCS Pictograms and Hazards

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

- Gases Under Pressure

Corrosion

- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment
(Non-Mandatory)

- Aquatic Toxicity

Skull and Crossbones

- Acute toxicity (fatal or toxic)

EMERGENCY ACTIONS

Purpose: To inform employees of the proper actions that need to be taken during various urgent or emergency situations.

Procedure: All employees will be provided training on emergency actions and/or situational responses during the initial orientation/job safety training conducted by their supervisor.

The below listed handbook and plans incorporate the district guidelines for responding to situational emergencies, specific incidences, and large natural disasters.

1. **ASD Emergency Procedures Handbook (1)**

2. **ASD High Quality Emergency Operations Plan**

3. **School Specific Emergency Operations Plan**

Note (1): The Emergency Procedures Handbook is located in every occupied space inside every district facility. The district-wide High Quality Emergency Operations Plan and School Specific Emergency Operations Plan are located with the primary administrator at every facility.

HAZARDOUS ENERGY CONTROL PROGRAM (lockout/tagout)

Purpose: This program establishes the requirements for the lockout or tagout of energy sources. It is used to ensure that machines or equipment are isolated from all potentially hazardous energy and locked-out or tagged-out before employees perform any servicing or maintenance activities where the unexpected energization, start-up, or release of stored energy could cause injury.

Procedure: All employees will be instructed on the significance of the lockout or tagout procedures during their initial orientation/safety training conducted by their supervisor. Each new or transferred employee, and other employees whose work operations are or may be in the area, shall be instructed on the lockout or tag out procedures.

Lockout/Tagout Program

Purpose

This Program establishes the requirements for lockout or tagout energy isolating devices. It shall be used to ensure that machines or equipment are isolated from all potentially hazardous energy, and locked-out or tagged-out before employees perform any servicing or maintenance activities where the unexpected energization, start-up or release of stored energy could cause injury.

Responsibility

All employees shall be instructed in the safety significance of the lockout or tagout procedure. Each new or transferred employee and other employees, whose work operations are or may be in the area, shall be instructed in the purpose and use of the lockout or tagout procedures.

Preparation for Lockout or Tagout

Conduct a survey to locate and identify all isolating devices to be certain of all switches, valves or other energy isolating device(s) that apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, or other) may be involved.

Sequence of Lockout or Tagout Procedure

- Notify all affected employees that a lockout or tagout system is going to be utilized and the reason. The authorized employee(s) shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof. If the machine or equipment is operating, discontinue operations and use the normal shut down procedure.
- Close or shut down all switches, valves, and other energy isolating devices so that the equipment is isolated from its energy source(s.) Stored energy (springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure) must be dissipated or restrained by a method such as repositioning, blocking, bleeding down, etc.
- Lockout and/or tagout the energy isolating devices with assigned individual locks and tags.

- To ensure that all energy sources have been de-activated, ensure that employees are not exposed, and then operate the push button or other normal operating controls to make certain the equipment will not operate. **CAUTION: Return operating controls to neutral or off position after the test.**
- The equipment is now isolated from energy sources.

Restoring Machines or Equipment to Normal Operation

- After the servicing and/or maintenance are complete and equipment is ready for normal operations, check the area around the machine to ensure that no one is exposed.
- After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout/tagout devices to restore energy to the machine or equipment.

Procedure Involving More Than One Person

In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place their own personal lockout device on the energy-isolating device(s.) When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used. If a lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet that allows the use of multiple locks to secure it. Each employee will then use his or her own lock to secure the box or cabinet. As each person no longer needs to maintain their individual lockout protection, that person will remove their lock from the box or cabinet.

Lost Key Procedure

If a key to a lockout device is lost or misplaced, report it immediately to your supervisor. Each device will have only one key, and a master key that shall be regulated and retained by the appropriate supervisor. Employees providing lock out service shall keep their key on them at all times.

Removal of Lockout Tagout Equipment by Others

- If a person who initially locked out the equipment neglects to remove their padlock before leaving the work site, the following procedure must be adhered to:
- A complete inspection of the work area by the supervisor or management to insure the person(s) who performed initial lock out/tag out procedures is safe and uninjured.
- If necessary, contact the employee's residence to verify their safety and location and determine if they did or did not complete the assigned task and/or if they inadvertently neglected to remove the lock out signs and padlock.
- These two steps need to be completed before the supervisor in charge of the master key may remove the lock out sign and/or padlock(s.)
- A record of this occurrence shall be kept and the lock out/tag out procedures reviewed by the employee. Progressive disciplinary action should be taken if appropriate.

Basic Rules for Using Lockout or Tagout System
All equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such an operation could cause injury to personnel. DO NOT ATTEMPT to operate any switch, valve, or other energy isolating device when it is locked or tagged out.

Personnel Authorized to Lockout Tagout
All Facilities Maintenance personnel with Lockout/Tag out training.

Lock-out/Tag-out Training

- All Maintenance and Operations employees involved shall be trained in the correct implementation of this program and its elements.
- A "certification" will be prepared with the names and dates of training.
- Lock out/tag out initial training and orientation should be conducted in-person and on-the-job by the new employees immediate supervisor.
- Refresher lock out/tag out training can be completed semi-annually utilizing the SafeSchools training program. This training will be initiated and scheduled by the district Safety Officer.

Periodic Review
At least annually, there will be a review and verification of these procedures.

PERSONAL PROTECTIVE EQUIPMENT

Purpose: To provide employees with protective equipment while performing tasks which present a potential for injury.

Procedure: During the initial orientation and safety training, all employees whose position requires the use of personal protective equipment (PPE) will be provided instruction by their supervisor. The instruction will include the issuance of, and the requirement for use, care, and maintenance of personal protective equipment. A survey of the work area will be conducted to assess the need for PPE and a record of the assessment will be kept on file.

Personal Protective Equipment (PPE) Program

Supervisors are required to assess the hazards of each job and determine what PPE is necessary on the job. They must document the hazard assessment for PPE.
When scheduling the work order task. This must be completed prior to starting the job, or whenever there are any changes in conditions, tools, or processes. The employee will be notified directly of the required PPE for the specific task or job.

- Employees are required to wear PPE as instructed by their supervisor to safely perform their work.
- Required PPE will be furnished to employees at no cost to them.
- Employees are required to maintain PPE in clean working condition according to manufacturer's instructions, test PPE before each use, and to request new PPE as needed.
- It is the supervisor's duty to ensure that appropriate PPE is available to employees, that they are trained in its use and care, and that PPE requirements are enforced.

Hand Protection - (Glove Policy)
Gloves are the most common form of PPE.

All employees are furnished with single-use disposable nitrile, latex, Licra or vinyl gloves in case they should be required to provide first aid or clean up after injury.

Custodial, maintenance, and yard crews are furnished appropriate gloves to protect them from materials they handle and for the protection against chemicals and cleaning compounds that may cause injury to employees' skin.

Kitchen workers are furnished with appropriate gloves per the local Health Department for ready-to-eat food preparation and serving requirements.

Maintenance staff working on or near energized electrical sources (i.e. testing, troubleshooting), will be furnished with rated electrical gloves and protectors. Employees are to follow the Electrical Safety Program.

Eye & Face Protection
Prior to working in any area with potential exposure to hazardous materials/chemicals, the nearest eyewash shall be identified and communicated to all.

Safety glasses (ANSI Z87.1approved) will be worn at all times while performing tasks where particles could hit eyes. When in special eye hazard work areas (such as welding, torch cutting, lasers etc.), the proper eye protection shall be identified and provided. ANSI approved eye wear shall be worn over prescription glasses for access to project work areas until permanent protective eyewear can be obtained.

Goggles shall be worn if the potential for fine particles or chemical hazards exist. Visitors invited to our shop areas where eye protection is required, shall be provided with approved goggles or glasses.

Face shields shall be worn when grinding and handling acids, other hazardous chemicals, or hot liquids/grease that could splash.

Face shields will be worn when cleaning spills of blood or potentially infectious materials when there is a splash hazard.

Head / Scalp
Hard-hats are to be worn in all construction areas unless otherwise communicated or posted. Hard-hats shall meet ANSI Z.89.1- 1986 and shall be Class A or B.

- Metallic hard-hats are prohibited.
- Bump caps are prohibited as head protection.
- Before each use, hard-hats should be inspected for cracks, signs of impact or rough treatment and wear and tear. lf signs of excess wear exist, it should be discarded.
- Hard-hat suspensions shall never be altered. Hard-hats are to be worn with the bill to the front and in accordance with the manufacturer’s directions.

Body Protection
Where chemical hazards (corrosives, etc.) are present, appropriate protection shall be provided to all personnel. The protection provided shall be chosen to be resistant to the hazards and chemical properties as presented by the work.

Legs, Thighs, Knees, Shins, & Ankles
Custodial and maintenance employees shall wear full length pants and shirts with sleeves at least 4" long. Overalls or pants must not have loose, torn or dragging fabric.

Pointed tools shall not be carried in pockets. A canvas or leather tool sheath hung from the belt is acceptable -Remember: All Points Down. Feet & Toes.

At no time will tennis shoes or those types be accepted for adequate footwear. Light-duty Tennis shoes, running shoes, light canvas shoes, etc., are not authorized footwear for custodial or maintenance work or construction areas.

Hearing Protection
Any area or operation that exposes employees to noise in excess of 85 dBA shall be posted as "High Noise Area" or "Hearing Protection Required".

In areas posted "Hearing Protection Required" or "High Noise Area", hearing protection (earmuffs or ear plugs) shall be provided and worn at all times.

General rule of thumb: If background noise is loud enough to require speaking with a raised voice above background noise at 3 feet; the noise level is probably above 85 dBA. If a shout is required; the noise level is probably in the range of 90 dBA or greater.

Employees operating equipment are required to wear either foam ear plugs or earmuffs as provided by the district when exposed to noise levels equal to or over 90 dBA as determined by instrumental monitoring or the general rule listed above or when recommended by equipment manufacturer.

Respirators
If a project plan or exposure monitoring determines that the use of a respirator is required to adequately safeguard employees, all employees shall be trained, medically evaluated, fitted, and supplied with the appropriate respirator for the job. At no time will an employee be allowed to purchase or furnish his or her own respirator.

Respirators shall not be shared. Each employee requiring protection shall be issued equipment.

Anyone wearing a respirator shall be clean-shaven to ensure a secure face/respirator seal.

All personnel required to use a respirator shall be trained and training records will be available upon request.

HAZMAT Exposures
Qualified employees with current training and certification will assist in the choice of PPE whenever entry or work in a hazardous site is required. They will select the PPE in accordance with the manufacturer's recommendations, as stated in the SDS for the chemical exposure that has been identified or called for by their training. This may include, but is not limited to, protective eyewear, clothing, gloves, or respirators. (Use of a respirator requires proper training, fitting, and medical monitoring.)

No entry into areas with HAZMAT exposures will be undertaken without appropriate risk assessment and testing. Procedures for decontamination and cleaning or disposal will be considered.

FIRST AID

A. Purpose: To ensure that each district employee is afforded quick and effective first aid treatment in the event of an on-the-job injury.

B. Procedure:

1. **First Aid Training**

Per WAC 296-800-150 First aid kit guidance, a sufficient number of employees will be trained to ensure that a first aid certified individual is present at or near any location where employees are working. Other school employees required to have first aid training include:

All Health Technicians must have a first aid card: per OSPI/WSDOH.
All PE and health teachers must have a first aid card: per OSPI.
All lab science teachers must have a first aid card: per WISHA/DOSH.
All school bus drivers must have a first aid card: per OSPI.
All day care workers must have a first aid card: per WSDOH.
All coaches must have a valid first aid card: per WIAA.

It is the employee's responsibility to attend first aid certification training if selected by the supervisor.

2. **First Aid Kits**

First aid kits will be maintained at each facility and their locations will be posted on the Safety Bulletin Board and shown to each employee during the safety orientation. If first aid kits are not clearly visible, a sign shall be posted indicating their location. All kits shall be readily accessible.

The building principal, administrator or designee will be designated to ensure that the first aid kits are properly maintained and stocked.

Emergency phone numbers and emergency procedures will be strategically located, such as on the first aid kit, on telephones, on the safety bulletin board and at other areas where appropriate.

SAMPLE: First-aid Kit Contents

(a) 1 absorbent compress, 4x8 inches
(b) 16 adhesive bandages, 1x3 inches

(c) 1 adhesive tape, 5 yards long
(d) 10 antiseptic single-use packages, 0.5g application
(e) 6 burn treatment single-use packages, 0.5g application
(f) 1 eye covering (for two eyes)
(g) 1 eyewash, 1 fluid ounce
(h) 4 sterile pads, 3x3 inches
(i) 2 pair of medical exam gloves
(j) 1 triangular bandage, 39x39x55 inches
(k) Disposable rubber (vinyl) gloves
(l) CPR Micro-shield (sterile, disposable)

Optional First-aid Kit Contents

(a) Bandage compresses, 2x2 inches, 3x3 inches and 5x5 inches
(b) Self-activating cold packs, 4x5 inches
(c) Roller bandages, 6 yards long
(d) Mouth-to-mouth barrier for CPR

Note: ASTM (American Society for Testing and Materials) and ANSI (American National Standards Institute) or other consensus national standard kits will meet these requirements. **Employers should consider the type of hazards at each work site (physical, chemical, biological, number of employees, and local emergency response providers to determine the quantities of first aid supplies.**

A CPR Micro-shield (sterile, disposable) and a supply of disposable rubber (vinyl) gloves are additional items, which should be included in every first aid kit. Disposable gloves should be readily available to every school employee at all times to provide basic barrier protection from bodily fluids; e.g., blood, urine, vomit, mucus, vaginal discharge, etc.

Gloves should be provided to playground supervisors, crossing guards, bus drivers, coaches, club advisors and others who may need to assist a student at a location away from a first aid kit. First aid should not be administered without protection provided by gloves. Other barrier protection devices, such as aprons and eye splash protection, should be available and used whenever circumstances dictate their use (e.g., day care workers, bus drivers and handicapped student instructors and aides).

School administrators should remember that these requirements apply to employees only.

HEARING CONSERVATION PROGRAM

Purpose: To provide protection to all employees from hazardous noise levels and the accompanying potential for permanent hearing loss. This program will apply to those employees who, due to their assignments, are exposed to hazardous noise levels as defined by OSHA and the Washington State Department of Industrial Safety and Health.

Procedure: An initial survey of all district facilities/occupations will be conducted to identify any area or occupation that may exceed either the time weighted average (TWA) of 85 dBA, a noise level above 115 dBA or an impulsive or impact noise measured above 140 dB for further action as required by WAC 296-817-200 thru 500.

Hearing Conservation Program

Exposure to noise over a period of time in excess of recognized standards can cause harm and damage the ability to hear. Our policy is to identify areas where the noise exceeds regulatory standards and to take engineering and administrative steps where practical to reduce the exposure to below action levels. Where engineering and administrative controls do not reduce the level adequately, personal protective equipment (hearing protection) will be provided and its wearing required.

Job Hazard Assessment and Sound Level Surveys
Supervisors are to assess the hazards in work areas and make recommendations for correction. ln areas or for tasks where noise levels are high, (where you would need to raise your voice to be heard at a 3 foot distance) they are to use a sound level meter and conduct a survey and record the findings. Depending upon the survey results, employees will be enrolled in the hearing conservation program and audiometric testing performed.

Employees will be notified when the surveys are going to be conducted in their area and provided with an opportunity to witness. Survey results will be provided to the employee within 5 days of receiving results.

lf the survey indicates the work environment has continuous noise levels of above 85 dBA TWA8, 115 dBA slow response, or impulse noise of 140 dBA the area will be posted and employees required to wear hearing protection. The affected employees will be enrolled in the hearing conservation program.

Employees
Employees are to report areas and activities which produce high noise levels and to wear PPE when instructed by their supervisor.

Preventing Hearing Loss
Hearing loss caused by continuous exposure to noise can be prevented. In situations where the sound levels equal or exceed 85 dBA, an effective hearing conservation program will be administered.

Engineering Controls
When employees are subjected to sound levels equal to or exceeding 85 dBA, administrative controls are utilized when possible. These include:

- Maintenance of machinery to reduce noise level.
- Modification of equipment.
- Substitution of equipment.
- Isolation from the noise source.
- Installation of acoustical material to absorb noise.

If these measures do not reduce the noise level, personal protective equipment and/or administrative controls will be provided and used.

Administrative Controls
When employees are subject to sound levels equal to or exceeding 85 dBA, administrative controls are utilized. These include:

- Rotation of employees.
- Limitation of time for exposure to operation.
- Restricted area of work operation.

Types of Hearing Protection
There are several types of hearing protection available:

- Disposable ear plugs.
- Reusable ear plugs, custom fit.
- Ear canals.
- Earmuffs.

The purpose of these devices is not to eliminate all sound, but to prevent overloading the ears with loud, unnecessary noise. Speech and warning signals are more easily understood if the total intensity of all noise is reduced. The type of hearing protection used is determined by working conditions and personal preference. To effectively protect hearing, the devices of choice must be worn properly and continuously.

Selection of Ear Protectors.
The reduction of noise by hearing protectors is called attenuation. This is expressed in Decibels (dB). The manufacturer of each hearing protector will indicate the amount of attenuation for each type of protector. It will be listed on the package as the Noise Reduction Rating (NRR). A table listing the NRR of common ear protectors is included at the end of this procedure. Ear protectors should be selected which are convenient and comfortable and provide the proper amount of protection for the noise encountered. Under attenuating would lead to excessive noise exposure. Over attenuating in moderate noise levels can lead to a feeling of isolation and, consequently, poor acceptance of the protectors.

When employees work on multiple sites or equipment with varying degrees of noise, two types of hearing protection must be kept on hand at all times.

- Disposable foam ear plugs.
- Earmuffs.

With two levels of hearing protection available, the employee can wear only the foam plugs, only the earmuffs, or, when in the presence of very loud noise, can wear both the plugs and the earmuffs. This provides employees working with differing noise levels with a broad range of hearing protection.

Hearing Protection Training and Record Keeping

Employees who are exposed to noise at or above the 8-hour time-weighted average (TWAB) of 85 dBA shall participate in our hearing conservation program and receive training regarding hearing protection.

The training will be presented periodically to all affected employees and repeated annually. The training will include the following:

1. The effects of noise on hearing and noise control principles.
2. The purpose of hearing protection, the advantages, and disadvantages.
3. The attenuation of various types of hearing protection.
4. Instruction on selection, fitting, use and care of hearing protection.
5. The purpose of audiometric testing and an explanation of the test procedures.
6. The rights of employees to access records on sound measurements and audiometric testing.

All training and educational materials, as well as the Noise/Hearing Protection Standard, shall be available to the employee or his/her representative upon request to the Workers' Compensation Specialist. Audiogram and noise exposure records will be maintained as a part of the employee's permanent record in the Human Resource Department and shall be available to the employee or his/her representative. Records of Noise Surveys/Monitoring, results of special noise studies, and records of special actions or engineering controls installed to control noise exposure will be maintained indefinitely.

Audiometric Testing and Oversight

This district will provide audiometric testing and program review by a licensed audiologist, otolaryngologist, or other qualified physician for all employees in the hearing conservation program. All audiograms will be conducted by one of these licensed healthcare providers or a technician certified by the Council of Accreditation in Occupational Hearing Conservation (CAOHC) and responsible to a qualified reviewer.

CONFINED SPACE PROGRAM

Purpose: This program was established to protect the safety and health of all school district employees and others who enter confined spaces for purposes of maintenance, repairs, and other reasons.

Confined space entry guidelines are governed by Washington Administrative Code, WAC 296-809-200 thru 600 and are intended to provide standards for acceptable conditions for entry into confined spaces and to establish procedures for safe entry, work, and egress.

Confined spaces are identified and classified as either "permit-required," "controlled hazards only" or "non-permit-required" confined space.

Procedures: District personnel responsible for supervising, planning, entering, or participating in confined space entries will be trained in their duties prior to assignment(s).

Confined Space Program

This district will identify and mark with appropriate warning signs all confined spaces on school district property.

Attached as part of this policy is a list of the identified permit-required confined spaces located on district property along with any known hazards related to each confined space.

Definitions

A confined space is an enclosed space that:

- is large enough for an employee to enter;
- has limited or restricted means of entry or exit (for example, tanks, vaults, wells, tunnels, pits, manholes, catch basins); and
- is not designed for continuous human occupancy.

A permit-required confined space (PRCS) is a confined space that:

- contains or has the potential to contain a hazardous atmosphere;
- contains a material that has the potential for engulfing an entrant;
- has an inside configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or a floor which slopes downward and tapers to a smaller cross-section;
- contains any other recognized serious hazards.

Entry is the action by which a person passes through an opening into a permit required confined space.

An entry permit is the written or printed document that is provided to allow and control entry into a permit space.

Engulfment is the surrounding, capturing, or both, of an entrant by divided particulate matter or liquid.

A hazardous atmosphere is one that may expose employees to the risk of death or incapacitation, injury, or illness due to oxygen deficiency or enrichment (less than 19.5 % or greater than 23 % oxygen by volume), flammability, explosive, or toxicity.

A hazardous condition is a non-atmospheric condition that expose personnel to the risk of death, incapacitation, injury, acute illness, or impairment of unaided egress. These conditions include but are not limited to: electrical hazards, thermal hazards, engulfment, entrapment or collapse hazard, mechanical hazards (moving parts, belts pulleys etc.), chemical contact hazards (corrosives, eye/skin irritation), physical hazards (slippery surfaces, falls, tight spaces)

A non-permit confined space is a space which, by configuration meets the definition of a confined space but which after evaluation is found not to contain or with respect to atmospheric hazards, does not have the potential to contain any hazard capable of causing death or serious physical harm.

All Supervisors and employees will follow these rules:

- Supervisors shall ensure that all employees who may enter or work around confined spaces have confined space awareness training.
- Prior to any entry of a permit or non-permit confined space a hazards assessment will be made and the space classified.
- To conduct an evaluation of the space identify hazards, consider the scope of hazard exposure; magnitude of hazard; likelihood and consequences of hazard occurrence; changing conditions/activities; impact on the need for emergency response; testing will be conducted in the presence of entrants.
- Based on the evaluation of hazards, classify and list confined spaces as either permit-required or non-permit confined spaces.
- If a permit is required; complete in detail the Confined Space Entry Permit.
- Expired and completed permits will be saved for 1 year and used to evaluate the confined space programs effectiveness.

Periodic Evaluation of Hazards

Periodic re-evaluation of the hazards will be performed based on possible changes in activities in the confined space or other physical or environmental conditions that could affect the space adversely shall be conducted. Information from expired and completed Confined Spaced Entry Permits will be used.

Marking of Confined Spaces

Signs shall be posted or other warnings shall be used to alert employees of the danger of the particular confined space. "DANGER, CONFINED SPACE. ENTRY PERMIT REQUIRED. DO NOT ENTER! CALL MAINTENANCE AT 931- 4955 FOR ASSISTANCE" signs, barriers, or other means to keep unauthorized persons out of the permit space may be used.

Entry into Confined Spaces

EXCEPT UNDER APPROVED PERMIT, NO EMPLOYEE WILL BE ALLOWED TO ENTER A PRCS.

Entry into a permit-required confined space (PRCS) will be in accordance with the instructions of the Entry Supervisor and the Confined Space Entry Permit.

- The permit will be available at the confined space, have been reviewed by all involved and procedures on the permit followed.
- Periodic testing of the atmosphere will be conducted and the results noted on the permit.
- Any change in conditions from acceptable entry conditions will require immediate evacuation from the confined space, the permit will be canceled, and a new permit required before reentry.
- After the work is finished, the issuing Director of Maintenance/Operations must be notified.

Proper traffic control, warning devices and guards will be set in accordance with Roadway and Traffic Design Standards and other Safety Standards that may be adopted to warn the public passing through the areas.

lf the Entry Supervisor has determined that the only hazard in the identified confined space is atmospheric and ventilation alone can control the hazard, entry into the confined space may be authorized. In such a case, the requirements for alternative protection procedures shall be followed.

No open flame, torch or lighted smoking material shall be brought near an open manhole, cable vault, or sewer nor taken into any of these areas, even though tests indicate the atmosphere inside is free of combustible gases, vapors, or fumes. No employee will enter these even momentarily, until it has been tested properly with detecting devices for explosive gases, oxygen deficiency and hydrogen sulfide.

Use of Safety Harness and Lifelines

Employees who are required to enter manholes, cable vaults, sewers or pits shall wear a safety harness and a lifeline. The lifeline will be attached to an appropriate rescue retrieval device that allows recovery without entry into the space. Hard hats shall be worn in all such structures that are over four feet deep. A trained attendant will remain outside the entrance to tend the line and provide emergency non-entry assistance if needed during the entire time anyone is inside the underground facility.

Those persons tending the lifeline will have available communication devices or be capable of communications with the entrants and reaching rescue services and calling for help.

Manhole Covers and Grates

Equipment to use - two tools may be used for unseating and moving covers and grates. They were devised specifically for these operations.

- Manhole cover hook - 28" long, four pounds, made of 5/8" octagonal, plated tool steel and hardened to prevent bending.

- Manhole cover lifter - 42 y2" L-shaped lever with handle, foot, and swing-out hook with the same details as that of the "cover hook".

The instructions that follow are written for removal and replacement with these tools.

Freeing
When a cover or grate is stuck in its frame, remove any encrustation with a cold chisel. Then, place a block of wood on the cover near the rim, and hit the block with a heavy hammer. Do this at different points until the cover is loosened. Try to avoid causing sparks by any of your activities. Use a railroad pick to complete the freeing operation.

Unseating
Lift with a tool that provides adequate handhold and a positive hold on the cover. On a round manhole cover, engage the circumferential bib before lifting. Unseat the grate or cover about four inches by pulling and lifting with the leg and arm muscles.

NEVER place your fingers or hands under a cover. Spider bites or mashing can result.

Removing
Use a helper when available.

- Clear the area of any hazards to footing.
- With your feet spread and footing secure, pull the cover, clear of the frame, and keep pulling until the cover or grate is in a non-hazardous location. Pull with the arm and leg muscles.
- Pull parallel to any traffic so you do not tumble into the path of a vehicle if your hook slips. Also, do not pull toward precipices (steep slopes) or other hazards that are near the manhole.

Replacing a Round cover or Grate

- Stand parallel to the desired direction of travel with your toes in the clear.
- Place the point of the hook under the edge of the cover nearest you. Lift slightly and swing the cover toward the structure.
- Move to the opposite side and repeat the lifting and swinging.
- Continue this alternate lifting and swinging until the cover is partially over the structure's opening. With the hook, lift the edge that is farthest from the opening. Lift until the cover or grate slips into the frame of the structure.
- lf a helper is available with another hook, stand on opposite sides of the cover and parallel to the direction of travel, securely hook under the cover and slide it to the frame.

Rectangular Covers and Grates

- Follow the first 4 items above
- Use a helper. Single grates weigh up to 326 pounds.
- When pulling the cover clear of the frame, be sure you pull in line with the frame so the cover cannot fall into the opening.

- When replacing, be sure you pull straight into the frame so the cover or grate cannot fall into the opening.

Training:

1. All employees who will be assigned duties associated with entry into confined spaces will be provided with training to enable them to acquire the knowledge and skills necessary for the safe performance of those duties.

2. Training will be provided:

a.) To all employees prior to the first assignment involving confined spaces.

b.) To employees who experience any change in assigned duties involving confined spaces.

c.) Whenever there is a change in operations or procedures for which the employee has not previously been trained.

3. All employees involved in entering confined spaces are required to receive annual refresher training and will be certified to enter confined spaces by the Executive Director of Maintenance and Operations.

4. All training will be documented and certified by the supervisor. The documentation will include the date of training, topics of instruction and the employees and trainer's names and signatures. This documentation must be available for inspection by the employees and their authorized representatives.

FALL PROTECTION PROGRAM

Purpose: To help reduce or eliminate fall hazards and protect employees, the school district has established a Fall Protection Program. This program applies to all employees involved in construction, alteration, repair, or maintenance and everyone who is assigned to perform tasks where fall hazards of ten feet or more exist.

"Fall Restraint and Fall Arrest" general standards are set forth in Washington Administrative Code, WAC 296-155-245, and Part C-1. This program involves establishing a fall protection work plan, or a combination of prevention and protection measures.

Procedures: All employees who work ten feet or more above the ground or other work surfaces shall be trained in the primary elements of the district's Fall Protection Program and job-site plans in accordance with WISHA requirements.

Fall Protection Program

The district's Fall Protection program is administered by the Facilities Services and falls under the compliance guidelines for Chapter 296-880 WAC Unified Safety Standards for Fall Protection.

This district will take all practical measures possible to prevent employees from being injured by falls from heights. We will take necessary steps to eliminate, prevent, and control fall hazards. Protective measures will be taken to protect employees from falling from a height of four (4) or more feet.

When there is a potential for personnel to fall from heights of at least six (6) feet, the supervisor will develop a site-specific fall protection work plan. First consideration will be given to the elimination of fall hazards. If a fall hazard cannot be eliminated; effective fall protection will be planned, implemented, and monitored to control the risks of injury due to falling.

All personnel exposed to potential falls from heights will be trained to minimize the exposures. Fall protection equipment will be provided and its use required by all employees. Supervisors will be responsible for continued training and enforcement of the fall protection program.

Fall Protection Required Regardless of height:

Either a standard railing with standard toe board on all exposed sides, or a floor hole cover of standard strength and construction that is secured against accidental displacement shall guard floor holes, into which persons can accidentally walk. While the cover is not in place, a standard railing shall protect the floor hole.

Regardless of height, open sided floors, walkways, platforms, or runways above or adjacent to dangerous equipment, such as material handling equipment, and similar hazards shall be guarded with a railing and toe board.

Fall Protection Required at 4 Feet or More:

Every open sided walking working surface or platform four (4) feet or more above adjacent floor, or ground level shall be guarded by one of the following fall protection systems. Examples of such raised walking surfaces are wall openings, excavations, holes, ramps, runways, walkways, scaffolding, low slope roofs, and there may be many others.

1. A standard railing, or the equivalent, on all open sides, except where there is entrance to a ramp, stairway, or fixed ladder. The railing shall be provided with a standard toe board wherever, beneath the open sides, persons can pass, or there is moving machinery, or there is equipment with which falling materials could create a hazard.
    - When employees are elevated and working next to the standard railing and could fall over the top rail, the height of the standard railing shall be increased an amount equal to the height where the employee is working.
    - When employees are elevated above the standard railing, but not working next to the standard railing, where there is still a potential for the employee to fall over the top rail, the height of the railing shall be increased. To account for the arc of travel in a free fall and ensure the standard railing meets the employee above their center of gravity, the railing shall be increased to a height so that the measurement taken from the outer edge of the elevated surface, where the employee is working to the top of the standard railing must be equal to or greater than 39 inches. The measurement must be taken on 45 degree or greater angle from the horizontal.
2. A personal fall restraint system;
3. A personal fall arrest system;
4. A warning line system;
5. A standard guardrail system;
6. A safety watch system.

Fall Protection Required at 6 Feet or More:

The district will develop and implement a site-specific plan including each area of the workplace where employees are assigned and where fall hazards of 6 feet or more exist.

The work plan will identify all fall hazards in the work area; describe the method of fall arrest or fall restraint to be provided; describe the procedures for the assembly, maintenance, inspection, and disassembly of the fall protection system to be used; describe the proper procedures for the handling, storage, and securing of tools and materials; describe the method of providing overhead protection for workers who may be in, or pass through the area below the work site; describe the method for prompt, safe removal of injured workers; and be posted or available on site.

Prior to permitting employees into areas where fall hazards exist, the supervisor will insure that employees have received training in the site fall protection work plan and that all fall protection restraint and fall arrest systems have been inspected and comply with the work plan.

Fall Protection Systems

Guardrail Systems: Guardrail systems must meet the following criteria. The top edge height of top rails, or (equivalent) guardrails must be 42 inches plus or minus 3 inches, above the walking/working level.

The guardrail system must be capable of withstanding a force of at least 200 pounds applied within 2 inches of the top edge in any outward or downward direction. Mid rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding a force of at least 150 pounds applied in any downward or outward direction at any point along the mid rail or other member.

Note: A safety warning line system may be used in place of the guardrail system. The warning line must be erected 15 feet back from the unprotected edge. Caution or danger tape is acceptable for a warning line. WISHA will accept it as equivalent to a flagged rope or chain warning line.

Fall Arrest Systems: These consist of an anchorage, connectors, and a body harness and may include a deceleration device, lifeline, or suitable combinations. If a personal fall arrest system is used for fall protection; it must do the following:

- Limit maximum arresting force on an employee to 1,800 pounds;
- Be rigged so that an employee can neither free fall more than 6 feet nor contact any lower level;
- Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and
- Have sufficient strength to withstand twice the potential impact energy of an employee free-falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.
- All personal fall arrest systems shall comply with ANSI 2359.1-1992.

The use of body belts for fall arrest is prohibited. A full body harness is required.

Personal fall arrest systems must be inspected prior to each use for wear damage, and other deterioration. Defective components must be removed from service.

Safety Net Systems: Safety nets must be installed as close as practicable under the walking/working surface on which employees are working and never more than 30 feet below such levels. Defective nets shall not be used. Safety nets shall be inspected at least once a week for wear, damage, and other deterioration. Safety nets shall be installed with sufficient clearance underneath to prevent contact with the surface or structure below. Items that have fallen into safety nets including-but not restricted to, materials, equipment, and tools-must be removed as soon as possible and at least before the next work shift.

Fall Restraint Systems: Full body harnesses (no safety belts) will be used as a means of fall restraint.

Each employee assigned to work at elevated heights has the responsibility of thoroughly inspecting the personal fall protection system prior to use. lf the harness or lanyard is seriously worn or damaged it shall be promptly removed from service and returned to the site supervisor. Damage includes but is not limited to frayed or broken fibers, pulled or torn stitching, abrasions, mold, burns, and discoloration of original fibers. Oil soaked harness should also be promptly removed from service.

lf a fall occurs; the fall protection equipment that was being used at the time (full body safety harness, the lanyard) must be retrieved, and turned over to the site supervisor. Any falls will be fully investigated by the job site supervisor/safety coordinator and new fall protection equipment will be provided to the employee.

Harness and lanyards must only be used as personal equipment. Should any of these items be subject to actual loading or impact force as developed in arresting a fall or otherwise, they must be removed from service and destroyed.

Lanyards must be secured at a level not lower than the user's waist, when practical, at a level that is the highest possible point above the work location. The lanyard should limit the fall distance to a maximum of 4 feet. ln addition, all lanyards must be secured to a substantial structure.

When attaching the lanyard, keep in mind what hazards are directly below work area, should you happen to fall.

Any questions concerning the type of personal fall protection systems best suited for a particular job as well as system installation should be directed to the supervisor or safety coordinator/safety department.

The full body harness must be worn as designed and as intended by the manufacturer. Full body safety harnesses, lanyard, and hardware must meet the specifications set forth in ANSI Standard A10.14 -1975, requirements for use in construction and industrial areas.

The use of body belts for fall restraint is prohibited. A full body harness is required.

Safety Watch System: When work, other than construction work, is performed 15 feet or more from the roof edge, the employer is not required to provide any fall protection, provided the work is both infrequent and temporary and the employer implements and enforces a work rule prohibiting employees from going within 15 feet of the roof edge, employers are allowed to use a safety watch system.

- Ensure the safety watch system meets the following requirements:
    - There can only be two people on the roof while the safety watch system is being used: The one employee acting as the safety watch and the one employee engaged in the repair work or servicing equipment.
    - The employee performing the task must comply promptly with fall hazard warnings from the safety watch.

- The safety watch system cannot be used when weather conditions create additional hazards.
- The employee acting as the safety watch must meet the definition of a competent person as defined in WAC 296-880-095, has full control over the work as it relates to fall protection, has a clear, obstructed view of the worker, is able to maintain normal voice communication; and performs no other duties while acting as the safety watch.

Training

All employees exposed to falls will be trained in the Fall Protection Program. General fall protection training is a requirement for all maintenance/facilities employees as of new employee orientation.

Site-specific training will be provided for site-specific fall protection work plans prior to the employee commencing work in the area. Site-specific training documentation will be maintained at the work site, with a signed training receipt for each employee filed with the employee's safety training records.

Retraining will be provided whenever there is a change of procedure or equipment, a change on job task assignments, or when deficiencies in training are noted by the supervisor.

RESPIRATORY PROTECTION PROGRAM

Purpose: This program is established to ensure that employees who are exposed or potentially exposed to harmful airborne contaminants are properly protected.

WAC 296-842-10000 thru 20020 governs respiratory protection guidelines and are intended to establish work practices to prevent employees from breathing air contaminated with harmful dusts, fumes, mists, gases, smoke, sprays, vapors, or aerosols.

Control methods include preventing atmospheric contamination through effective engineering and substitution of less toxic materials.

Procedures: No school district employee will work in atmospheres that are classified as immediately dangerous to life and health. Those employees whose use of respirators involves only the voluntary use of filtering face pieces (e.g., dust masks) are not required to be included in a written respiratory protection program.

Respiratory Protection Program

PURPOSE

To help reduce the incidence of employee injuries and illness from airborne contaminants, the school district has established this Respiratory Protection Program. Through this program, the district will ensure that employees are aware of the respiratory hazards that they are exposed to when working, and protective measures that are employed to prevent adverse health effects from occurring.

In the control of occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, vapors, or aerosols, the first goal is to prevent atmospheric contamination through effective engineering control measures. (These include enclosure or confinement of the operation, general or local exhaust ventilation, and substitutes of less toxic materials.) Some schools choose to use more environmentally friendly products. If neither is feasible, respiratory protection will be used to protect employees.

To protect the health of the employee against recognized respiratory hazards, the school district will provide, at no cost to the employee, a suitable NIOSH-certified respirator that is clean, sanitary, and in good condition. The district will also provide required training, medical evaluation, and fit testing, and ensure that employees use respirators where required.

RESPIRATORY PROTECTION STANDARDS

WISHA's respiratory protection standards are set forth in WAC 296-842-100, "Respiratory Protection." A Respiratory Protection Program is required in any workplace where respiratory hazards are present and respirators are necessary.

Required program elements (see WAC 296-842-12005)

These standards require a written respiratory protection program that must include the following:

1. Procedures for **selecting respirators** for use in the workplace and a list identifying the proper type of respirator for each respiratory hazard (WAC 296-842-13005);
2. **Medical evaluation** of employees required to use respirators (WAC 296-842-14005);
3. **Fit testing** procedures for tight-fitting respirators (WAC 296-842-15005);
4. Procedures for **proper use of respirators** in routine tasks, non-routine tasks, reasonably foreseeable emergency, and rescue situations (WAC 296-842-16005).
5. Procedures for **issuing the proper type of respirator** based on the respiratory hazards for each employee (WAC 296-842-13005).
6. Procedures and schedules for **cleaning, disinfecting, storing, inspecting, repairing**, **discarding, and otherwise maintaining respirators** (WAC 296-842-17005);
7. Procedures to make sure **adequate air quality, quantity, and flow** of breathing air for atmosphere-supplying respirators (WAC 296-842-20005);
8. **Training of employees in the respiratory hazards** to which they are potentially exposed during routine, non-routine, and unforeseeable emergency and rescue situations (WAC 296-842-16005);
9. **Training of employees in the proper use of respirators**, including putting on and removing them, any limitations on their use, and their maintenance (WAC 296-842-16005);
10. Procedures for **regularly evaluating the effectiveness** of the program (WAC 296-842-12005).

This plan is a summary of the WISHA requirements; users should refer to the standard for specific details of its implementation.

B. Designation of a Program Administrator (see WAC 296-842-10505)

A Program Administrator is a trained individual responsible (1) to oversee the respiratory protection program and (2) to conduct the required evaluations of the program's effectiveness. She/he is charged with implementation of, and adherence to, the provisions of the respiratory protection program, and assuring that the respiratory protection measures outlined in this practice are appropriate for each job and are followed. For this school district, the designated Program Administrator is the Assistant Direction for Health Services: Vicki Wagner, RN; PH# (253) 931-4927, together with the District Safety Office: John Lobdell; PH# (253) 931-4955.

C. Other related WISHA standards

There are other WISHA standards that require the use of respiratory protection for employees, including the following: abrasive blasting; working with asbestos containing materials; areas containing carcinogens; confined spaces; industrial exhaust systems; fire brigades; masonry saws; mechanical paint removers; sanding machines; spray finishing operations; tunnels and shafts; welding, cutting, and heating, hot work; and agriculture.

Note: This standard does not apply to the single-strap, non-approved, filtering face piece disposable dust masks.

WHERE RESPIRATORY PROTECTION MAY BE NEEDED IN SCHOOLS

Examples of maintenance and custodial activities in schools where employees may be exposed to potentially toxic environments, and respiratory protection may be required, include (but are not limited to) the following:

- cleaning, finishing, sanding, or buffing floors
- blowing down heaters or air handlers
- applying pesticides, herbicides, or fertilizers
- spray painting
- welding
- spray application of sealants
- septic work
- remediation work for indoor air quality problems
- performing asbestos abatement activities or working with known or suspected asbestos containing materials

(Note: Job descriptions should reflect the potential positions to wear respirators.)

ACTIVITIES WHERE RESPIRATORY PROTECTION IS NEEDED

A. Assessing the respiratory risk

The first step in determining whether respiratory hazards exist is through the district's Hazard Communication Program, and the hazard information found on the Safety Data Sheets (SDS). Employees and supervisors should review the Safety Data Sheets for the substances being used and evaluate work practices to determine if respiratory protection is needed. (This applies to both routine and non-routine tasks.) The "Workplace Respiratory Hazard Assessment" form can be used to assist with this assessment. (Note: Respiratory risk can also be found in asbestos-containing materials, which is addressed in a separate program.) If possible, before respirators are issued, the supervisor should work to eliminate the need for respiratory protection through effective engineering control measures, such as ventilation.

B. Emergency situations

An emergency, in this context, means any occurrence that may or does result in an uncontrolled significant release of an airborne contaminant. (Causes can include equipment failure, rupture of containers, or failure of control equipment.)
In this school district, **we anticipate no emergency situations that require respiratory protection.** As listed in other plans, in the event of such an emergency, staff and students quickly evacuate the building and do not reenter the hazardous area. **No school district employee will attempt an emergency rescue in a potentially dangerous environment. No school district employee will work in atmospheres that are immediately dangerous to life and health.**

SELECTING THE PROPER TYPE OF RESPIRATOR

A. Types of respirators

A **respirator** is a device designed to protect the wearer from breathing harmful vapors. There are two primary kinds of respirators - air-purifying respirators and atmosphere-supplying respirators.

Air-purifying respirator means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element. They do not supply oxygen, so they should not be used in an oxygen deficient atmosphere. Three types are available: particulate removing, gas- and vapor-removing, and combination particulate- and either gas- or vapor-removing.

- **Canister or cartridge** means a container with a filter, sorbent, or catalyst, or any combination of these materials, which removes specific contaminants from air drawn through it.

    - **Mechanical filter** respirators can protect the wearer from both solid and liquid particles, including dusts, mists, fumes, smokes, and aerosols. This can be a disposable type made with laminated filter (a dust mask), or a face piece with a filter holder. Mechanical filters do not protect wearers from gases or vapors.

    - **Chemical cartridge** (or canister) respirators are designed to protect the wearer from hazardous substances such as acid gases, organic vapors, ammonia, formaldehyde, and certain pesticides. Cartridges usually contain activated or chemically treated charcoal. (There are many organic chemicals for which there are no NIOSH approved chemical cartridges.) Cartridges are color coded to designate the atmospheric contaminants to be protected against (i.e. - acid gases - white; organic vapors - black); this is also written on the cartridge.

    - **Combination** respirator combines both mechanical and cartridge elements to protect against multiple contaminants.

Atmosphere-supplying respirator means a respirator that supplies the user with breathing air from an uncontaminated source and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA). They supply air that is independent of the air surrounding the wearer. Four types are available: supplied-air or airline; combination supplied-air and air purifying; combination supplied-air with auxiliary self-contained air supply; and self-contained breathing apparatus.

- **Self-contained breathing apparatus (SCBA)** means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user (traditionally in a tank carried on the user's back). This type protects against a wide variety of contaminants at almost any concentration.

- **Supplied-air respirator (SAR) or airline respirator** means an atmosphere-supplying respirator for which the source of breathing air is drawn from a separate, stationary system or an uncontaminated environment. These respirators are not acceptable in atmospheres that are immediately dangerous to life and health.

A **half face piece** respirator covers the wearer's nose and mouth; a **full-face piece** respirator covers the wearer's nose, mouth, and eyes. These types of respirators traditionally come in three sizes: small, medium, and large.

B. Choosing the best respirator for the job

Respiratory hazards are classified into several categories: oxygen deficient; physical properties (gas, vapor, biological aerosols, and particulate contaminants); physiological effects on the body (asphyxiate, carcinogenic, toxic); concentration of toxic material or radioactivity level; established exposure limits; and established immediately dangerous to life or health concentrations. An employee exposure is a worker's exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

Determining the type of respirator that is appropriate for each task is essential. The wrong kind of respirator may not protect the worker. The proper type of respirator should be chosen based on the respiratory hazards of the job, the configuration of the job, and the relevant factors pertaining to the workplace and respiratory user that affects respirator performance. It should be appropriate for the chemical state and physical form of the contaminant, and correctly fit the user.

The respiratory hazard job assessment will be completed or reviewed by the Program Administrator (named in section II). This assessment will be documented on the "Workplace Respiratory Hazard Assessment" form or similar document.

If there are questions about which type of respirator to use, review the Safety Data Sheet(s) or product label, talk to the respirator manufacturer or distributor, the Program Administrator, or a WISHA consultant. For more detailed information on how to choose a respirator, the WISHA standard, "Additional Information Regarding Respirator Selection." (Note: When using pesticides, be sure to follow the label requirements for respirator selection and use.)

Respirators used must be selected from those approved by the National Institute for Occupational Safety and Health (NIOSH) that are applicable and suitable for the purpose intended. A NIOSH-approved respirator contains the following: an assigned identification number associated with each unit; a label identifying the type of hazard the respirator is designed to protect against; and additional information on the label that indicates limitations and identifies the component parts approved for use with the basic unit.

In most cases, the respirator should be reserved for the exclusive use of a single individual. The respirator must correctly fit the user.

The Program Administrator in one location will maintain a list of respirators issued to every employee. Copies of the completed "Workplace Respiratory Hazard Assessment" forms and "Respiratory Protection Training Records" will fulfill this requirement.

ENSURING THAT AN EMPLOYEE CAN WEAR A RESPIRATOR

A. Medical Evaluations and Approval

All respiratory protection devices impose some kind of physiological stress on the user. Air-purifying respirators, for example, make breathing more difficult. Persons with heart or lung diseases or other health problems may be harmed by wearing a respirator. Many physicians counsel pregnant workers against wearing respirators.

Only those individuals who are medically able to wear respiratory protective equipment shall be issued a respirator. Before being issued a respirator, and as often as medically indicated, an employee will receive pertinent tests to evaluate medical and physical conditions. (These can include - physical exams, blood chemistry, pulmonary function, chest x-ray, EKG, etc.) The employee's physician visits will be at no cost to the employee and will occur as part of his/her regular workday.
Each potential respirator wearer should be individually evaluated to determine the employee's ability to use a respirator. This is a joint effort by the district, employee, and designated licensed health care provider. Duties are as follows:

<u>District's duties:</u>

- Identify a PLHCP (physician or other licensed healthcare provider) to perform medical evaluations.
- Provide a copy of the following documents to the PLHCP: the school district's written respiratory protection program, the district's fit testing procedures, the WISHA Respiratory Standard (WAC 296-842-22010)
- Provide specific respiratory hazard and respirator information to the PLHCP (see WAC 296-842-13005); the completed *Workplace Respiratory Hazard Assessment* form can be used for this

- Administer the *WISHA Respiratory Medical Evaluation Questionnaire*@ confidentially to the employee and send it to the PLHCP
- Respond appropriately to written recommendations from the PLHCP.
- Provide additional medical evaluations as indicated by the PLHCP.

In this school district, the Program Administrator will give the blank *WISHA Respiratory Medical Evaluation Questionnaire*@ to the employee and ask him/her to complete it and take it with him/her to the PLHCP.

PLHCP's (physician or other licensed healthcare provider's) duties:

- Review specific respiratory hazard and protection information and determine what additional questions to ask.
- Review and evaluate the completed *WISHA Respiratory Medical Evaluation Questionnaire.*
- Arrange for any necessary medical testing (this may include: a pulmonary function test, chest x-ray, or electrocardiogram)
- Complete any follow-up evaluations with employee
- Complete the written recommendations for respirator use and send to both the employee and district.

The employee will cooperate with all of the above and provide input on respirator selection and use when requested.

Medical evaluation forms are found in WAC 296-842-22005 “Respiratory Medical Evaluation Questionnaire" and "Health Care Provider Respirator Recommendation Form".

B. Types of Fit Testing for Tight-Fitting Respirators

Fit test means the use of an accepted protocol to evaluate the fit of a respirator on an individual. (See WAC 296-842-22010, "General Fit Testing Requirements for Respiratory Protection" for requirements and additional information on fit testing.) Fit tests must be administered using WISHA-accepted protocols.

Qualitative fit test (QLFT) means a pass/fail test that relies on the individual's response to the test agent to assess the adequacy of respirator fit for an individual. WISHA-accepted QLFTs include: (1) isoamyl acetate (banana oil), (2) saccharin solution aerosol (taste response), (3) Bitrex (denatonium benzoate) solution aerosol (taste response), and (4) irritant smoke (stannic chloride). See Appendix A-2, "Qualitative Fit Testing (QLFT) Protocols for Respiratory Protection" for details of this testing.

Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit for an individual by numerically measuring the amount of leakage into the respirator. WISHA-accepted QNFT's include: (1) generated aerosol protocol, (2) ambient aerosol condensation nuclei protocol, (3) portacount fit testing procedures, and (4)

controlled negative pressure fit testing. See Appendix A-3, "Quantitative Fit Testing (QNFT) Protocols for Respiratory Protection" for details of this testing.

In this school district, the banana oil or irritant smoke qualitative fit tests will be used for fit testing tight-fitting respirators.

In order to ensure that the respirator will seal properly, all employees required to wear a respirator must be and remain clean-shaven. (Clean-shaven means that the employee has no beard or shadow that will prevent the respirator from making a smooth seal with the face. Moustaches that do not extend below the lower lip and do not interfere with the respirator fit may be worn.) In addition, corrective glasses, goggles, or other personal protective equipment may not interfere with the face-to-face piece seal or valve function.

C. Frequency of Testing

The purpose of the fit test is to ensure that the tight-fitting mask fits securely and does not allow vapors, fumes, etc. to enter and be inhaled.

- All staff required to wear NIOSH approved filtering face piece respirator must pass an initial fit test before using the respirator.
- Fit testing is to be done annually per WAC 296-842-15005.
- Fit testing will be performed in accordance with WAC 296-842-22010. Fit testing for the ASD is currently provided through Northwest Response.
- Northwest response uses an OSHA qualitative respirator fit testing through air to smoke method utilizing stannic chloride.

Once an employee has passed the medical exam, a fit test must be conducted for tight-fitting respirators:

- **Before the initial respirator use**,
- When a different respirator is used,
- When there are changes in the employee's physical condition that could affect respirator use,
- Annually thereafter.
- AHERA regulations require fit testing every six months.

The Program Administrator will keep a record of the initial or most current fit test for each employee who uses a respirator on file.

In addition to the required formal fit testing by a qualified person, the wearer before each use should check the snug fit of the mask on tight-fitting respirators. See WAC 296-842-22020, "User Seal Check Procedures," for this protocol.

ENSURING EFFECTIVE RESPIRATOR OPERATION

Follow the manufacturer's written recommendations for respirator selection, use, inspection, maintenance, filter replacement, cleaning, and storage.

A. Inspecting the Respirator

The wearer prior to each use and during cleaning shall inspect respirators and their components. Respirators shall be removed from service if their function has been adversely affected. Items removed from service should be tagged as defective and should not be returned to use until repaired or adjusted properly and deemed safe by a trained individual.

Employees should never alter or repair a respirator. Only NIOSH-approved replacement parts from the respirator's manufacturer can be used. Repairs should be made according to the manufacturer's specifications.

The face piece, mask, head straps, filters/canisters/cartridges, housing, hoses, and valves should be checked for any deterioration or damage including:

- Dirt
- Corrosion
- Cracks, tears, breaks, or holes
- Distortion from improper storage
- Cracked, scratched or loose fitting lens.
- Broken or missing mounting clips, buckles, or attachments.
- Loss of elasticity/pliability
- Excessively worn head straps that might let the face piece slip
- Deterioration of rubber straps, hoses, nose clips, etc.
- Inhalation/exhalation valve damage
- Detergent residue, dust, or dirt on the valve seat
- Cracks, tears, or distortion in the valve
- Missing or defective valve cover
- Proper type of filter for the job and contaminants
- Missing or worn gaskets
- Worn threads.
- Cracks or dents in the housing
- Spent, dirty, used filters.
- Expired cartridges or contaminated prefilters for cartridges

Note: Cartridges usually are considered spent after eight hour of consecutive use, after two weeks (even without much use), or when break-through is detected by the wearer - whichever comes first. Follow the manufacturer's guidelines for replacement of the pre-filter, filter, cartridge, and canister.

B. Ensuring adequate air supply

Before each use of an atmosphere-supplying respirators (SCBA or SAP), the user should also check to make sure that the air tank is fully charged (SCBA) or the air line is correctly connected and functioning (SAP), and the regulator and warning devices function properly. Review WAC 296-842-20005 for more detailed requirements for ensuring proper breathing air quality.

C. Cleaning and disinfecting the respirator

Periodically, respirators should be cleaned and disinfected. If the respirator is used by more than one person (which is not the norm in a school district), the respirator should be cleaned and disinfected after each use.

Most respirators can be washed in a detergent solution and immersed in a sanitary solution. However, rubber and plastic can be damaged by strong cleaning agents, alcohol, lacquer/paint thinner, etc. Check the manufacturer's recommendations concerning cleaning. See WAC 296-842-22015 "Respiratory Cleaning Procedures," for this protocol.

D. Storing the respirator

After the respirator has been removed and cleaned or wiped, it should be placed in a plastic bag provided by the supervisor and stored it in a secure location (dedicated lockers or cabinets are traditionally used) near the worksite. The respirator should be protected from damage, contamination, dust, light, heat, cold, moisture, or chemicals.

E. Employee complaints or problems with respirators

When there is a change in work area conditions, or degree of employee exposure, or stress that may affect respirator effectiveness, the district must reevaluate the continued effectiveness of the respirator. If health problems or respiratory hazards are suspected, contact the job supervisor or Program Administrator. Symptoms which that may indicate problems with respirator use include: eye or skin irritation, changes in breathing resistance, severe discomfort in wearing the respirator, sensations of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever, and chills.

EMPLOYEE TRAINING

Each employee who engages in work with an associated respiratory hazard, and his/her supervisor must be trained in the proper use of the respiratory protection appropriate for that job **before** being required to wear a respirator. The training session should be conducted by a qualified individual and overseen by the Program Administrator. Employees must be retrained if they change or add to the types of equipment they use, if circumstances change significantly, or problems are identified. Retraining must be completed annually.

Training must ensure the employee understands the following:

1. Why the respirator is necessary and how improper fit, use or maintenance can compromise the protective effect of the respirator.
2. What the respirator is capable of doing and what its limitation are.
3. How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
4. How to inspect, put on and remove, use, and check the seals of the respirator.
5. The procedure for maintaining and storing the respirator.

6. How to recognize medical signs and symptoms that may limit or prevent the effective use of the respirator.
7. The general requirements of the Respiratory Protection Standard, WAC 296-942-12005, Table 3.

A record of the training must be kept. The form, "Respiratory Protection Training Record," can be used for this purpose.

If inappropriate respirator use is noted during routine job surveillance or periodic program evaluation, the employee should be retrained.

EVALUATING THE RESPIRATORY PROGRAM'S EFFECTIVENESS

At least annually, the district will consider the effectiveness of the respiratory protection program. The Program Administrator will coordinate this evaluation and report its status to the district's safety committee.

Evaluation should include periodic visits to the workplace by the Program Administrator to (1) make sure that the requirements of the current written program are being effectively carried out and respirators are being worn, and (2) solicit comments from employees required to use respirators about the program's effectiveness and any problems with respirator use. Plans for updating training and fit testing should also be done annually. The written program should be updated as necessary.

RECORD KEEPING

The Program Administrator should keep the following written records:

- The current written Respiratory Protection Program
- Program evaluations and monitoring

For each respirator user:

- Written recommendations from the PLHCP.
- The most recent fit testing noted on the "Respirator Fit Test Record."
- Completed "Workplace Respiratory Hazard Assessment" or equivalent.
- Completed "Respiratory Protection Training Record" or equivalent.

The Program Administrator in one location will maintain a list of respirators issued to each employee. Copies of the completed "Workplace Respiratory Hazard Assessment" forms and "Respiratory Protection Training Records" will fulfill this requirement.

VOLUNTARY USE OF RESPIRATORS

The district may provide respirators at the request of employees, or permit employees to use their own respirators, if the Program Administrator determines that respirator use will not in itself create a hazard. The district must ensure that any employee using a respirator voluntarily should be medically able to use that respirator, and that the respirator is cleaned, stored, and maintained properly. (This does not apply to the single-strap, non-approved, filtering face piece disposable dust masks.)

Employees who choose to wear a respirator when not required should be provided with the following information found in WAC 296-842-11005.

Important Information about the Voluntary Use of Respirators

Note: "You" and "your" means the employee in the following information.

Respirators protect against airborne contaminants when properly selected and worn. Respirator use is encouraged, even when exposures to contaminants are below the exposure limit(s), to provide an additional level of comfort and protection for the workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to you. Sometimes, workers may wear respirators to avoid exposures, to hazards even if the amount of the hazardous contaminants (chemical and biological) does not exceed the limits set by WISHA standards. If your employer provides respirators for your voluntary use, or if you are allowed to provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and follow all instructions provided by the manufacturer on use, cleaning, and care, and warnings regarding the respirator's limitations.
2. Choose respirators certified for use to protect against the contaminants of concern. NIOSH, the National Institute for Occupational Safety and Health of the U. S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect. For example, a respirator designed to filter dust particles will not protect you against solvent vapor or smoke (since smoke particles are much smaller than dust particles).
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

FORM A: Filtering Face piece Respirator Fit Test Record

Date:

Name of employee:

Has this employee been medically cleared for filtering face piece respirator use? If not, then do not proceed with the fit test.
Yes ___ No___

Is this employee clean-shaven (i.e., no facial hair or stubble) in the mask-to-face seal area? If not then do not proceed with the fit test.
Yes ___ No ___

The employee was shown how to properly put on, seal check, and remove the respirator and was able to demonstrate this correctly. If not, provide additional instruction until the employee succeeds.
Yes ___ No ___
Fit-testing procedure/protocol used: Bitrex™ ___ Saccharin ___ Other:

Filtering Face Piece Make, Model, & Approval #	Size	Result: Pass or Fail? (circle one)
(complete this row of information based on each fit test for this employee)		P F
		P F
		P F

Person conducting this fit test:
NOTES:

FORM B: Filtering Face-Piece Respirator Training Record

Employee Name (printed):

I certify that I have been trained in the use of filtering face piece respirators, including:

- How the respirator protects me from the coronavirus and when I need to wear it.
- The respirator's capabilities and limitations
- Why I needed to get medical clearance for respirator use.
- How improper fit, use, or storage can make it ineffective.
- How to properly inspect, put on, seal check, use, and remove it.
- When and how to temporarily store it so it does not get damaged, contaminated inside, or spread contamination at work
- What to do if my respirator is defective, gets damaged, or somehow does not perform as it should
- The company's obligations under the Respirators Rule, Chapter 296-842 WAC and where to review a copy of the company's written respirator program.

I now feel confident to use my respirator. If I have a problem with comfort or other use issues or if I could benefit from additional respirator user training, I can contact my supervisor or the Respirator Program Administrator for assistance.

Employee signature:

_____

Instructor 's signature:

_____

Date:

_____

BLOODBORNE PATHOGENS EXPOSURE CONTROL PROGRAM

1. Purpose and Procedures

In accordance with the WISHA Bloodborne Pathogens standard WAC 296-823, Auburn School District has developed the following exposure control plan to eliminate or minimize employee occupational exposure to blood or other potentially infectious materials as detailed in the Occupational Exposure to Bloodborne Pathogens Standard.

All employees shall receive training on the district's Bloodborne Pathogen Exposure Control Plan upon initial employee orientation. Employee training will be updated whenever the introduction of new or modified tasks or procedures warrants it.

2. Administration and Compliance

The Auburn School District Assistant Superintendent for Human Resources is the administrator of this plan and is responsible for its implementation.

The Executive Director of Student Support Services will maintain, review, and update this plan at least annually, and whenever necessary to include new or modified tasks and procedures.

The District Safety Officer will make this plan available to employees and WISHA (Washington Industrial Safety and Health Act) representatives.

The Assistant Director for Health Services will be responsible for making sure all medical actions required are performed.

Employees who are identified as having occupational exposure are required to comply with the procedures and work practices outlined in this exposure control plan. Failure to follow these procedures could result in disciplinary action.

3. Definitions

"Blood" means human blood, human blood components, and products made from human blood.

"Bloodborne pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

"Contaminated," means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

"Contaminated laundry" means laundry that has been soiled with blood, urine, feces, vomitus, or other potentially infectious materials.

"Contaminated sharps" means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass.

"Decontamination" means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

"Engineering controls," means controls (e.g., sharps disposal containers) that isolate or remove the bloodborne pathogens hazard from the workplace.

"Exposure incident" means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials those results from the performance of an employee's duties.

"Hand washing facilities" means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

"HBV" means hepatitis B virus.

"HIV" means human immunodeficiency virus.

"Occupational exposure" means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

"Other potentially infectious materials" (OPIM) means anybody fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids or any body tissue.

"Parenteral" means piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

"Personal protective equipment" (PPE) is specialized clothing or equipment worn by an employee for protection against a hazard.

"Source individual" means any individual whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.

"Universal precautions" are an approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

"Work practice controls" means controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

4. Exposure Determination

WISHA requires employers to perform an exposure determination to identify employees who have occupational exposure to blood or other potentially infectious materials. Occupational exposure means "reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious material that may result from the performance of an employee's duties." For purposes of the determination, employees are considered to have occupational exposure even if they utilize PPE while performing duties that put them at risk for exposure. Below is a list of all job classifications and tasks in which employees may be expected to incur such occupational exposure, regardless of frequency.

Job Classifications in which employees have occupational exposure are:

Registered Nurses
Health Room Technicians
Special Ed Teachers (BD and SLC only)
Special Ed Para-Professionals (BD and SLC only)
Special Ed Bus Driver Assistants (BD and SLC only)
District Police Officers
School Security Staff
Custodial Staff
Bus Drivers (Special Ed Student drivers)
Safety Officer

5. Compliance

a. Universal Precautions

Universal precautions will be observed at all district facilities in order to prevent contact with blood or other potentially infectious materials. This means that all blood or OPIM will be considered infectious regardless of the perceived status of the source individual.

b. Engineering Controls

Auburn School District conducts ongoing evaluation of tasks and medical devices that carry a risk of exposure and implements safer medical devices whenever feasible. The district's nursing staff assigned to the Student Support Services Department will conduct evaluations annually. A representative sample of non-managerial employees is included in all evaluations.

We have developed the following engineering controls to prevent or minimize exposure to bloodborne pathogens. New technology will be implemented and evaluated whenever possible. Our engineering controls will be evaluated and maintained as described below:

Controls in Use	Location	Evaluation/Service Interval
Sharps containers	*Health Room*	*When 2/3 full, Nurse seals the container and submits a work order for warehouse pickup.*
Waste Disposal	*Health Room*	*While wearing gloves, double bag with plastic bag*
Restroom Facility	*Health Room*	*Provide separate restroom facility inside or immediately accessible to Health Room*

c. <u>Work Practice Controls</u>

The following work rules apply where there is a potential for contact with blood or OPIM.

Hand and Body Washing:

- Hand washing facilities are available to employees who are exposed to blood or other potentially infectious materials.
- Employees shall wash their hands after removal of personal protective gloves.
- When hand washing facilities are not readily available, the use of waterless hand washing products is permitted in interim means of washing the hands or other parts of the body after contamination with blood or OPIM.
- If blood or other potentially infectious material contacts mucous membranes then those areas shall be washed or flushed with water as appropriate as soon as possible following contact.

Other Work Practices:

- Contaminated needles may not be recapped, bent, or broken off. Shearing or breaking of contaminated needles is prohibited. They must be deposited in a sharps container immediately or as soon as possible after use.
- Sharps containers must be closed prior to removal or replacement to prevent spilling or protrusion of the contents during handling or storage.
- All procedures will be conducted in a manner that will minimize splashing, spraying, splattering and generation of droplets of blood or other potentially infectious materials.
- Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.
- Regulated waste material must be placed in a double bagged, red plastic bag, which is to be closed before removal to prevent spillage or protrusion of contents. If the outside of the container becomes contaminated, then it must be placed in a second red plastic bag.

d. Personal Protective Equipment (PPE)

All PPE utilized at district facilities will be provided without cost to employees. PPE will be chosen based on the anticipated exposure to blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time during which the protective equipment will be used. Employees will receive training on the appropriate use of PPE provided for specific tasks.

The following personal protective equipment is provided for health room workers:

PPE	Use Guidelines
Disposable Gloves – (acrylic, latex, lycra, nitrile)	*To be worn during all medical treatment, cleaning up of any type of blood and while handling infectious waste.*
Mask, one way CPR mask	*To be worn while performing CPR*
Mask, surgical, N95, KN95	*To be worn during medical treatment if there is potential exposure to the facial areas.*

Refer to safe working practices for medical procedures for the use of PPE for specific tasks that may expose workers to blood or other potentially infectious material.

If required PPE is not available, contact the school health technician or office manager who will ensure that supplies are replenished.

Gloves

- Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes.
- Disposable gloves are not to be washed or decontaminated for re-use and are to be properly discarded as soon as practical when they become contaminated or as soon as possible, if they are torn, punctured, or when their ability to function as a barrier is compromised.

e. Housekeeping

Work surfaces must be decontaminated with an approved disinfectant as soon as possible after contamination with blood or OPIM.

The following locations require cleaning and decontamination on a scheduled basis:

Area	Scheduled Cleaning (Day/Time)	Cleaners and Disinfectants Used	Specific Instructions
Health Room countertop	*Daily by Custodial staff*	*As available from warehouse custodial*	*Per Supervisor*

and sink		*supplies*	
All school restroom toilets and urinals	*Daily by Custodial staff*	*As available from warehouse custodial supplies*	*Per Supervisor*

Handling of Waste Material

- Used sharps containers are to be closed, sealed, and transported to the King County Health Department by the school nurse.
- Never manually open, empty, or clean contaminated sharps containers.
- Other infectious waste shall be placed in the wastepaper basket (See 5.c. under "other work practices.")
- Always use mechanical means such as tongs, forceps or a brush and dustpan to pick up contaminated broken glassware. Never pick up with your hands – even if gloves are worn!

f. Laundry

- Laundry service is operated by Auburn School District.
- Handle contaminated laundry as little as possible, with minimal agitation.
- Place wet contaminated laundry in leak-proof, labeled, or color-coded containers before transporting to the laundry facility.
- Wear appropriate PPE when handling and/or sorting contaminated laundry.
- Contaminated linens should be washed with detergent in water at least 140F – 160F for 25 minutes. If low temperature laundry cycles are used, chemicals suitable for low temperature washing at proper use concentration must be used.

6. Hepatitis B Vaccine

All employees whose positions have been identified as having potential occupational exposure to blood or OPIM through the exposure determination described in section 4 of this plan, will be offered the Hepatitis B vaccine series at no cost to the employee within 10 days of initial assignment unless:

- *the employee has previously received the series;*
- *antibody testing reveals that the employee is immune;*
- *medical reasons prevent taking the vaccination; or*
- *the employee chooses not to participate.*

Employees will be provided with information on Hepatitis B vaccinations addressing its safety, benefits, efficacy, methods of administration and availability from the Auburn location of the South King County Health Department.

All occupationally exposed employees are strongly encouraged to receive the Hepatitis B vaccination series. If an employee chooses to decline the Hepatitis B vaccination and has an occupation that may include high-risk exposure (as listed previously), the employee must

sign a copy of the declination statement in Appendix A of this plan. The declination statement will be kept in the employee's personnel record. Employees who decline may request and obtain the vaccination later at no cost.

7. Evaluation and Management of Exposure Incidents:

a. Post-Exposure Evaluation and Follow-up

1. Wounds and skin sites that have been exposed to blood or other potentially infectious body fluids should be washed with soap and water; mucous membranes should be flushed with water.
2. Immediately report the exposure incident to the principal and office manager.
3. Following a report of exposure, the employee needs to document the exposure incident by filling out the following forms: Report of Accident/Incident (Forms, page 123 and online at: http://www.pswct.org/school-district-employee/reporting-an-incident/. and an Exposure Incident Report (Appendix B).
4. The employee needs to be evaluated by the Auburn Regional Medical Center emergency department within one hour of exposure. It is important that employees receive a prompt medical evaluation because HBIG, Hepatitis B vaccine, and HIV post-exposure prophylaxis are most likely to be effective if administered as soon after exposure as possible. The employee will need to read and complete the Employee Consent to Administer Communicable Disease Blood Test (Appendix C). This follow-up and all related blood testing shall be available at no cost to the employee, be provided at a reasonable time and place, and be performed by a licensed physician or other appropriately trained licensed health care professional.
5. The physician will need to complete a Healthcare Professional Written Opinion Post-Exposure report (Appendix D) and will provide the employee with a copy within 15 days after completion of the evaluation. Another copy will be placed in the employee's personnel file.
6. After an exposure, an employee has the right to request that the source individual's blood be tested as soon as feasible. If consent is not obtained from the source individual, the district shall provide documentation that legal consent cannot be obtained. Results of source testing shall be provided to the employee, and the employee shall be informed of all applicable laws and regulations concerning disclosure of the identity and infectious status of the source.
7. If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline sample for at least 90 days: if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

b. Review of Exposure Incidents

- The circumstances of all exposure incidents will be reviewed by the district Assistant Director for Health Services and the Safety Officer to determine:
    - why the exposure incident occurred;
    - type and brand of device involved;
    - if procedures were being followed; and
    - if procedures, protocols, and/or training need to be revised.

- If it is determined that revisions need to be made, the Safety Officer will ensure that appropriate changes are made to this exposure control plan.
- Documentation of this evaluation should accompany the exposure report.

8. Employee Training

All employees will receive training on the risks of occupational exposure to bloodborne pathogens at the time of initial assignment and at least annually thereafter. Training will be provided by the Auburn School District.
Training will include:

- Information on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases.
- An explanation of our exposure control plan and how to obtain a copy.
- An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
- An explanation of the use and limitations of engineering controls, work practices, and PPE.
- An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- An opportunity for interactive questions and answers with the person conducting the training session.

Training records will be completed for each employee upon completion of training. These documents will be kept with the employee's personnel records in the Human Resources Department and will include:

- dates of the training sessions;
- contents or a summary of the training sessions;
- names and qualifications of persons conducting the training; and
- names and job titles of all persons attending the training sessions.

Training records will be maintained for a minimum of three (3) years from the date on which the training occurred.

Employee training records will be provided upon request to the employee or the employee's authorized representative within 15 working days.

9. Record Keeping - Personnel Records

The Human Resources Department is responsible for maintenance of the required personnel records. They are kept in the District Administration Building.

A record will be maintained for each employee with occupational exposure in compliance with WAC 296-823-17005 “Employee Exposure and Medical Records” and will include:

- the name and social security number of the employee;
- a copy of the employee’s hepatitis B vaccinations and any medical records relative to the employee’s ability to receive vaccination;
- a copy of all results of examinations, medical testing, and follow-up procedures as required by the bloodborne pathogens standard; and
- a copy of all health care professional’s written opinion(s) as required by the bloodborne pathogens standard.

All employee medical information will be kept confidential and will not be disclosed or reported without the employee’s express written consent to any person within or outside the workplace except as required by the standard or other legal provisions.

Employee medical records shall be maintained as required by OSHA and WISHA.

Employee medical information will be provided upon request of the employee or to anyone having the written consent of the employee within 15 working days.

Appendix A

HEPATITIS B IMMUNIZATION CONSENT/WAIVER FORM

This form must be signed by all employees identified in Section 4.

Employee's Name:_____

Program: _____

Position: _____

I have received training regarding the Hepatitis B virus. Yes _____ No _____

(Please read each of the following three items carefully.)

1. I understand that I will need a series of **three** injections of hepatitis B vaccine in order to be protected from hepatitis B virus infection. (Occasionally, the first series of three vaccinations does not provide immunity and more doses of vaccine are required.)
2. If I **choose not** to receive the vaccine at this time (or if I **do not** become protected after receiving the vaccine), I understand that I will need post-exposure evaluation and possibly post-exposure treatment if I have direct, unprotected contact with blood or other potentially infectious materials while at work.
3. I understand that **I should consult with a health care provider before receiving the vaccine** if I can be described in any one of the following categories: children, pregnant women, nursing mothers, and persons with severe heart or lung problems, persons who are allergic to yeast.

(Please read each of the following two sections carefully, sign the section that reflects your decision at this time, and send the signed form to the Human Resources office.)

CONSENT

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 UNDERSTAND THAT I HAVE 60 DAYS FROM THE DATE OF MY CONSENT TO BEGIN THE IMMUNIZATION SERIES AND THAT FAILURE TO DO SO WILL BE DOCUMENTED IN MY EMPLOYEE RECORD AS A VOLUNTARY WAIVER.**

I have read and I understand the information on this form, and I wish to be vaccinated with hepatitis B vaccine, a series of three doses of vaccine. I understand that the school district will make the arrangements for the vaccination. **I have no known sensitivity to yeast.**

Signature: _____
Date: _____

WAIVER OF VACCINATION

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.

I have read and I understand the information on this form, and I **DO NOT** wish to be vaccinated with hepatitis B vaccine, a series of three doses of vaccine, at this time, **for one of the following reasons (circle one): 1) personal reasons or 2) I have already been vaccinated (proof attached).**

Signature: _____
Date: _____

April 7, 2006

Appendix B

Exposure Incident Report

Directions: Complete this form, if an employee has an accidental exposure to blood or body fluids.

Employee Name: _____ **Date of Exposure:** _____

Social Security Number: _____

1. **ROUTE(S) OF EXPOSURE:** _____

_____

_____

(Example: Eyes, break in skin, nose, mouth, skin pierced by object)

2. **CIRCUMSTANCES SURROUNDING THE EVENT:** _____

_____

_____

_____

(Example: Employee was cut by a saw and severed an artery. The responder went directly to the aid and did not grab the first aid kit and started applying pressure to the severed artery when blood splashed into his eyes.)

3. **DESCRIPTION OF EXPOSED EMPLOYEE'S DUTIES (job description):**

_____

_____

(Example: Primary classroom teacher, electrician, nurse, etc.)

4. **SOURCE INDIVIDUAL:**

Name: _____

Address: _____

_____

Phone Number: _____

Physician's Name (if known): _____

Physician Phone Number (if known): _____

Appendix C

EMPLOYEE CONSENT TO ADMINISTER COMMUNICABLE DISEASE BLOOD TEST

I, _____, am an employee of the Auburn School District. During the performance of my duties, I have been exposed to blood and/or body fluid as defined by the Federal Bloodborne Pathogen Standard on _____ (date).

The regulation requires that a sample of blood be drawn as soon as possible from the source of the exposure to determine if they are infested with Human Immunodeficiency Virus, Hepatitis B Virus, or Hepatitis C Virus. The regulation recommends that the exposed employee be tested for baseline Human Immunodeficiency Virus, antibody present of Hepatitis B (if immunized) and Hepatitis C antibodies.

After the completion of your post-exposure counseling, read the following and, if you consent, sign and date the form. You will be provided with the test results as soon as they become available.

If you know you are infected with HBV, HIV, or HCV and can provide medical records or documentation, no blood test is necessary for that particular test:

1. I authorize and consent to testing of a sample of my blood for the Human Immunodeficiency Virus, Hepatitis B Virus, Hepatitis C Virus, and ALT (Alanine Aminotransferase).

2. I understand that a positive HIV test does not always mean a person has AIDS; testing can assist healthcare staff in medical management and infectious disease control of the virus.

3. I understand that HIV/HBV/HCV testing is not always 100% accurate and that results may be “false negative” (negative results when the virus is actually present) or “false positive” (positive results when the virus is not present). If a positive result is obtained, additional tests will be done to attempt to confirm the test results.

4. I understand the results of the test will be confidential and will be maintained by Employee Health Services at Auburn Regional Medical Center. Auburn Regional Medical Center will not disclose the results of these tests to others except to the extent required by law. I can obtain a copy of my results by signing a consent for release of information.

5. I certify that this form has been fully explained to me, that I have read it or had it read to me, and that I understand its contents. I have been given an opportunity to ask questions about the test and I have sufficient information to give this informed consent.

_____	_____
Employee Signature	Witness
_____	_____
Print Name	Print Name
_____	_____
Date and Time	Date and Time

REFUSAL of CONSENT

I have read the above and fully understand the issues. I refuse to have my blood drawn or tested.

_____
Signature

_____
Print Name

_____
Date and Time

Appendix D

Healthcare Professional Written Opinion Post-Exposure

_____
Date

_____
Employee Name

_____
Social Security Number

The above individual was referred to Auburn Regional Medical Center's Emergency Room for an evaluation of an occupational exposure to blood or other potentially infectious material. The employer provided the required information necessary for the evaluation. Please indicate the following:

_____ Hepatitis B vaccine was provided.

_____ Hepatitis B vaccine was not provided.

Comments:

_____ The above individual was informed as to the results of the evaluation.

_____ Employee was informed about medical conditions resulting from the exposure that may require further evaluation or treatment.

Comments:

All other medical information is maintained as Auburn Regional Medical Center's Employee Health Services.

_____
Name of healthcare professional

_____
Signature of healthcare professional

_____
Date sent to employer.

HAZARDOUS WASTE MANAGEMENT & EMERGENCY RESPONSE PLAN

Purpose: The hazardous waste management and emergency operations plan is designed to protect employees from harmful hazards while handling, storing, and removing hazardous waste within the confines of the district. The plan also provides guidelines for chemical spill control.

Procedures: The district will ensure that all employees who handle chemicals will be trained in proper waste handling and emergency procedures.

Program: Please refer to the district's Emergency Operations Plan located at each site. This program contains information regarding the district's Hazardous Waste Management Plan procedures.

CHEMICAL HYGIENE PROGRAM

Purpose: The Chemical Hygiene Plan is a document designed to express the districts policies and procedures relating to the safe operation of the school laboratory and protection of individual employees who may be exposed to hazardous chemicals.

Procedures: The district will ensure that all employees who are assigned to work in a laboratory workplace (instructors and aides) and those that may be required to enter (i.e., maintenance and custodial staff), will receive training in the district's Chemical Hygiene Plan.

Chemical Hygiene Program

A. Introduction

1. Goal of the Chemical Hygiene Plan

It is the policy of Auburn School District to provide a workplace that is free from recognized hazards likely to cause physical harm, and complies with all federal, state, and local laws and regulations affecting the safety and health of its employees. This Chemical Hygiene Plan addresses this goal for the laboratory workplace by including the requirements of the Occupational Safety and Health Administration (OSHA) Standard on Occupational Exposure of Hazardous Chemicals in Laboratories as adopted by the Washington Industrial Safety and Health Administration (WISHA) (WAC 296-828-200 Series). The Division of Occupational Safety and Health (DOSH) within the Washington State Department of Labor and Industries (L&I) enforces compliance with the laboratory standard.

2. Who is covered by the Laboratory Standard?

The laboratory standard covers "laboratory use of hazardous chemicals", where chemical manipulations occur which are not part of a production process.

"Laboratory scale" means work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safely manipulated by one person. This definition excludes those workplaces whose function is to produce commercial quantities of materials.

Employees who are addressed in the Chemical Hygiene Plan are individuals employed in the laboratory workplace that may be exposed to hazardous chemicals in the course of his or her assignments. This includes employees who actually work in the laboratory (instructors and aides) or employees who because of their work assignments may be required to enter a laboratory where potential exposures may occur, such as maintenance or custodial personnel.

List of employees covered by this plan:

All employees of the Auburn School District

The occasional visitor to the laboratory, such as a guest or salesperson, is not included in the definition of employee and therefore is not addressed in the Chemical Hygiene Plan.

3. Summary of the Requirements

a. The Laboratory Standard requires that covered laboratories prepare, implement, and make available to employees, a Chemical Hygiene Plan which is capable of:

(1) Protecting employees from health hazards associated with hazardous chemicals in the laboratory.

(2) Keeping laboratory employees' exposures to WISHA-regulated substances below the permissible exposure limits.

b. The Chemical Hygiene Plan should include:

(1) Procedures for determining employee exposure that includes: initial monitoring, periodic monitoring, and employee notification of the monitoring results.

(2) Employee information and training to ensure that they are apprised of the hazards of chemicals present in their work area(s).

(3) Procedures for employees who work with hazardous chemicals to receive medical attention under specified circumstances.

(4) A system for hazard identification of incoming containers of chemicals and for chemical substances developed in the lab.

(5) Requirements for the use of proper respiratory equipment where necessary to maintain exposure below permissible exposure limits.

(6) Record keeping procedures for employee exposure monitoring measurements and medical records.

B. Chemical Hygiene Personnel

1. Goal

Successful development and implementation of a Chemical Hygiene Plan must be by the full commitment of the senior administrators, the school district Chemical Hygiene Officer and laboratory department chair. Implementation of this plan shall be by the district Chemical Hygiene Officer and the department chair. The District Chemical Hygiene Officer's goal is to ensure that responsibility for chemical hygiene and safety in the laboratories is shared by all who work in those laboratories, including students.

2. Key Personnel and Their Responsibilities

a. District Chemical Hygiene Officer

The District Chemical Hygiene Officer is appointed by the Superintendent and contracted by the Board of Directors, in accordance with the contract between the two parties.

1. Develop and implement the school's Chemical Hygiene Plan and for the district, including training, reporting and other functions noted here.

2. The CHO should report directly to the Associate Superintendent of School Programs.

3. Work with administrators and teachers to develop and implement the Chemical Hygiene Plan.

4. Implement appropriate training with regard to chemical hygiene for all district employees whose normal work locations include laboratory areas or who desire to work with potentially hazardous chemicals in their classrooms.

The responsibilities of the School Chemical Hygiene Officer include:

1. Maintain a list of employees assigned to work in laboratories, or who choose to use potentially hazardous chemicals for instruction.

2. Work with school staff to monitor procurement, use, and disposal of chemicals used in the schools' instructional programs.

3. Assure that inspections of equipment and space in the laboratory are performed when appropriate and that records of inspections are maintained.

4. Provide technical assistance to schools and employees on the Chemical Hygiene Plan.

5. Assure that the Chemical Hygiene Plan is reviewed annually and revised as needed to assure that it complies with current legal requirements.

6. Make decisions regarding possible use of requested chemicals identified as explosive, carcinogenic, mutagenic, highly toxic, or otherwise potentially hazardous.

7. Determine the need for personal protective equipment.

b. School Department Chairs.

1. Records: Maintain adequate records detailing efforts and results of staff exposure monitoring (including associated accident reports, if applicable) and medical consultations and examinations.
2. Training: Ensure that staff are provided with the required and appropriate training to carry out their responsibilities.
3. Monitoring: Monitor the legal requirements concerning hazardous substances.

c. Laboratory Staff

Laboratory instructors are responsible for planning and conducting each laboratory operation in accordance with the appropriate laboratory procedures and rules outlined in the Chemical Hygiene Plan. The instructors are responsibility to develop good personal chemical hygiene habits.

d. Students**.**

Good personal chemical hygiene habits must also be taught to all students who use the lab while enrolled in science courses. Students shall not be allowed to use school district laboratories outside of regular science course classes unless they first obtain permission and are directly supervised during their work.

C. Standard Operating Procedures for Laboratories

1. Goal

To protect employees and students working in the laboratory, others who may be exposed and to protect the environment from injury and/or contamination due to hazardous chemicals.

2. On-line Resources

Visit these websites and familiarize yourself with their laboratory safety information:

- Hazardous Chemicals in Laboratories (Chapter 296-828, WAC) www.lni.wa.gov/safety/rules/chapter/828/
- Rehab the Lab (Local Hazardous Waste Management Program in King County) www.hazwastehelp.org/educators/rehabthelab.aspx

3. Employee Exposure Protection

Laboratory operations will be conducted in a manner that prevents employee exposure to OSHA/WISHA-regulated substances in excess of the permissible exposure limits (PELs). (Reference list in WAC 296-841-20025 or OSHA, 29 CFR Part 1910 Subpart Z.)

See http://app.leg.wa.gov/WAC/default.aspx?cite=296-841&full=true#296-841-20025

a. Respiratory Protective Equipment

Respirators are not an acceptable substitute for a properly functioning chemical fume hood when attempting to keep employee exposures below PELs. If a chemical fume hood is unavailable, proper respiratory equipment must be provided to employees where the use of respirators is necessary to maintain exposure below PELs. Respirators must be selected and used in accordance with WAC 296-62-07715.

b. Personal Protective Equipment

Personal protective equipment and instructions on the proper use of this equipment will be provided to employees and students, as appropriate, to minimize exposure to hazardous chemicals.

4. Laboratory Facilities (Design Criteria)

The work conducted in a lab and its scale must be appropriate to the physical facilities available and to the quality of the ventilation system.

a. Laboratory Design

Laboratory facility should include, where appropriate:

(1) An adequate general ventilation system with air intakes and exhausts located so as to avoid intake of contaminated air.

(2) Well-ventilated stockrooms and storerooms.

(3) Proper chemical storage for specific hazardous materials; e.g., flammables, corrosives, acids, bases, and poisons.

(4) Adequate laboratory hoods and sinks.

(5) Emergency equipment including fire extinguishers, spill kits, and alarms.

(6) First aid equipment including first aid kits, eyewash fountains and drench showers.

(7) No direct drainage to sewers (storm drains, domestic sewage systems, etc.), or arrangements for proper waste disposal.

b. Laboratory Ventilation

(1) The general laboratory ventilation system should provide a source of air for breathing and for input to local ventilation devices, ensure that laboratory air is continually circulated and direct airflow into the laboratory from non-laboratory areas and out to the exterior of the building.

(2) General laboratory ventilation should not be relied on for protection from exposure to hazardous chemicals released into the laboratory. A rate of 4 -12 room air changes per hour is normally adequate general ventilation if local exhaust systems such as hoods are used as the primary method of control. General airflow should not be turbulent and should be relatively uniform throughout the laboratory. The most recent ASHRAE standard should be consulted for new facilities and for any facility experiencing indoor air quality problems. ASHRAE recommends 15-20 CFM per person in school classrooms and higher rates for hazardous areas. General ventilation rates must be tied to the size of the room, the occupant load, and the exposure potential. How is the facility being used? Are chemical experiments being performed in, or outside of, the hood? Are select carcinogens or acute toxics allowed

in the lab? All of these items will greatly affect the general ventilation rate in the laboratory/classroom in a middle or high school.

(3) A laboratory hood with a minimum of 2.5 linear feet of hood space per person should be provided for every two students if they spend most of their time working with chemicals. Airflow into and within the hood should not be excessively turbulent and hood face velocity should be adequate (typically 60-125 linear fpm).

(4) Cabinets that store hazardous chemicals should be fitted with auxiliary ventilation systems. Stockrooms should be well ventilated.

(5) The quality and quantity of ventilation should be evaluated when installed, regularly monitored (at least every school year), and reevaluated whenever a change in ventilation devices is made.

5. Employee Exposure Determination and Monitoring

If there is reason to believe that exposure levels for an OSHA/WISHA-regulated substance routinely exceed the action level (or in the absence of an action level, the PEL), the District Chemical Hygiene Officer will ensure that employee or student exposure to that substance is measured. (Refer to Section 8.)

6. Medical Consultations and Medical Exams

Employees who work with hazardous chemicals will be provided with an opportunity to receive medical attention when overexposure to a hazardous chemical is suspected. (Refer to Section 8.)

7. Chemical Procurement

The activities and personnel involved in purchasing or otherwise acquiring chemicals for the laboratory must be performed in accordance with the Chemical Hygiene Plan.

a. Plan Purchase Approval

The department chair must approve chemical purchases. It is this school district's policy that all chemical purchases are of minimum amount needed for immediate needs. **Stockpiling of chemicals for future use for any reason is discouraged.**

b. Receiving Shipments

Before a substance is received, information on proper handling, storage and disposal should be available and known to employees involved in shipping, receiving and distribution of laboratory chemicals. Preferably, all substances should be received in a central location within the department and inspected by the department chair. **No container should be accepted without an adequate identifying label and Material Safety Data Sheet.**

c. **No select carcinogens, reproductive toxins or highly acute toxins are allowed in middle school or high school laboratories in this school district without written approval of the Deputy Superintendent for School Programs.** (See Appendix 1).

8. Hazard Identification

Laboratory chemicals and facilities should be properly labeled to identify any hazards associated with them for employee/student information and protection.

a. Container Labels

Labels on incoming containers of hazardous chemicals must not be removed or defaced. Unlabeled bottles of chemicals should not be opened; such materials should be disposed of promptly as outlined in the Waste Disposal Procedures below.

When dispensing chemicals from one container to another, make sure that the new container is properly labeled with the chemical name and hazards. All secondary containers should be labeled in this manner unless they are intended for the immediate use of the person who dispensed the chemicals.

b. Safety Data Sheets

Safety Data Sheets (SDS) must be maintained within the laboratory for ALL chemicals stored within district facilities. This includes existing chemicals and newly purchased chemicals. The SDS must be maintained and made readily available to laboratory employees and students upon request.

c. Laboratory Signs

Laboratory areas that have special or unusual hazards should be posted with the appropriate warning signs.

Signs should be posted to show the location of safety showers, eyewash stations, exits, first aid kits, fire extinguishers, etc. Extinguishers should be labeled to show the type of fire for which they are intended. Waste containers should be labeled to show the type of waste that can be safely deposited. Consumption of food and beverages is not permitted in areas where laboratory operations are being carried out.

9. Material Handling

The storage, distribution, and methods of handling hazardous chemicals will be conducted in a manner that minimizes the potential for accidents and employee/student exposure.

a. Stockrooms/Storerooms

Segregate hazardous chemicals by hazard class in a well-identified area with local exhaust ventilation. (See *Appendix 2. Storage pattern for chemicals where space is limited.*)

Stockrooms should be under the control of one person who handles safety and inventory control. Examine stored chemicals for replacement, deterioration, and container integrity annually. Ensure safety data sheets (SDSs) are available for all chemical compounds in stock.

b. Distribution

When chemicals are hand carried, precautions should be taken to protect against breakage and spillage. This includes the transport of chemicals from the storage rooms to the classrooms and visa-versa.
When chemicals are transported, they should be placed in covered containers and/or on an appropriate rolling laboratory cart to minimize the potential for spills.

Compressed gas cylinders should never be rolled or dragged. Cylinders should be transported with a suitable handcart and the strapped in place.

c. Laboratory Storage

Keep quantities of chemicals stored in the laboratory to a minimum. Store chemicals away from heat sources and direct sunlight.

Keep chemical inventories current when containers are disposed of, added, or replaced. When inventorying, track the size of the container, not how much it contains.

Segregate incompatible materials in storage:

- Acids away from bases in dedicated cabinets.
- Oxidizers away from organic compounds and flammable materials.
- Bleach away from ammonia.
- Water-reactive compounds away from alcohols, aqueous solutions, and sinks.
- Flammable glacial acetic acid in the flammables cabinet, not the acid cabinet.
- Store concentrated sulfuric acid on a separate shelf in the acid cabinet away from concentrated hydrochloric acid.
- Store nitric acid in a secondary container in the acid cabinet.

d. Use of a chemical fume hood

Use the chemical fume hood for processes that may release hazardous chemical vapors, fumes, or dusts. Use the hood when working with any volatile liquid or fine powders.

Limit chemical storage in the hood to 24 hours. Chemicals stored in the hood should not block the flow of air. Provide secondary containment for all stored chemicals. Secondary containment must hold 100 percent of the largest container's capacity.

Keep the hood ventilation system running while chemicals are stored in it.

e. Working Alone

Employees should avoid working alone in a laboratory. Students are not allowed to work in laboratories alone or unsupervised by a certified instructor.

10. Laboratory Operations and Activities Requiring Approval

a. These laboratory operations require review and prior approval by the Chemical Hygiene Officer:

- Non-routine procedures for which the employee or student has not been trained.
- Analytical work with an unknown substance.
- Disposal of chemical wastes, including evaporation or disposal in drains.
- Operations or activities for which there are no written procedures.
- Purchase of chemicals.

11. Emergency Prevention and Response

Laboratory instructors and other employees should be familiar with emergency procedures in order to prevent and reduce the impact of laboratory accidents.

a. First Aid

Schools must have personnel trained in first aid available during working hours to render assistance until medical help can be obtained. All laboratory science personnel in this district are encouraged to possess a valid first aid card.

b. Emergency Equipment

The District Chemical Hygiene Officer will ensure that adequate emergency equipment is available in the laboratory and inspected periodically to ensure that it is functioning properly. (Refer to the laboratory safety checklist in this manual.)

c. Accident Reports

All accidents and near accidents should be reported immediately and will be thoroughly investigated. The results of this investigation and recommendations for the prevention of similar occurrences should be forwarded to the District Chemical Hygiene Officer.

12. Waste Disposal

The Department Chair and District Chemical Hygiene Officer will ensure that laboratory chemicals are disposed of in compliance with appropriate regulations and in a manner that minimizes damage to human health and the environment.

a. Waste handling

Label chemical wastes with the words Hazardous Waste and the type of hazard it presents (e.g., Flammable, Corrosive, Toxic) on each container. Segregate waste chemicals based on their hazards in the same way that chemical products are stored in the stockroom. Once the hazardous waste collection container is full, contact the Safety Program Manager and Chemical Hygiene Officer to arrange for proper disposal.

Unlabeled containers of chemical wastes are unacceptable. Ask instructors if they know what these containers may hold. Waste disposal companies cannot dispose of

unknown materials, so their field chemist will have to test the contents. This is called profiling and is a very expensive process that is avoidable in a well-run laboratory.

b. Treatment by generator

Some laboratory waste can be treated prior to disposal. All treatment activities must be tracked on a log sheet that shows the date, type, and number of materials added to the treatment collection container. Use the log sheet found in *Appendix 5. Evaporation log sheet for treating aqueous metals solutions* to track this process.

Evaporate the water from aqueous metals solutions prior to disposal. Insert a large slide-locking plastic bag into a large beaker. Label the large plastic container with the words “Hazardous Waste – Toxic Metals.” Open the bag and fold the edges over the rim of the beaker. Place the beaker inside a secondary containment tray. Pour the metal-contaminated aqueous solution into the bag and let it evaporate.

As the liquid level drops, add more liquid. Eventually the bag will fill with dried sludge. Once the bag is mostly full, zip it closed and place the bag into a large plastic container with a tight-fitting lid. Then put a new bag in the beaker and repeat the process.

When the large plastic container is mostly full, attach the lid securely and dispose of it as hazardous waste. Once the hazardous waste collection container is full, contact the Safety Program Manager and Chemical Hygiene Officer to arrange for proper disposal.

Be sure to keep the log sheet with the container to show exactly what it contains.

13. Information and Training

The District Safety Officer and Chemical Hygiene Officer must provide laboratory and other appropriate employees (e.g., receiving and shipping personnel, custodial, maintenance, stockroom personnel, emergency teams) with training and other information on the hazards of chemicals present in their work area and what to do if an accident occurs.

Appropriate and authoritative on-line training can be used as a substitute for some of this training. Visit the Washington State Department of Labor and Industries’ Video Library page at www.lni.wa.gov/safety/trainingprevention/Videos/ to see their collection of on-line videos. Rehab the Lab safety videos are also available at: www.hazwastehelp.org/educators/labvideos.aspx.

a. Training Program

Training will consist of at least the following subjects:

(1) Methods that may be used, and observations to detect, the release or presence of a hazardous chemical (such as continuous monitoring devices and the visual appearance or odor of hazardous chemicals when being released).

(2) The physical and health hazards of chemicals in the work area.

(3) The measures that instructors can take to protect themselves and their students from these hazards, including specific procedures that this school district has

implemented to protect instructors and students from exposure to hazardous chemicals (e.g., general laboratory safety rules, emergency procedures and protective equipment to be used).

b. Information for Employees

Employees will be provided with the following information:

- WISHA Standard for Hazardous Chemicals in Laboratories WAC 296-828.
- Location and availability of the Chemical Hygiene Plan.
- Permissible exposure limits (PEL's) for DOSH-regulated substances found in WAC 296-841-20025 or recommended exposure limits for other hazardous chemicals where there is no applicable standard.
- Signs and symptoms associated with exposure to hazardous chemicals used in the laboratory.
- Location and availability of reference material on the hazards, safe handling, storage, and disposal of hazardous chemicals found in the laboratory including Safety Data Sheets.

c. When to Provide Training and Information

Information and training will be provided at the time of the employee's initial assignment to the work area where hazardous chemicals are present and prior to assignments involving new exposure situations. Refresher information and training will be provided at least annually.
Students will receive general laboratory safety training at the beginning of each course and whenever practice demonstrates a need. Specific safety procedures will be taught whenever the need dictates.

14. Inspections and Reviewing Chemical Hygiene Plan

General safety inspections of the laboratory and annual review of the Chemical Hygiene Plan will contribute to overall laboratory and employee safety.

Laboratory safety inspections must include all areas covered in *Appendix 3. Science classroom and lab safety reference* (found online at www.hazwastehelp.org/educators/labchecklist.aspx.

a. Inspecting Laboratory Safety Equipment

The department chair will ensure that laboratory safety equipment is inspected at least semi-annually to determine fitness for use including:

(1) Fume hoods & other protective equipment (environmental controls)

(2) Personal protective equipment (e.g., gloves, respirators).

(3) Emergency equipment (e.g., fire extinguishers, spill kits).

(4) First aid equipment (e.g., showers, eyewash stations). (See science lab safety checklist for complete list.)

b. Review of the Chemical Hygiene Plan

The Chemical Hygiene Plan for the laboratory will be reviewed by the District Chemical Hygiene Officer, at least annually for:

(1) Compliance with current regulations.

(2) For adequacy in protecting employees from the health and physical hazards associated with chemicals in use in the laboratory.

(3) The results of this review should be recorded, including notes on needed changes, when those changes were made, etc.

(4) The plan will be updated as necessary (e.g., when there are changes in laboratory operations, laboratory personnel, regulations, etc.) and in a timely manner.

D. General Laboratory Safety Rules

1. Goal

To protect the health and safety of laboratory instructors and students who work with hazardous chemicals through training and careful attention to safe operation practices.

2. General Rules

The following pages contain the General Laboratory Safety Rules for all school district laboratories. Other specific laboratory safety rules for individual laboratories can be added to these rules by the department chair of that laboratory.

a. Know the safety rules and procedures that apply to the work at hand. Before beginning any new operation, determine the potential hazards and appropriate safety precautions to take.

b. Know the location of, and how to use, emergency equipment in the area, as well as how to obtain additional help in an emergency. Be familiar with emergency procedures.

c. Know the types of protective equipment that are available and use the proper equipment for each job.

d. Watch out for unsafe conditions and report them so that corrections can be made as soon as possible. One person's accident can be a danger to everyone in the lab area.

e. Consuming food or beverages in laboratories or areas where chemicals are being used or stored is not permitted.

f. Practical jokes or other behavior that might distract, startle, or confuse another worker can be dangerous and must be avoided.

g. Make sure that you use equipment for its designed purpose only.

h. If you leave an operation unattended for any period of time, leave the laboratory lights on, post a sign, and take the necessary precautions for the event of a failure of a utility service (such as electricity or cooling water). Any time chemicals are out of locked cabinets or storerooms, an unattended lab must be locked.

i. Notify the science department chair and the Chemical Hygiene Officer immediately if you have been exposed to a hazardous chemical.

3. Chemical Handling

a. Do not smell or taste chemicals.

b. Always add acid to water. Never add water to acid.

c. Know the hazards posed by the different classes of chemicals, including oxidizers, flammables, corrosives, compressed gasses, acutely hazardous and chronically hazardous chemicals.

d. Read and understand the Material Safety Data Sheet (MSDS) before using any new chemical.

e. Be aware of the proper waste disposal methods for the chemicals you are handling. Improper disposal may lead to injury to human health, the environment and/or facility equipment.

f. Be sure that equipment is carefully secured before its use. Combine reagents in the proper order and avoid adding solids to hot liquids.

g. Never work alone in the laboratory. Make arrangements to have someone monitor your activities.

h. When transporting, storing, using, or disposing of any substance, be sure that the substance cannot accidentally come into contact with an incompatible substance. This contact could result in explosions or the production of highly toxic or flammable substances. Refer to incompatibility charts.

i. When chemicals are being transferred from one container to another, be sure that the new container is compatible with the chemical and is labeled with the identity of the chemical. Labels shall be dated and have the name of the person making the transfer.

4. Health and Hygiene

a. Wear appropriate eye protection at all times in areas where chemicals are used or stored. Wearing contact lenses in the laboratory is strongly discouraged. The plastic lens can absorb chemical vapors that can then cause serious eye damage.

b. Use protective apparel, including face shields, gloves, and other special clothing, as needed. Inspect gloves before each use, wash them before removal, and replace them periodically. Avoid contact between gloves and exposed skin, clothing, and eyes or mucous membranes during use.

c. Long hair and loose clothing should be confined to avoid accidents; lab smocks or aprons are highly recommended.

d. Mouth suction to pipet chemicals or to start a siphon shall NOT be permitted for any laboratory procedure; a pipette, pipet bulb, or aspirator shall be used to provide vacuum.

e. Avoid exposure to gases, vapors, and aerosols. Use appropriate safety equipment when this type of exposure is likely.

f. Wash well with soap and water before leaving the laboratory. Chemicals on hands can be transferred to food and ingested.

5. Food Handling

a. Do not store, handle, or consume food or beverages in the laboratory or other areas where chemicals are used or stored.

b. Do not bring chemicals or chemical equipment into areas that are designated for food consumption or smoking.

c. Never use laboratory glassware or utensils to prepare or consume food. Laboratory refrigerators, ice chests, microwave ovens and cold rooms must not be used for food storage or preparation. Laboratory refrigerators must have spark-proof motors to avoid setting off explosions of leaking vapors.

6. Housekeeping

a. Keep work areas clean and free from obstructions. Cleanup should follow the completion of each operation and at the end of each day.

c. Attend to laboratory accidents and spills immediately. Follow the appropriate emergency procedures. The Center for Disease Control (CDC) has published Emergency Procedures in Schools in the Event of a Chemical Spill at www.cdc.gov/niosh/docs/2004-101/append.html.

d. Keep chemical and waste containers labeled at all times. Inform the Chemical Hygiene Officer immediately of the presence of any unlabeled containers. Do not open unlabeled containers.

- Label chemical product containers with the name of the product that matches its SDS and its primary hazards (toxic, corrosive, reactive, flammable).

e. Never block access to exits, emergency equipment, controls, etc.

f. Notify the laboratory supervisor immediately if equipment malfunctions. Discontinue use of the equipment if a safety hazard exists.

g. Keep chemical storage under the hoods to a minimum. Leave the hood ventilation system turned on if chemicals are stored in or under the hood. Limit chemical storage in fume hoods to under 24 hours.

7. Glassware

a. Accidents involving glassware are the leading cause of laboratory injuries. Careful storage and handling procedures should be used to avoid glassware breakage.

b. Adequate hand protection should be used when inserting glass tubing into rubber stoppers or corks or when placing rubber tubing on glass hose connections. Tubing should be fire polished or rounded and lubricated, and hands should be held close together to limit movement of glass should a fracture occur.

c. Vacuum-jacketed glass apparatus should be handled with extreme care to prevent implosions. Only glassware designed for vacuum work should be used for that purpose.

d. Hand protection should be worn when picking up broken glass. Small pieces should be swept up with a brush and dustpan.

8. Flammability Hazards

a. Do not use an open flame to heat a flammable liquid or to carry out a distillation under pressure. Use an open flame only when it is necessary and extinguish it as soon as it is no longer needed.

b. Before lighting a flame, remove all flammable substances from the immediate area and notify others in the area. Check all containers of flammable substances in the area to ensure that they are tightly closed.

c. **Store flammable materials in a flammable storage cabinet only.**

d. Make sure that all flammable cabinets and containers are properly grounded to prevent accidental ignition of flammable vapors and liquids from static electricity or other sources of ignition.

9. Hazardous Waste Handling

a. Hazardous wastes should be properly labeled and stored in a separate hazardous waste area.

b. See your science department chair for the proper hazardous waste disposal procedures.

Note: Any questions or concerns about laboratory safety rules should be addressed to the District Chemical Hygiene Officer.

E. Specific Exposure Control Measures

1. Goal

To address the criteria that would invoke the use of specific exposure control measures, above and beyond the Standard Operating Procedures and General Laboratory Safety Rules, which will reduce instructor or student exposure to hazardous chemicals.

2. Criteria

Three situations may require unique specific exposure control measures:

a. Use of Ban Candidate or other high-hazard chemicals.

b. Experimental procedures that increase the risk of harmful exposures.

c. Procedures that could exceed the capacity of protective equipment or practices.

3. Chemicals of Special Concern

Purchase of chemicals listed in *Appendix 1. Ban Candidate Chemicals* is prohibited without written authorization from the Safety Program Manager.

The Washington State Department of Labor and Industries (L&I) publishes a list of PELs for air contaminants. Several of the listed airborne contaminants may be found in secondary school science stockrooms. Follow these guidelines when working with the chemicals listed below to avoid exceeding the PELs:

a. Cadmium

- Cadmium compounds are carcinogenic. Purchase and use of cadmium compounds is prohibited.

b. Chromium - hexavalent

- Hexavalent chromium compounds (chromate compounds, dichromate compounds, and chromium trioxide) are carcinogenic. Minimize the use of these compounds and the amount kept in storage.
- Use of hexavalent chromium compounds is discouraged. If they must be used, buy the smallest amount necessary and only use them in the fume hood while wearing chemical-resistant gloves.
- Purchase hexavalent chromium compounds pre-diluted to reduce the risk of dust formation.

c. Lead

- Lead compounds are neurotoxic by ingestion and inhalation.
- Only open powdered lead compounds in chemical fume hoods.
- Purchase lead compounds pre-diluted to reduce the risk of dust formation.

d. Methylene chloride

- Methylene chloride is a probable carcinogen that is highly volatile, easily inhaled and absorbs into the bloodstream through unprotected skin.
- Use of methylene chloride is discouraged. If it must be used, buy the smallest amount necessary and only use it in the chemical fume hood while wearing chemical-resistant gloves.

e. Mercury compounds and apparatus

- Secondary schools in Washington State are prohibited from having elemental mercury, mercury compounds, mercury novelty items, mercury thermometers or mercury-containing sphygmomanometers. One calibrated mercury barometer is allowed per school.

NOTE: Designated carcinogens, reproductive toxins or highly acute toxins **are not allowed** in middle or high school laboratories in this school district without written authorization from the Associate Superintendent for School Programs.

4. Exposure Potential

The routes of exposure to chemicals may occur by inhalation, ingestion, contact with skin or eyes, or injection.

a. Inhalation of chemical vapors, mists, gases, or dusts can produce poisoning through the mucous membrane of the nose, mouth, throat, and lungs and can seriously damage these tissues. The degree of injury resulting from exposure to toxic vapors, mists, gases, or dusts depends on the toxicity of the material and its solubility in tissue fluids, its concentration, and the duration of exposure.

b. Ingestion of many chemicals can be extremely dangerous. The relative acute toxicity of a chemical can be evaluated by determining its LD 50, which is defined as the quantity of chemical that will cause the death of 50% of the test animals when ingested in a single dose. In addition, many chemicals will directly damage the tissue of the mouth, throat, nose, lungs, and gastrointestinal tract.

c. Contact with skin and eyes can lead to significant chemical injury. A common result of skin contact is local irritation, but many chemicals can be absorbed through the skin and cause systemic poisoning. Most chemicals are damaging to the eyes, which are very sensitive organs. Alkaline materials, phenols, and strong acids can cause permanent loss of vision.

d. Injection of chemicals is not a very common route of exposure but may occur through mechanical injection from glass or other materials contaminated with chemicals, or when chemicals are handled in syringes.

Other factors to consider in evaluating the degree of exposure potential from the use of a particular chemical or activity involving the chemical include the:

e. Chemical's volatility, flammability, and reactivity.

f. Potential for unplanned chemical reactions.

g. High heat of reaction.

h. Amount of time that a worker will be exposed.

i. Sensitivity of the lab worker (e.g., asthma, allergies, pregnancy).

j. Potential for generating aerosols.

k. Potential for an uncontrollable release.

5. Exposure Control Measures

Check the need for exposure controls when staff handle chemicals or use lab procedures. Include a review of existing engineering controls, administrative practices, and PPE.

Make sure ventilation systems provide protection for employees from chemical exposures. For example, use a chemical fume hood when procedures generate smoke, dust, fumes, or vapors.

Provide training to ensure employees are adequately protected from overexposure to hazardous chemicals. Keep track of the chemicals being used in experiments and demonstrations. Higher hazard chemicals require a higher degree of protection from harmful exposures. Use this information to decide if medical monitoring is needed.

Choose the right PPE for the compounds you are using. Before working with hazardous chemicals, ask the Chemical Hygiene Officer what type of PPE is necessary. Receive training in proper use and maintenance of PPE prior to using it – especially respirators.

The WISHA Laboratory Standard requires that laboratories evaluate the need for specific exposure control measures when employees are working with select carcinogens, reproductive toxins, or substances with a high degree of acute toxicity. If the Safety Program Manager authorizes use of these compounds, they must ensure an exposure control measure evaluation is completed first and the recommended measures implemented.

These measures include the establishment of designated areas, use of containment devices, decontamination procedures and safe removal of contaminated waste.

6. Decontamination Procedures

The Chemical Hygiene Officer and Hazardous Waste Manager shall develop procedures for decontaminating chemical usage areas in the laboratory. Decontaminate contaminated equipment and glassware in the hood before moving them. Decontaminate fume hoods after use and always before resuming normal work.

7. Procedures for Handling Reproductive Toxins

Examples: Lead, cobalt and nickel compounds, formaldehyde, ethidium bromide.

a. Only handle dry forms of these substances in a fume hood.

b. Use gloves and other protective clothing to prevent skin contact.

c. Always wash hands and arms immediately after working with these materials.

d. Keep records of the amounts of these materials on hand, amounts used, and the names of the workers using them.

e. Train employees in emergency procedures for accidents or spills involving these substances. Notify the Chemical Hygiene Officer of all chemical exposures or spills.

f. Store containers of these substances in a well-ventilated area and label them properly.

8. Procedures for Handling Chemicals with High Acute Toxicity

Examples: Fluoride compounds, nitric acid, bromine, phenol.

a. Seek safer alternative compounds for use in experiments.

b. Use and store these substances in restricted access areas with warning signs.

c. Always use a hood when working with concentrated forms of these substances.

e. Always wash your hands and arms immediately after working with these materials.

f. Keep records of the amount on hand, the amount used, and the names of the workers using them.

9. Procedures for Handling Select Carcinogens

Examples: Formaldehyde, perchloroethylene and chromate, nickel, cobalt, and cadmium compounds.

a. Seek safer alternative compounds for use in experiments.

b. The use and disposal of these substances should be approved by the Chemical Hygiene Officer prior to this activity.

c. Use and store these substances in areas of restricted access with special warning signs.

d. Always use a hood when working with concentrated forms of these substances.

f. Always wash your hands and arms immediately after working with these materials.

g. Keep records of the amounts on hand, the amounts used, and the names of the workers using them.

F. Inspection and Plan Review

1. Goal

To develop a well-organized laboratory inspection program that allows the District Chemical Hygiene Officer to identify and correct the cause of chemical exposures before they occur and:

a. Generate and help maintain a high level of prevention consciousness.

b. Assist in the education of employees, supervisors and students in the merits and methods of detecting and eliminating accident causes.

c. Demonstrate the school district's sincere interest in the health, safety and welfare of all employees and students.

d. Foster a better understanding of the responsibilities that each employee must assume in the prevention of accidents.

e. Help determine where additional training or instruction may be required.

f. To develop a Chemical Hygiene Plan review process that evaluates the effectiveness of the overall plan and identifies the need for updates to ensure that employees and students are adequately protected against harmful exposure to hazardous chemicals.

2. Inspection Procedures

Refer to *Appendix 3. Science classroom and lab safety reference*. This checklist provides information on the recommended and required environmental health and safety components of a well-functioning laboratory.

See www.hazwastehelp.org/educators/labchecklist.aspx.

3. Emergency, First-Aid and Personal Protective Equipment

Inspect safety equipment every six months to ensure it is functioning properly and that there are adequate supplies. Note and promptly correct deficiencies.

4. Review of the Chemical Hygiene Plan

The effectiveness of the Chemical Hygiene Plan must be reviewed and evaluated at least annually and updated if necessary. Factors to consider in the review include:

a. Changes in laboratory procedures, operations or equipment that may affect the potential for personal exposure to hazardous chemicals.

b. The addition or deletion of the use of specific hazardous chemicals that warrant a review of laboratory safety procedures.

c. Changes in laboratory personnel or their responsibilities.

d. The review and evaluation of inspection records, accident investigations, and professional research on chemical hygiene techniques.

G. Employee Information and Training

1. Goal

To provide information and training about the hazards of chemicals present in the laboratory work area in a manner and at a frequency which will educate employees on how to protect themselves and others from potential harm in the laboratory.

2. Information Requirements

Laboratory employees must be provided with specific information on the chemicals used in their work areas. DOSH's information requirements are summarized in this section under the heading "Information Program."

3. Employee Training Requirements

Employees must be trained on the potential chemical hazards in their work areas and on appropriate sections of the Chemical Hygiene Plan.

4. Who Should Be Trained

This training should be provided to all employees who actually work in the laboratory as well as to other employees whose assignments may require that they enter a laboratory where exposures might occur, such as maintenance and custodial personnel. Employees who are responsible for receiving and handling shipments of new chemicals or chemical wastes should also be informed of the potential hazards and use of the appropriate protective measures. **Students are required to receive training appropriate to their level of chemical handling and potential exposure.**

5. Record Keeping

Training of laboratory personnel should be documented and kept in the employee's file. Training for students will be documented and maintained in the students file while attending the appropriate science class.

6. Information and Training Frequency

The OSHA/WISHA Laboratory Standard requires that employees receive information and training at the time of their initial assignment to a work area where hazardous chemicals are present and prior to assignments involving new exposure situations. Refresher training and information must be provided at least annually.

7. Information Program

Laboratory employees will be informed of at least the following information:

a. The contents of the WISHA Standard and its Appendices (found at http://www.lni.wa.gov/safety/rules/chapter/828/WAC296-828.PDF).

b. The location and availability of the Chemical Hygiene Plan.

c. The PEL's for DOSH-regulated substances and/or recommended exposure limits for other hazardous chemicals. (Found in WAC 296-841-20025.)

d. Signs and symptoms of exposure to hazardous chemicals used in the laboratory.

e. The location and availability of known reference materials on the hazards, safe handling, storage, and disposal of hazardous chemicals found in the lab including Safety Data Sheets received from the chemical suppliers.

H. Exposure Monitoring and Medical Attention

1. Goal

To provide laboratory instructors, other laboratory employees and students with an appropriate level of exposure monitoring and medical attention to protect them from adverse health effects resulting from potential exposure to hazardous chemicals.

2. Exposure Monitoring

The laboratory standards for exposure monitoring are summarized on the following pages. The Safety Program Manager or Chemical Hygiene Officer must maintain records of exposure monitoring, including the test method and results. Keep employee exposure monitoring records in the employee's file.

If there is reason to believe that exposure levels for a DOSH-regulated substance routinely exceed the action level (or in the absence of an action level, the PEL), employee exposure to that substance must be measured.

a. Initial exposure determination

This is a list of common situations that increase the risk of employee exposures.

- Laboratory operations use hazardous chemicals in a way that increases releases.
- Past data that shows elevated exposures to the particular substance for similar operations.
- Procedures that use large volumes of hazardous chemicals.
- Procedures that use hazardous chemicals over a long period of time.
- Employees with exposure symptoms like skin irritation, difficulty breathing, nausea, or headache.

None of these conditions should exist in middle or high school laboratories.

b. Exposure monitoring when the action level is exceeded

If an exposure determination exceeds a substance's PEL, the school district must follow the substance's WISHA exposure monitoring requirements. Monitor airborne concentrations of individual hazardous chemicals in these circumstances:

- When testing or redesigning the hoods and other local ventilation devices.
- When a specific substance that is toxic or highly toxic is regularly and continuously used.
- When requested by a laboratory employee because of a documented health concern or suspicion that a PEL may be exceeded.

c. Exposure record-keeping

Send exposure testing procedures and results to the Safety Program Manager for coordination and record maintenance.

The employee must be notified of any monitoring results within 15 working days of receiving the results, either individually or by posting the results in an appropriate location that is accessible to employees, such as the safety bulletin board.

Accurate records of measurements taken to monitor employee exposures must be kept, transferred and made available for each employee in accordance with WISHA's Access to Employee Exposure and Medical Records requirements (WAC 296-802).

3. Medical Attention

Medical examinations are to be provided at no cost to the employee. The Safety Program Manager must maintain an accurate record for each laboratory employee undergoing medical consultations or medical examinations as required by the laboratory standard. Keep this information in an employee's file:

a. Exposure monitoring test methods and results.

b. Safety Data Sheet of the hazardous chemical(s) involved.

c. Accident Report.

d. Information submitted to, and received from, the physician.

4. Medical Consultations and Medical Exams

Employees who work with hazardous chemicals must be provided with an opportunity to receive medical attention when overexposure to a hazardous chemical is suspected.

a. Medical attention must be provided to an employee under the following circumstances:

- Employees showing symptoms of chemical exposure must be permitted to receive a medical examination.
- When exposure monitoring reveals an exposure level routinely above the substance's action level, medical surveillance must be conducted as required by the laboratory standard.
- Whenever a spill, leak or other event makes it likely a hazardous exposure has occurred, the affected employee must be provided with the opportunity for medical consultation to determine the need for a medical exam.

b. Type of medical attention

All medical examinations and consultations must be performed under the direct supervision of a licensed physician without cost to the employee, without loss of pay and at a reasonable time and place. Direct all questions regarding medical consultations and examinations to the Safety Program Manager.

c. Information for the physician

Provide the following information to a physician conducting medical consultations and exams:

- The identity of hazardous chemicals to which the employee may have been exposed.
- A description of the conditions under which the exposure occurred, including quantitative exposure data if available.
- A description of the signs and symptoms of exposure that the employee is experiencing, if any.

d. Physician's report

A written opinion from the examining physician for any consultations or exams performed under this Operating Procedure must include:

- Any recommendations for further medical follow-up.
- The results of the medical examination and any associated tests.
- Any medical condition revealed during the course of the exam that might compromise employee safety during, or because of, exposure to hazardous chemicals found in the workplace.
- A statement that the physician of the results of the consultation or medical exam and any medical condition that may require further examination or treatment has informed the employee.

The written opinion should not reveal specific diagnoses unrelated to occupational exposure, except as noted above.

e. Medical record keeping

The Safety Program Manager must keep accurate records of medical consultations or medical examinations. Records for each employee must be transferred and made available as specified under WISHA's Access to Employee Exposure and Medical Records requirements (WAC 296-802).

Provisions equal to the above must be extended to affected students when an overexposure situation occurs. Application of the specific provisions related to student medical records, method of payment for physician services, etc., will vary according to student safety requirements and school district policies.

Appendix 1.

RESTRICTED (BANNED) CHEMICALS

(from www.schoolchemlist.org)

Acetal
Acetaldehyde
Acetyl Chloride
Acrolein
Acrylamide
Acrylic Acid
Acrylonitrile
Adrenaline
Amidol
Ammonium Bifluoride
Ammonium Metavanadate
Ammonium Nitrite
Ammonium Perchlorate
Ammonium Polysulfide
Ammonium Sulfide
Anasol
Anhydrous Ammonia
Aniline
Aniline Acetate
Aniline Hydrochloride
Anthracene
Antimony - Powder
Antimony Trichloride
Arsenic - Metal Lump
Arsenic Trioxide
Asbestos
Barium - Metal Lump
Barium Chlorate
Barium Chromate
Benzalkonium Chloride
Benzene
Benzidine
Benzoyl Chloride
Benzoyl Peroxide
Beryllium Oxide
Beryllium Sulfate
Boron Trichloride
Bouin's Fixative
Bromoethane
Butadiene
Cadmium - Powder
Cadmium Acetate
Cadmium Chloride
Cadmium Iodide
Cadmium Nitrate
Cadmium Oxide
Cadmium Sulfate
Calcium - Powder
Calcium Cyanide
Carbon Disulfide
Carbon Tetrachloride
Carnoy's Fixative
Catechol
Cesium 133
Chloral Hydrate
Chloretone
Chlorine
Chloroethanol
Chloroform
Chlorophenol
Chlorosulfonic Acid
Cobalt - Powder
Colchicine
Collodion
Cresol
Cumene
Cupric Cyanide
Cuprous Cyanide
Cyanogen Bromide
Dibromo-3-chloropropane-1,
2-Dichlorobenzidine
Dichlorophenoxy Acetic Acid
Dimethyl Aniline
Dimethylaminoazobenzene
4-Dinitrophenol
Dinitrophenyl Hydrazine
Dioxane
Estrone
Ethanolamine
Ethyl Chloride
Ethyl Ether
Ethyl Iodide
Ethylene Oxide
Ethylenediamine
Ethyleneimine
Europium
Formaldehyde
Gilson's Fixative
Glyoxal
Hayem Diluting Fluid
Hydrazine
Hydrazine Sulfate
Hydrofluoric Acid
Hydrogen Bromide
Hydrogen Chloride
Hydrogen Peroxide (>31%)
Hydrogen Sulfide Gas
Isopropyl Ether
Lanthanum
Lauroyl Peroxide
Lead - Powder
Lead Arsenate
Lead Chromate
Lead Citrate
Manganese - Powder
Mercaptoethanol
Mercuric Bichloride
Mercuric Chloride
Mercuric Iodide
Mercuric Nitrate
Mercuric Oxide
Mercuric Oxycyanide
Mercuric Sulfate
Mercuric Sulfide
Mercurochrome
Mercurous Chloride
Mercurous Nitrate
Mercurous Sulfate
Mercury Thermometers
Methoxyethanol
Methyl Bromide
Methyl Chloromethyl Ether
Methyl Ethyl Ketone
Peroxide
Methyl Iodide
Methyl Isobutyl Ketone
Methyl Isocyanate
Methyl Mercaptan
Methyl Tert-Butyl Ether
Methylamine
Millon's Reagent
Naphthylamine

Nessler's Reagent
Nicotine
Nitrobenzene
Nitrosodimethylamine, N-
Osmium Tetroxide
Paraformaldehyde
Paraldehyde
Paris Green
Pentachlorophenol
Perchloric Acid
Phenylarsine Oxide - Solid
Phenylhydrazine Hydrochloride
Phenylthiocarbamide
Phosphorus - Red
Phosphorus–White or Yellow
Phosphorus Pentasulfide
Phosphorus Pentoxide
Phosphorus Trichloride
Physostigmine
Picric Acid
Potassium - Chunks
Potassium Cyanide
Potassium Peroxide
Praseodymium
Promethium
Pyridine
Radium
Rubidium
Selenium
Silicon Tetrafluoride
Silver Cyanide
Sodium - Chunks
Sodium Arsenate
Sodium Arsenite
Sodium Azide
Sodium Borohydride
Sodium Cyanide
Sodium Dithionite
Sodium Fluoroacetate
Sodium Nitroferricyanide
Strychnine
Sulfur Dioxide
Testosterone
Testosterone Propionate
Tetrabromoethane
Tetrafluoroethylene
Tetrahydrofuran
Thallium
Thimerosol
Thionyl Chloride
Thorium Nitrate
Thorium Oxide
Titanium Tetrachloride
Titanium Trichloride
Trichloroethane
Trichloroethylene
Trichlorotrifluoroethane
Triethyl Phosphate
Triethylamine
Trimethylamine
Uranium
Uranyl Acetate
Uranyl Nitrate
Vanadium
Vanadium Pentoxide
Zenker's Fixative

Appendix 2.

STORAGE PATTERN FOR CHEMICALS WHERE SPACE IS LIMITED

A proper chemical storage system separates materials according to chemical compatibility and hazard class. Many schools try to use the excellent chemical storage system found in Flynn Scientific's catalog. Unfortunately, many school stockrooms are too small to provide 23 separate locations for classes of chemicals.
Here are some tips for creating safer chemical storage rooms:

- Complete an inventory of the chemical compounds in each stockroom.
- Do not store chemical containers above eye level if possible.
- Separate inorganic compounds from organic compounds.
- Store solids above and liquids below
- Storage cabinets for acids, bases and flammables are meant for liquids, not dry solids.
- Vent acid cabinets to prevent vapor build-up.
- Store concentrated sulfuric acid on one shelf of the acid cabinet and concentrated hydrochloric acid on another.
- Store nitric acid in a secondary container with other inorganic acids or a separate cabinet.
- Do not vent flammable liquid storage cabinets unless you are using an explosion-proof fan that is carrying the vapors out of the building.
- Glacial acetic acid is a flammable liquid; store it in a dedicated organic acid cabinet or in the flammable liquids cabinet.
- Flammable liquids like alcohols must not be stored in conventional refrigerators.

The chart below combines categories of chemicals that have similar hazardous characteristics. By doing so, you will only need 12 separate storage locations.

Inorganic Reactives & Metals (I-1, I-10) Sulfur, Phosphorus (double packaged), Arsenic, Solid Metals, Hydrides, Lithium, Sodium	**Organic Toxins (O-5, O-7)** Epoxy Compounds, Isocyanates, Sulfides, Polysulfides
Inorganic Salts (I-2) Chlorides, Iodides, Fluorides, Bromides, Sulfates, Sulfites Thiosulfates, Phosphates	**Organic Reactives #6** Peroxides, Azides, Hydroperoxides
Inorganic Oxidizers (I-3, I-6, I-8) Nitrates, Nitrites, Borates, Chromates, Manganates, Permanganates, Chlorates, Chlorites, Peroxides, Azides	**Flammable Storage Cabinet (O-2, O-3, O-4, O-8 & Concentrated Organic Bases)** Alcohols, Glycols, Phenol, Hydrocarbons, Cresols, Esters, Ethers, Propionic Acid, Formic Acid, Glacial Acetic Acid, Lactic Acid
Inorganic Corrosive Bases (O-4) (Dry Chemicals) Dry Hydroxides, Oxides, Silicates, Carbonates, Carbon	**Dry and Dilute Organic Acids & Anhydrides (O-1)** Citric Acid, Anhydrides, Peracids, etc.
Inorganic #5 and #7 Toxins Arsenates, Cyanides, Sulfides, Selenides, Phosphides, Carbides, Nitrides	**Miscellaneous** Household chemicals (vinegar, baking soda, vegetable oils), Dyes, Stains, Agars, Sugars, Gels
Corrosive Base Storage Cabinet (I-4 Liquids) >1.0 molar Ammonium Hydroxide, Sodium Hydroxide, Calcium Hydroxide (limewater), Potassium Hydroxide, Oxides, Silicates	**Non-metal Corrosive Acid Storage Cabinet (I-9 Liquids)** Hydrochloric Acid, Sulfuric Acid, Hydrobromic Acid, Phosphoric Acid, Perchloric Acid. Nitric acid separately stored in this or another cabinet. Limit Nitric Acid to a 5 year supply.
Dilute solutions at or below 1.0 molar can be stored on shelves rather than in cabinets. Segregate inorganic and organic compounds. Check containers annually for condition of containers, labels, and contents. Replace degraded lids, dropper tops and solutions.	*To prevent release of corrosive vapors, avoid storing pipettes holding acids or bases in test tubes taped to the side of bottles. Wrap fritted glass stoppers on acid bottles in parafilm to reduce evaporation. Store Iodine crystals in a sealed plastic bag to monitor degradation of the container's cap and reduce indoor air pollution.*

Appendix 3.

LABORATORY SAFETY EQUIPMENT RECOMMENDATIONS

Personal Clothing and Equipment	Recommendations
Aprons, rubber, or plastic	Extends to or below the knees.
Gloves	The material from which the glove is made must be carefully chosen so that the glove is not permeable to the liquids or vapors anticipated for the experiment.
Chemical splash goggles	Meets ANSI Standard Z87.1 for chemical splash proof goggles. Indirect ventilation
Face shield	Used with goggles.
Laboratory coat	Tyvek or Dacron and cotton or cotton; has long sleeves; has Velcro or snap fasteners. Extends to or below the knees.
Drench shower	Ceiling and wall-mounted showers operated by chain pull valves. Required to deliver tepid, potable water for at least 15 minutes without needing to hold valve.
Fire blanket, wool	Most useful to keep a victim warm while waiting for medical attention. A blanket should be available but not on a roller. The purpose of the fire blanket is to cover the victim, not encircle.
Fire blanket, wool	Wrapping a burning victim may cause additional burns to neck and face due to the chimney effect.
Fire extinguisher	Should be suitable for Class A, B & C fires.
First aid kit	Any good, general-purpose first aid kit is suitable.
Flammable storage cabinet	May be made of wood or metal. Should be vented directly to the outside. Check local fire Codes. Self closing door is required.

Fume Hood	Should have a face velocity of 60-100 linear feet per minute. Should be vented to the outside. May have a vertical or horizontal sash. Should be kept clean and uncluttered.
Safety cans	Some occasions demand the volatile, flammable, or combustible solvents be stored in safety cans. Each can should have a flame arrestor in good working order. Check Local fire codes and NFPA standards 30 and 45.
Signs	Signs are required for designating the location of safety equipment, means of ingress and egress, etc. Signs will be chosen to conform with state guidelines and recommendations.
Smoke alarm	Check local fire codes.
Spills – acid	Best treated with sodium bicarbonate, which may be mixed with kitty litter and/or sand.
Spills – base	Best treated with sodium bisulfate, which may be mixed with kitty litter and/or sand.
Spills – halogen	Best treated with sodium thrisulfate, which may be mixed with kitty litter and/or sand.
Spills protection in the laboratory	A general-purpose adsorbent, such as a mixture of kitty litter, sand, and vermiculite is suitable for containing many chemical spills.

Appendix 4.

RECORD OF CHEMICAL TRAINING

Employee Name: _____ District ID # _____

Job Assignment: _____ Job Location: _____

The above-named employee has received training, as specified in the applicable Chemical Hygiene Plan, in the following areas:

Training Topic	Date	Location	Trainer's Name/initials
Federal & state chemical hygiene standards	_____	_____	_____
Location/content of the District Chemical Hygiene Plan	_____	_____	_____
Hazards of chemical in the workplace	_____	_____	_____
Proper procedures of requesting authorization to obtain and use chemicals considered too hazardous for general school laboratories	_____	_____	_____
Labeling and storing practices and information to interpret labels	_____	_____	_____
Location and content of SDS's	_____	_____	_____
Location of safety references	_____	_____	_____
Location and proper use of protective apparel and equipment	_____	_____	_____
Appropriate first aid techniques	_____	_____	_____
Procedures for responding to chemical exposures	_____	_____	_____
Procedures for reporting accidents	_____	_____	_____
Detecting presence of release of hazardous chemicals	_____	_____	_____
Proper operation of fire extinguisher	_____	_____	_____

Appendix 5.

Science Classroom & Lab Reference for Environmental, Health and Safety Guidance

Local Hazardous Waste Management Program in King County, Washington

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
CHEMICAL HAZARD MANAGEMENT				
• Containers of non-hazardous substances (e.g., distilled water) shall be labeled to avoid confusion. (All containers must be labeled regardless of the contents).	X		WAC 296-800-17025	
• A mercury barometer is allowed, but not recommended. Mercury shall be disposed of in compliance with EPA and ECY regulations. Mercury-free barometers are available, e.g.: the "Eco-Celli" barometer. www.weatherequipment.com/Eco-celli-Barometer_p_156.html		X	RCW 70.95M WAC 173-303	
• Formaldehyde should not be in K-12 schools. Laboratories using formaldehyde solutions must comply with the OSHA Occupational Standard for Formaldehyde. Biology specimens stored in formaldehyde should be decanted and held in a formaldehyde-free alternative.-e.g., Flinnsafe, Carosafe, propylene glycol, or alcohol solution. Formaldehyde disposal shall adhere to the ECY Dangerous Waste Regulations.		X	WAC 296-856 29 CFR 1910.1048 WAC 173-303 Prudent Practices 11.C.1	
• Glassware should be free of all cracks, chips, sharp edges, and other defects.		X	Prudent Practices 4.E.9	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• Biology specimens should be stored in sealed containers to prevent evaporation of liquid contents and resulting IAQ issues. Specimens preserved in hazardous or dangerous chemicals, e.g., alcohol, should be stored in locked cabinets. A flammable cabinet may be required.		X	Prudent Practices 5.E.1	
EMERGENCY AND WASTE MANAGEMENT				
• All laboratories shall have a written clean-up plan for spills. All laboratories shall have a spill clean-up kit or materials for absorbing spills identified and readily available to students and staff.	X		WAC 296-828-20005 Prudent Practices 2.F Prudent Practices 6.C.10.6	
• Waste shall be disposed of in accordance with ECY regulations. No waste or chemicals shall be poured down the drain or put in the garbage without approval from local sewer or solid waste authorities.	X		WAC 173-303 Prudent Practices 8.B.6.2	
EYE, LUNG, AND SKIN PROTECTION				
• Instructors shall wear PPE when using corrosive, toxic, reactive, or irritating chemicals and during hazardous activities as required by L & I WISHA rules.	X		WAC 296-800-160 WAC 296-155 Prudent Practices 7.C.3	
• Fume hood shall be used when using known or suspected carcinogens, mutagens, teratogens, and chemicals which are fast acting/highly toxic, listed as toxic via skin absorption or inhalation, or chemicals with a TLV or PEL of 50 ppm or less. This determination shall be based on information provided by material? (MSDS or SDS) safety data sheets.	X		WAC 296-841-20010 Prudent Practices 9.C.1	
• Eye protection, safety glasses, and face shields shall meet ANSI requirements... Students shall wear PPE when using corrosive, toxic, reactive, or irritating chemicals and during hazardous activities.	X		ANSI Z87.1 WAC 246-366-140 RCW 70.100 WAC 296-800-160 WAC 296-155-215 Prudent Practices 6.C.2.2	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• A sink with soap and paper towels shall be available in the lab for hand washing.	X		WAC 296-800-23025	
• Emergency eyewash and shower stations shall be provided when there is a potential for exposure to corrosives, strong irritants, or toxic chemicals. They shall be located within 50 feet or ten seconds walking distance from all lab science workstations.	X		WAC 246-366-140(2) WAC 296-800-15030 ANSI Z 358.1 Prudent Practices 7.F.2.5	
• Emergency showers shall deliver water to cascade over the user's entire body at a minimum rate of 20 gallons (75 liters) per minute for 15 minutes or more.	X		WAC 296-800-15030 ANSI Z 358.1 Prudent Practices 7.F.2.5.1	
• Eye-wash stations and emergency showers shall be handicap accessible and operable "hands-free" so that the user can hold both eyes open. Hand-held showers and eye-wash equipment do not meet current L & I WISHA rules (except as auxiliary or extra protection).	X		WAC 296-800-15030 ANSI Z 358.1 Prudent Practices 7.F.2.5 ADA Title III	
• Eye wash stations shall provide 0.4 gallons (1.5 liters) per minute for 15 minutes or more. In some areas with high water pressure, flow regulators may be required on the eye wash stations.	X		WAC 296-800-15030 ANSI Z 358.1 Prudent Practices 6.F.2.5 ADA Title III	
• Emergency showers and eye wash units shall be inspected and tested for proper operation annually. Plumbed emergency eye washes must be activated weekly. Written documentation of tests shall be maintained on site.	X		WAC 296-800-15035 Prudent Practices 7.F.2.5	
• Fire retardant lab coats shall be used as required by L & I WISHA PPE rules when appropriate for a specific project or demonstration.	X		CFR 1910.132(d)(1) Prudent Practices 6.C.2.6.2	
• A first aid kit shall be provided and adequately stocked in the lab area.	X		WAC 296-800-15020 Prudent Practices 2.F.2	
• Appropriate gloves, matched to the hazard, shall be provided, and worn when the potential for hand contact with chemicals exists.	X		WAC 296-800-16065	
• Closed toe shoes shall be worn at all times in the laboratory. (No sandals or perforated shoes.)	X		WAC 296-800-16060	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• A non-asbestos fire blanket should be provided, identified, readily available, and visible to students and staff.		X	Prudent Practices 6.C.10.9	
• Safety shields on the demonstration table should be used for demonstrations wherever the possibility of explosion exists.		X	Prudent Practices 7.F.2.2	
• Ethidium Bromide is hazardous via skin contact or ingestion. Gloves and eye protection shall be worn when handling it. Only purchase Ethidium Bromide in kits and, when done using it, dispose as toxic hazardous waste.		X	WAC 173-303-090,170	
• Jewelry should not be worn if personal safety would be jeopardized.		X	Prudent Practices 7.C.8.4.2	
• Loose hair should be restrained so that personal safety is not jeopardized.		X	Prudent Practices 7.C.8.4.2	
MECHANICAL AND ELECTRICAL EQUIPMENT				
• There shall be an on-demand, mechanical ventilation system providing additional air exchange as required by codes for chemical areas such as photo darkrooms, storerooms, and chemistry labs. (This is in addition to the building HVAC system).	X		WAC 51-52/IMC 401, 403 WAC 296-841-20010 WAC 296-828-20005 Prudent Practices 9.C NFPA 45 Chapter 8	
• All hazardous chemical fumes and vapors shall vent directly to the outside to prevent return into the building or the building HVAC system.	X		WAC 296-62-13620 WAC 296-841-20010 (2) WAC 51-52/IMC 501 Prudent Practices 9.C NFPA 45	
• Make-up air shall be of ample quantity to replace the exhausted air and shall be tempered when necessary.	X		WAC 296-62-13625 WAC 51-52/IMC 501 Prudent Practices 9.C NFPA 45	
• Only UL approved heating devices shall be used in laboratories.	X		IFC 605	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• Electrical receptacles shall be properly grounded. GFI devices shall be provided on all electrical receptacles within six (6) feet of sinks and other grounding sources.	X		WAC 296-24-95705 NFPA 70/NEC 210-8(b) NFPA 45-5.6 Prudent Practices 7.C.1.1	
• All electrical equipment shall be properly grounded. Portable electrical equipment shall be double-insulated or provided with a UL-listed ground prong.	X		WAC 296-800-28040 WAC 296-24-95705 WAC 296-24-95709 NFPA 70/NEC Prudent Practices 7.C.1.1	
• Electrical extension cords shall be UL-listed, and the wire size shall be appropriate for the applied use.	X		WAC 296-800-28040 WAC 296-24-95707,95709 IFC 605 NFPA 70/NEC Prudent Practices 7.C.1.1	
• There shall be at least one fume hood for each laboratory where hazardous chemicals are used. A demonstration hood is also recommended with clear sides so students can view demonstrations from three sides.	X		WAC 296-828-20005 Prudent Practices 7.C.1.2 29 CFR 1910.1450 App A	
• All fume hoods shall exhaust directly to the outside, away from all occupied areas and air intakes in order to prevent exhaust from reentering the building.	X		WAC 296-62-13620 WAC 51-52/IMC 501 Prudent Practices 9.C.2	
• Fume hoods in school buildings shall comply with AHERA asbestos regulations.	X		AHERA	
• All electrical devices such as switches, lights and motors used in the fume hood shall be explosion-proof.	X		NFPA 70/NEC Prudent Practices 7.C.1.2	
• Electrical panel circuit breaker switches for the lab shall be accessible and the breakers labeled. A clear and unobstructed means of access with a minimum width of 30 inches and a minimum height of 78 inches shall be maintained from the operating face of an electrical panel board.	X		WAC 296-800-28022 WAC 296-800-28025 WAC 51-54/IFC 605.3, 8509 NFPA 70/NEC 110.26	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• Fire extinguishers (ABC type) shall be provided. Fire extinguishers shall be identified and readily accessible to staff and students. The instructor shall be trained in fire extinguisher use. Demonstration or hands-on training shall be provided during safety orientation.	X		WAC 296-800-30005, 30010, 30025 Prudent Practices 7.F.2.3.1	
• A fire alarm system shall be provided. Alarm pull stations shall be identified and readily accessible to staff and students.	X		WAC 296-800-31070 Prudent Practices 7.F.2	
• Master gas shut-offs shall be provided, the location clearly visible, accessible, and indicated by means of a sign. Master electricity and water shut-offs are recommended. Directional signs should be provided to safety items in all lab areas.	X		WAC 51-56/UPC 12.1151-54 IFC 2703.2.2.1, 3503.1.3, WAC 296-806-20008, 20012	
• Fume hood air velocity should be 60-125 LFM checked quarterly with a velocity meter. Written documentation of all tests should be maintained on site. The exhaust capture path should direct contaminants away from the user. With the sash raised to 12 inches, the air flow should measure at least 60 LFM.		X	WAC 296-828-20005 ASHRAE 10-1995 ANSI Z 9.5 29 CFR 1910.1450 App A(C)(4) Prudent Practices 9.C.2	
STORING AND HANDLING CHEMICALS				
• Chemicals shall be organized and stored to separate incompatible groups. Labels shall clearly denote the identity of the container's chemical contents, warnings about its health and physical hazards, and the date received.	X		WAC 296-800-17025 Prudent Practices 5.E.2, Prudent Practices – Table 5.1	
• Food items (for human consumption) shall not be permitted in chemical laboratories or storerooms (including lab refrigerators). No eating, drinking or gum chewing shall be allowed in labs to prevent poisoning through ingestion. All food items to be used for experiments shall be labeled "Not for human consumption."	X		29 CFR 1910.141 (g) (2) & (4) Prudent Practices 6.C.2.3	
• Chemical storerooms shall be lockable and inaccessible to unsupervised students ~~and~~ have self-closing doors. Doors shall have a one-hour fire rating.	X		WAC 51-54/IFC 2703.8.3.2 WAC 51-50/IBC 414.2.4 Prudent Practices 2.D.2	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• Chemicals marked only with teacher codes (e.g., A, B, C,), for student testing/analysis, shall not be allowed in permanent storage. All containers shall be stored in a way that allows identification of their contents.	X		WAC 296-800-17025 Prudent Practices 5.E.2	
• All flammables shall be stored in approved flammable storage cabinets with self-closing doors. Flammables (red labels) and acids and bases (white labels) shall be stored separately. Fire departments recommend **not** venting flammables cabinets.	X		WAC 296-24-33009 Prudent Practices 5.E.5	
• Elemental mercury, mercury thermometers, mercury compounds and other mercury-containing devices shall not be in Washington State schools.	X		WAC 246-366-140 RCW 70.95M	
• Only explosion-proof refrigerators shall be used to store volatile chemicals. Non explosion-proof refrigerators or other electrical devices shall not be located in areas with vaporous or flammable chemicals.	X		29 CFR 1910.307 Prudent Practices 7.C.3	
• Chemicals should not be stored in fume hoods for over 24 hours.		X	WAC 296-828-20005 Prudent Practices 9.C.2 29 CFR 1910.1450 App A(D)	
• There should be a separate storage shelf, cabinet, or area for water-reactive compounds (e.g., metallic sodium, potassium, or calcium) and organic peroxides.		X	Prudent Practices 5.E.7	
• Chemical storage areas should be clean, well-organized and have sufficient space to allow segregation of incompatible chemicals and easy access to storage shelves and exit doors.		X	IFC 2703.9.8 Prudent Practices 2.D.2	
• Chemical storerooms should have sturdy, well-supported shelves secured to the walls. All shelves should have "earthquake" (or "spill-prevention") lips on all shelf edges. Doors that close on cabinets do not replace the need for spill-containment "lips" on the front edge of shelves.		X	Prudent Practices 2.D.2	
• Chemical storerooms should have all hazardous chemicals stored at or below eye level (typically below 5' 6") with heavy objects stored on lower shelves. Higher shelves may be used for other items; e.g., glassware, equipment, paper goods, etc.		X	Prudent Practices 2.D.2	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• Chemical storage areas should be kept cool (between 55 and 80 degrees F) and dry (relative humidity between 30 and 60%).		X	Prudent Practices 2.D.2	
• Chemicals should be stored according to their properties, in compatible storage groups, not alphabetically.		X	Prudent Practices 5.E.2	
• All acids should be stored in approved acid cabinets. Isolate flammable acids like glacial acetic acid from oxidizing acids like nitric and sulfuric acid. Non-metal cabinets are recommended to prevent corrosion of the cabinet. Vent acid cabinets to prevent build-up of hazardous vapors.		X	IFC (2009) 2701.3.3.3 Prudent Practices 5.E	
TRAINING AND DOCUMENTATION				
• The chemical hygiene officer (e.g., science department chairperson or science teacher) shall develop and carry out a written CHP. It should include an operation and maintenance program for laboratory fume hoods and other mechanical equipment in science laboratories.	X		WAC 296-828-20005 Prudent Practices 9.C.2	
• A written and documented lab safety orientation that includes components of the Chemical Hygiene Plan shall be provided for all staff and students.	X		WAC 296-828-20005 Prudent Practices 2.B	
• A telephone for reporting emergencies shall be located in or near the laboratory. Emergency telephone numbers shall be readily accessible. Staff shall be trained in emergency procedures.	X		RCW 28A.335.320 Prudent Practices 3.D.2.1	
• Lab floor plans shall be kept in the school office. A listing of exits, chemicals, and storage place of chemicals shall be included for use by emergency responders. Exits shall be clearly marked and free of obstruction.	X		29 CFR 1910.1450 App A Prudent Practices App. A	
• Science laboratories shall have an inventory list of all chemicals. This list must be updated periodically. (The recommendation is annually or more frequently.)	X		WAC 296-800-17005 WAC 296-800-17010 RCW 28A.320.125(3)(b) Prudent Practices 2.D.4	

(Abbreviations defined below) August 2014	Required	Recommended	WAC or Other Reference	Inspection Checklist: Check if compliant. Report problems to administration.
• SDS shall be kept and readily available for all chemicals in the lab.	X		29 CFR 1910.1200(b)(4)(ii) Prudent Practices 4.B.2	
• Science laboratories shall have a written CHP that is available to all students and staff members. It shall be reviewed annually and updated when necessary. (New science teachers shall review the CHP as part of their Employee Safety Orientation.)	X		WAC 296-828-20005 Prudent Practices 2.B	
• Invisible hazards (radiation, chemical, electrical, laser, and heat) should be posted with warning signs or symbols when present.		X	ANSI C95.2 OSHA Tech Manual Sec. III: Chap 6 (VI)(E)(1) Prudent Practices 7.C.8.1	
• Schools should only store and use chemicals appropriate for their level of science instruction. The Local Hazardous Waste Management Program in King County maintains a comprehensive database of school chemicals which includes exposure hazards, environmental toxicity, common experiments, grade suitability, and a grade-based hazard rating. Chemicals in the database rated as "ban candidates" should not be used in K-12 schools.		X	WAC 246-366-140 LHWMP School Chemicals List Database	
• Chemicals should be purchased in the smallest commercially available container or in an amount that will meet the school's needs for approximately five academic years, whichever is greatest. All chemicals should be dated upon receipt into the lab or storage area.		X	WAC 246-366-140 Prudent Practices 5.B.1 Prudent Practices 5.B.5 Prudent Practices 5.C.1	
• CDC/NIOSH/USCPSC School Chemistry Laboratory Safety Guide is available on-line.			CDC School Chemistry Lab Safety Guide download	
• The Local Hazardous Waste Management Program in King County operates a website for teachers and students relating to laboratory safety in schools.			LHWMP Rehab the Lab website	

Guide to Abbreviations and References

AHERA – Asbestos Hazard Emergency Response Act

ANSI – American National Standards Institute
ANSI C95 – Standard for Radio Frequency Energy and Current Flow Symbols
ANSI Z9.5 – Laboratory Ventilation and Decommissioning Package
ANSI Z87.1 – Standard for Occupational and Educational Eye and Face Protection Devices
ANSI Z358.1 – Emergency Eyewash and Shower Equipment

ASHRAE – American Society Heating Refrigeration Air Conditioning Engineers

CFR - Codes of the Federal Register
29 CFR 1910.132 – Personal Protective Equipment
29 CFR 1910.141 – Chemical Hygiene in Laboratories
29 CFR 1910.307 – Electrical
29 CFR 1910.1048 –Formaldehyde Standard
29 CFR 1910.1200 –Hazard Communication Standard
29 CFR 1910.1450 –Lab Standard

CDC – Centers for Disease Control and Prevention

CHP – Chemical Hygiene Plan

ECY - Washington State Department of Ecology

EPA – Environmental Protection Agency

GFI - Ground fault interrupter

L & I – Labor and Industries

LFM – Linear feet per minute

HVAC – Heating, ventilation, and air conditioning

IAQ – Indoor air quality

IFC - International Fire Code
IFC 605 – Electrical
IFC 2701 – Performance Standards
IFC 2703 – General Safety Precautions

IMC - International Mechanical Code and state Building Code
IMC 51-52 –

MSDS - Material safety data sheets

NFPA - National Fire Protection Association
NFPA 70/NEC 110 – National Electrical Code

NIOSH – National Institute for Occupational Safety and Health

PEL - Prudent Practices - Prudent Practices in the Laboratory – National Research Council

RCW - Revised Codes of the State of Washington
RCW 28A – Common School Provisions
RCW 70.95 – Solid Waste Management
RCW 70.100 – Eye Protection

TLV – Threshold limit value

UL – Underwriters' Laboratories

UPC - Uniform Plumbing Code
51-56 UPC – Uniform Plumbing Code

USCPSC - United States Product Safety Commission

WAC - Washington Administrative Code
WAC 51-50 – State Building Code/International Building Code
WAC 51-52 – State Building Code/International Mechanical Code
WAC 51-54 – State Building Code/International Fire Code
WAC 51-56 – State Building Code/International Plumbing Code
WAC 173-303 – Dangerous Waste Regulations
WAC 246-366 – Primary and Secondary Schools
WAC 296-24 – Container and Tank Storage
WAC 296-62 – General Occupational Health Standards
WAC 296-155 – Occupational Health and Environmental Control
WAC 296-800 – Safety and Health Core Rules
WAC 296-806 – Operating Controls
WAC 296-828 – Using Hazardous Chemicals in Laboratories
WAC 296-841 – Airborne Contaminants
WAC 296-856 – Formaldehyde

WISHA – Washington Industrial Safety and Health

OUTDOOR HEAT EXPOSURE PREVENTION PLAN

Purpose: The purpose of this program is to ensure compliance with the Outdoor Heat Exposure rule, WAC 296-62-09510 - 09560, for employees who are exposed to temperatures listed in Table **1** below. Employees with only incidental exposure as defined in the rule are not covered.

Table 1
Outdoor Temperature Action Levels

All other clothing	**89°**
Double-layer woven clothes including coveralls, jackets, and sweatshirts	**77°**
Nonbreathing clothes including vapor barrier clothing or PPE such as chemical resistant suits	**52°**

Note: There is no requirement to maintain temperature records. The temperatures in Table 1 were developed based on Washington State data and are not applicable to other states.

Procedure: The following requirements are only in effect during the months of May through September each year for the following job categories or positions having outdoor heat exposure:

Job categories that may have outdoor exposures greater than incidental exposures:

Maintenanance and Operations: Electricians, Painters, General Construction, HVAC/Plumbers, Grounds/Landscape, Warehouse and Custodial.

Transportation: Mechanics

[**Note:** There are WAC rules that address drinking water, first aid, accident prevention programs and training requirements for other months of the year and for employees who are not at the action temperatures May through September.]

Training: Each year prior to the month of May, all employees working in the categories listed above will be provided training on signs and symptoms of outdoor heat exposure and on the company policies to prevent heat-related illness. Additional training will be scheduled for a make-up class as needed. When new employees are hired during the summer months, training will be provided prior to the new employee working in the outdoor environment.

Employee Training Content: Training on the following topics will be provided to all employees who may be exposed to outdoor heat at or above the temperatures listed in WAC 296-62-09510(2) Table 1:

(a) The environmental factors that contribute to the risk of heat-related illness;
(b) General awareness of personal factors that may increase susceptibility to heat-related illness including, but not limited to, an individual's age, degree of acclimatization, medical conditions, drinking water consumption, alcohol use,

caffeine use, nicotine use, and use of medications that affect the body's responses to heat. This information is for the employee's personal use;
(c) The importance of removing heat-retaining personal protective equipment such as non-breathable chemical resistant clothing during all breaks;
(d) The importance of frequent consumption of small quantities of drinking water or other acceptable beverages;
(e) The importance of acclimatization;
(f) The different types of heat-related illness, the common signs, and symptoms of heat-related illness; and
(g) The importance of immediately reporting signs or symptoms of heat-related illness either in themselves or in co-workers to the person in charge and the procedures the employee must follow including appropriate emergency response procedures.

Supervisor Training Content: Prior to supervising employees working in outdoor environments with heat exposure at or above the temperature levels listed in WAC 296-62-09510(2) Table 1, supervisors will be given training on the following topics:

(a) The information required to be provided to employees listed in subsection (1) of this section;
(b) The procedures the supervisor must follow to implement the applicable provisions of WAC 296-62-09510 through 296-62-09560;
(c) The procedures the supervisor must follow if an employee exhibits signs or symptoms consistent with possible heat-related illness, including appropriate emergency response procedures; and
(d) Procedures for moving or transporting an employee(s) to a place where the employee(s) can be reached by an emergency medical service provider, if necessary.

Drinking Water: On days when the temperature is at or above those listed in Table 1 of the regulation, employees will be provided a sufficient quantity of drinking water that is readily accessible at their work location. The water quantity will be sufficient to allow each employee to drink at least a quart or more of water each hour.

[**Note**: Drinking water packaged as a consumer product and electrolyte-replenishing beverages such as sports drinks that do not contain caffeine are acceptable.]

As the temperature increases through the day, additional water will be made available or replaced. It is the responsibility of this employer to ensure that the supply of available drinking water does not run out.

Responding to Signs and Symptoms. Time is critical when people are experiencing heat stress/heat stroke. The quicker any employee experiencing symptoms can be removed from the heat and cooled down, the better the chances are for a full recovery. On days when the temperatures will be at or above those listed in Table 1 of the regulation, the company will:

1. Provide an adequate supply of water or electrolyte replenishing beverages that is cooled and readily available to all staff working outdoors. The drinks must be readily available to every worker regardless of location and the task.

2. Encourage staff to wear loose fitting clothing, include shorts made from Cotton or another material that breathe for ventilation. Encourage the use of head coverings (hats).
3. Encourage staff to take hourly breaks, especially if unable to get out of the direct sunlight during their assigned tasks. Employees are allowed to take.
4. Provide temporary shade tents/awnings in areas where staff have extensive outdoor work and not sufficient shade.
5. Encourage staff to take shade breaks inside district facilities that are cooler or air-conditioned. When temperatures exceed 89 degrees, district staff whose assignments are outside will have access to shaded or air conditioned environments indoors at district facilities for hourly breaks. When temperatures exceed 100 degrees, staff assignments will be modified to provide increased time in shaded or air-conditioned environments.
6. Remind staff to pace the work progress and to cease work if they experience any signs of heat stroke or dehydration. Any staff member who may be experiencing the symptoms of heat stroke or heat exhaustion, must cease working immediately and seek a shaded area or go indoors and drink plenty of fluids for rehydration. Also, the staff member should contact their Supervisor as soon as possible regarding the exposure incident.

Never leave an employee who is experiencing heat-related problems by themselves; if they do not respond quickly to cooling attempts, immediately call emergency medical services at 911. If a co-worker is experiencing difficulty, do not hesitate to bring it to the attention of the supervisor or lead worker.

COVID-19 PANDEMIC SAFETY PLAN

Purpose: Auburn School District is committed to providing a safe and healthy environment for our staff, students, parents, volunteers, and visitors. To ensure we have a safe and healthy environment, the District continues to assess and update the COVID-19 Safety Plan. The Auburn School District Superintendents, Administrators and Staff are all responsible for implementing this plan. Our goal is to mitigate the potential for transmission of COVID-19 in our schools and community, and that goal requires full cooperation from administration, staff, and students. Only through this cooperative effort can we establish and maintain the safety and health of all persons in our facilities.

Procedures: The COVID-19 Safety Plan is administered by the Associate Superintendent for Business and Operations, who maintains the overall authority and responsibility for the plan. However, all District employees are responsible for supporting, implementing, complying with, and providing recommendations to improve all aspects of this COVID-19 Safety Plan.

The Auburn School District's COVID-19 Safety Plan follows the guidance developed by the State of Washington and is based upon Centers for Disease Control and Prevention (CDC), the Washington State Department of Health (WSDOH) guidelines for COVID-19, Washington State Department of Labor, and Industries (WSDLI) statutes and standards, and Washington's relevant and current Washington State Department of Health Guidelines.
https://doh.wa.gov/sites/default/files/2022-10/821165-K12SchoolsChildCare2022-2023.pdf.

The Auburn School District has reviewed and incorporated The Office of the Superintendent of Public Instruction (OSPI) Opening Public Schools in Washington District Planning Guide and the WSDOH/OSPI/WSDLI Employer Health and Safety Requirements for School Scenarios guidance for the development of this plan. The district is pivoting and adjusting to layered strategies during outbreaks or increased community prevalence.

Section 1: COVID-19 General Information

The CDC has updated their response and learning of respiratory disease spreading from person-to- person caused by a novel (new) coronavirus. COVID-19 can cause mild to severe illness; most severe illnesses occurs in older adults, and individuals with underlying health conditions or co-morbidity, especially those with respiratory-related conditions.

Symptoms

COVID-19 Symptoms may appear 2-14 days after exposure and include but are not limited to:

- Fever (100.4 °F or higher)
- Shortness of breath/difficulty breathing

- Cough
- Chills
- Muscle aches or body aches
- Fatigue
- Sore throat
- Runny nose/congestion
- Nausea, vomiting and diarrhea.
- New loss of taste or smell

Emergency Medical Conditions

Severe symptoms described by the CDC as requiring immediate medical attention include but are not limited to:

- Having trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse.
- Bluish lips or face

How the Virus is Transmitted

The virus is known to spread primarily from person-to-person transmission through the following:

- Respiratory droplets produced when an infected person coughs, sneezes, talks or spits, which can land in the mouths or noses of people nearby or possibly be inhaled into the lungs.
- People who are in close proximity, generally less than six (6) feet, with other people who are infected.
- Touching a surface or object that has COVID-19 on it and then touching one's own mouth, nose, or possibly the eyes.

The following should be considered with regards to COVID-19 symptoms:

- A person may NOT have a fever or other symptoms of COVID-19 and can still spread the virus.
- It is possible for people to spread the virus both prior to and after symptoms occur. If exposure is suspected people should be monitored for signs and symptoms for 14 days.

Section 2: Policies for Employees Exhibiting Signs of Illness or Confirmed COVID-19

All employees and substitutes are expected to stay home when sick or have contracted COVID-19 or have been in close contact with someone who has tested positive or has symptoms of COVID-19.

- Employees should self-monitor for signs and symptoms of COVID-19 throughout the workday.
- <u>If an employee becomes ill while at work/school they must leave for home immediately.</u>

Employees must inform the COVID supervisor if they become sick with:

- Symptoms of COVID-19 (fever 100.4, cough, shortness of breath/difficulty breathing, chills, fatigue, muscle aches/body aches, sore throat, new loss of taste or smell).
- Refer to the Washington State Department of Health flowchart for best practices and protocols: https://doh.wa.gov/sites/default/files/2022-03/820-229-SymptomExposureFlowchartK12SchoolsChildCare.pdf.
- The Auburn School District is informing workers if they have been exposed to a person with COVID-19 at their work in compliance with the Department of Labor and industries requirements and dashboards.

Teachers and Students in Classrooms

If a student reports feeling ill, they will follow WSDOH protocol and go to the school Health Room.

- Health room/office staff contact the parent/guardian and advise the family to pick the student up from school for observation at home.
- While waiting for the parent/guardian to arrive, COVID testing can be offered and administered id consented. Health room or other school staff will supervise the ill student until the students' parent/guardian arrive. Staff caring for the ill student shall wear medical PPE required for to the Washington State Department of Health mask order for Health Services.
- While waiting for pick up either in the Health Room or the COVID Isolation Room, the student should wear an FDA surgical mask. (this will be provided by the health Room staff.)
- Encourage the parent/guardian to consider COVID-19 testing. Provide the parent/guardian with COVID-19 testing information or a Rapid Antigen testing kit and request they notify school nurse if the results are positive.
- If parents/guardians report the student tests positive, the school nurse or the COVID para-educator will enter the students information into the district's online COVID-19 reporting form.
- The District COVID-19 Coordinator will contact Public Health-Seattle King County (PHSKC) for directives regarding classroom or school closure recommendation and length of closure if required based on the COVID outbreak criteria set by the WSDOH and will notify Human Resources of the Public Health Officer's recommendation. All school closure recommendations must be reviewed and approved by the Superintendent or designee.

Section 3: Infection Prevention Measures

Handwashing

Staff are instructed to wash their hands for at least 20 seconds with soap and water frequently throughout the day; Children and adults should clean their hands in the following situations:

- Arriving at school
- Before meals or snacks
- After outside activities
- After going to the bathroom

    - After sneezing or blowing their nose
    - Before leaving school
- Touchless hand washing sinks will be installed for every elementary portable classroom.
- Hand-sanitizer dispensers (that use sanitizers of greater than 60% alcohol) will be placed at entrances and strategic locations in the district facilities so they can be used for hand hygiene in place of soap and water. Hand sanitizer should not be used to clean dirty hands.
- Custodial staff will be responsible for providing hand-sanitizer to replenish built-in dispensers. Hand sanitizer dispensers should be placed at all building entrances/front offices/reception desks and meeting areas such as conference rooms, adjacent to elevator entrances, classroom entrances and high-use areas such as copier rooms and mailrooms. This is based on an as-needed basis as directed by the school principal.

Respiratory Etiquette

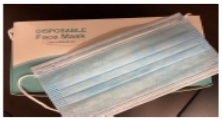
Cover your cough or sneeze. Employees are instructed to cover their mouth and nose with their sleeve or a tissue when coughing or sneezing and to avoid touching their face, in particular their mouth, nose and eyes, with their hands. They should dispose of tissues in provided trash receptacles and wash or sanitize their hands immediately afterward.

Face Coverings

All employees are welcome to wear face coverings over their noses and mouths while inside school district facilities. Before putting on a mask and after removing a mask, an individual should clean their hands with alcohol-based hand sanitizer or soap and water. Also, for cloths masks, change the masks when they get moist, and wash after daily use.

- How to properly wear face coverings
- How to wash face coverings

Auburn School District Mask Guidelines:

Level of Transmission Risk	Examples	Recommended Face Covering/Guidance	Auburn SD Provided Face Coverings
Negligible Transmission Risk	Working alone in a classroom or office	A mask is not required when working alone	N/A
Low Transmission Risk Available in every school building	General group instruction, office settings and food service in which students and staff are wearing masks and 6 foot distance is easily maintained.	Cloth face covering that covers mouth and nose or 3-ply disposable face mask (non-medical). Launder cloth face coverings daily, replace 3-ply mask after each use. Black cloth masks are provided, staff may wear their own if preferred.	 
Medium Transmission Risk Available in every school building	Small groups with 6 feet of distance mostly maintained, transportation and food service when 6 feet of distance is mostly maintained	KN95 (non FDA approved). Embossing is standard, visually check that no open holes prior to use. Limit use to one day (dispose of), change between use recommended.	
High Transmission Risk Available from Student Special Services or via School Health room	Working with students who are unable to wear a mask and/or without 6 feet of distance (sustained close contact). Sustained close contact for transportation or health room coverage.	**FDA Approved** Surgical Mask or **FDA Approved** KN95 Available from health services staff, please ensure that you have the correct mask. Replace (dispose) daily or more frequently if needed.11/24 *Face Shield also required	
Extremely High Transmission Risk Only available as designated	Health/Isolation (separation) room; Nurse conducting aerosolized treatment Nurses Health Techs Covid Site Coordinator (or other designated employee)	Healthcare N95 filtering facepiece respirator or **FDA Approved** Surgical mask or **FDA Approved** KN95 The N95 tight fitting respirator must be fit-tested and the individual provided medical clearance. *Face Shield also required	

Students face Coverings:

- The District will provide all students masks at no cost:
  - Masks for staff will be available through Student Special Services.
- Exceptions for students to wearing face coverings will only be allowed due to a known health condition, disability, or documentation from a licensed health care provider.
- Cloth face coverings should not be worn by:
  - Those under 2 years of age.
  - Those with a disability that prevents them from comfortably wearing or removing a face covering.
  - Those with certain respiratory conditions or trouble breathing.
  - Those who are deaf or hard of hearing, and those who provide instruction to such people, and use facial and mouth movements as part of communication.
  - Those advised by a medical, legal, or behavioral health professional that wearing a face covering might pose a risk to that person.
- In rare circumstances when a cloth face covering cannot be worn, students and staff may use a clear face covering or a face shield with a drape or wrap as an alternative to a cloth face covering. If used, face shields should extend below the chin, to the ears, and have no gap at the forehead.

- Younger students must be supervised when wearing a face covering or face shield. These students may need help with their masks and getting used to wearing them.
- The school is responsible for providing appropriate PPE for all staff, including those who assist students who have special needs.
- To facilitate and encourage the use of face coverings, the Auburn School District will provide masks at no expense to all district employees and students until further notice. This does not prevent employees or visitors from using their own face coverings, so long as they are compliant with the guidelines listed above. The school district will further make available disposable face coverings at the entrance to each building for employees or visitors to use who have forgotten their cloth face coverings at home.

KN95 Mask - Additional Information

- All KN95 masks have embossing. This is intended to maintain the integrity of the mask and allow the mask to stay in the appropriate position. On the KN95 masks where there is embossing, the outer and inner fabric is cut out, but there is a middle layer of protection.
- Inspect each KN95 mask prior to use to ensure there are no open holes where the embossing is in place. If you find holes, discontinue use, and request new KN95 masks.
- KN95 masks are for one-day use only and should be discarded daily.
- Refer to the ASD Respiratory Protection Program Addendum for COVID-19 mask requirements and fitting.

Section 4: Facility Cleaning, Sanitation and Disinfection Protocol

The Auburn School District utilizes Industry standard practices for cleaning, sanitizing, and disinfecting. The Maintenance and Operations Department follows the WSDOH and the CDC guidance for cleaning and disinfecting.

- Washington State Department of Health: Classroom Cleaning Tips for Teachers
- WSDOH green cleaning standards have been implemented, including a schedule for routine cleaning and disinfecting areas in all schools and support facilities.
- District custodial teams focus their efforts according to the following priority: clean and disinfect all high touch points on a daily basis. These areas include light switches, door handles, faucets, toilets, urinals, sinks, water fountains, health room counters and beds, and the counters and plexiglass in the Main, Attendance, and Counseling Offices.
- Only trained staff and custodians are allowed to disinfect facilities.
- All facilities will be disinfected daily in the evenings by building custodians when staff and students are gone, per the previously listed priorities.
- The type of room determines the cleaning. Custodial teams clean the health room, kitchen, restrooms, locker rooms, cafeteria, gyms, training & weight rooms, entry areas, hallways, and stairwells on a daily basis. These areas are where bodily fluids could be exposed or where the staff and students meet with the public.
- **Outdoor Play Equipment:** playgrounds and playground equipment at schools do not require cleaning and disinfection.
    - Do not spray disinfectant on outdoor playgrounds—it is not an efficient use of supplies and is not proven to reduce risk of COVID-19 to the public.

Staff and Student Cleaning

Staff and students play a significant role in helping keep our schools safe and clean. Each classroom is provided with the following cleaning kit:

- Two spray bottles of Fresh 118 Light Duty (99.9% effective germicidal)
- Microfiber cloths are available for cleaning upon request.
- Microfiber cloths will be laundered through Maintenance & Operations

- Staff and students will be responsible for cleaning their personal workspace, if needed.
- Computing devices should only be cleaned using materials and directions from the Department of Technology, under the supervision of the school BTC/TSS.
- **The District will provide all cleaning products. Cleaning and disinfecting products from home are not allowed!**

Cleaning of Personal Protective Equipment (PPE)

- Staff are responsible for cleaning and maintaining their personal PPE.
- Face Shields – can be cleaned daily or more often with soap and water.
- If additional cleaning/disinfecting is needed, follow the guidelines in PPE Safety Training.
- Any questions regarding the use and cleaning of personal PPE, contact the school nurse.

School Buses and Transportation Vehicles

- Bus drivers will be responsible for cleaning and disinfecting their school buses or vans daily and have been trained to do so.
- Cleaning and disinfecting supplies for school buses/vans will be provided by Maintenance and Operations.

Students Riding School Buses

- Windows may be open to improve ventilation as the weather permits.
- Consider how to reduce occupancy and increase space on the bus through scheduling.
- Encourage students to wash or sanitize their hands when they leave their home or classroom immediately before boarding the bus.

Section 5: Facility Building Operations and Ventilation Protocol

Operation of the building systems for Auburn School District facilities is in accordance with industry standards for public education facilities. The Maintenance and Operations Department is responsible for the assessment and maintenance of building systems, including - water, plumbing, electrical, heating, ventilation, and air-conditioning (HVAC) systems.

In an ongoing effort to optimize facility indoor air quality and to improve ventilation per CDC guidelines in order to reduce the risks of spreading the COVID-19 virus, the following actions have been implemented or completed:

- Replaced existing filters with high quality pleated air filters that provide the highest filtration rating that the building HVAC equipment can support.
- Confirmed all custodial vacuums are equipped with HEPA filters.
- Commissioned heating, ventilation & air-conditioning systems to ensure they are operating at optimal effectiveness and per manufacturer's designed specifications.
- Modified outside air louver settings to increase the amount of fresh air being delivered to indoor spaces.
- Changed hours of operation of ventilation equipment to the purge air by starting equipment two (2) hours prior to occupied hours and continuing for two (2) hours after closing hours.
- Encouraged staff to open doors and windows when practical.
- HEPA air purifiers are available for classrooms and offices upon request.
- School Health Rooms will be provided with HEPA air purifiers from the warehouse.

Section 6: Communications and Training Protocol

- This Auburn School District COVID-19 Safety Plan will be communicated to all employees and employees have been provided with the necessary training relating to the District's response to the COVID-19 virus. District training includes relevant district policies, procedures, and information about the COVID-19 virus and how to prevent its transmission, relevant sanitization/disinfection protocol and best hygiene practices. Additional communication and training will be ongoing through all district communication channels and provided to new or previously absent employees who did not receive the training.
- All employees, substitutes, volunteers, parents, visitors, and students are directed to stay home if they are experiencing symptoms or are positive for COVID-19.
- This COVID-19 Safety Plan has been reviewed by the Auburn School District Superintendent's Cabinet and has been posted throughout the workplace. The plan will be updated as necessary, upon receiving new guidance from state and local health officials.
- As the District begins to change information, this plan will be updated to provide relevant guidance and procedures for staff and students in the classroom environment.

APPENDIX A – REFERENCES AND INFORMATION SUMMARY

General

- CDC: Coronavirus (COVID-19) – www.cdc.gov/coronavirus/2019- nCoV

Face Coverings:

- **All staff and students are welcome to wear face coverings when in the building for protection.**
  - Auburn Mask Guidelines
  - Use and Care of Masks

Handwashing

- Hand washing protocols (multiple languages)

Respiratory etiquette: Cover your cough or sneeze.

- CDC: www.cdc.gov/healthywater/hygiene/etiquette/coughing_sneezing.html

Illness Prevention:

- CDC: www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html

Employees exhibiting signs and symptoms of COVID-19

- Staff who get sick after arriving to work should return home immediately:

Housekeeping

- Washington State Department of Health: Classroom Cleaning Tips for Teachers
- Computer and technology cleaning guidelines: Directions
- CDC: www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html

Families:

- What to do if you have confirmed or suspected COVID-19 (25 languages available)
- What to do if you were potentially exposed to someone with confirmed COVID-19 (25 languages available).
- King County Testing Sites

FORMS

JOB SAFETY ANALYSIS - "sample"

DATE:	JOB: Vertical Lathe Operation	ANALYSIS BY:
JOB SAFETY ANALYSIS	TITLE OF OPERATOR Lathe Machinist	REVIEWED BY:
DEPARTMENT	SECTION/UNIT in DEPARTMENT:	APPROVED BY:

REQUIRED OR RECOMMENDED
PERSONAL PROTECTIVE EQUIPMENT: Safety glasses, hand, and foot protection

SEQUENCE OF BASIC JOB STEPS	POTENTIAL ACCIDENTS OR HAZARDS	RECOMMENDED SAFE JOB PROCEDURE
1. Place Raw Stock Blank In Lathe Chuck	1. Sharp edges of stock blank	1. Wear gloves or protect against sharp edges as required when handling raw stock.
	2. Stock and lathe	2. Watch position of hands, arms, and body to keep clear of pinch point.
	3. Lifting raw stock blank	3. Use proper lifting procedures. Get help if blank is too large for one worker.
	4. Moving parts while rotating blank	4. Keep hands clear when rotating chuck to position part. Use jogging control to slow speed. Wear short sleeves. Do not wear gloves or rings.
	5. Falling objects	5. Wear foot protection.
2. Fabricate and/or Install Template On Stylus Platen	1. Slips on oily surface at same or different level. Climbing for access to elevated controls of equipment	1. Wipe up oil spills. Apply non-skid material to elevated steps. Use work platform engineered for job, including handrail protection.
3. Select And Install Tool Cutter	1. Falling objects, oily surfaces	1. Keep parts free of oil when handing. Wear foot protection.
	2. Sharp tools	2. Be aware of handling sharp objects.
4. Select Machine Mode	1. Electrical controls	1. Be sure machine is properly grounded and all electrical controls are in good repair.
5. Machine Part	1. Metal particles	1. Wear eye protection.
6. Remove Turnings And Chips As Machining Progresses	1. Turnings and chips	1. Wear eye protection. Use correct tools to clean turnings from table.
	2. Turnings	2. Break turnings before they become unwieldy. Do not wear long sleeve work clothes.

JOB SAFETY ANALYSIS

DATE:	**JOB:**	**ANALYSIS BY:**
JOB SAFETY ANALYSIS:	**TITLE OF OPERATOR:**	**REVIEWED BY:**
DEPARTMENT:	**SECTION/UNIT inc. DEPARTMENT:**	**APPROVED BY:**
REQUIRED OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT:		
SEQUENCE OF BASIC JOB STEPS	**POTENTIAL ACCIDENTS OR HAZARDS**	**RECOMMENDED SAFE JOB PROCEDURES**

ORIENTATION/JOB SAFETY CHECK LIST

Employee's Name		**Employee's Assignment**	
Supervisor's Name		**Location**	
Status (Circle One):	New Employee	Transfer	Rehire

Subject		**Employee's Initials**	**Supervisor's Initials**
1.	Purpose of Orientation		
2.	District Policy		
3.	Accident (Injury) Reporting/Investigation		
4.	First Aid Requirements		
5.	Safety Committee		
6.	Emergency Actions		
7.	Hazard Reporting		
8.	Hazardous Communication Program		
9.	Lockout/Tagout Program		
10.	Personal Protective Equipment		
11.	Safety Rules		
12.	Operation of Machinery		
13.	Safety Bulletin Boards		
14.	Responsibilities		

List machinery employee is authorized to operate:

Item	**Employee's Initials**	**Supervisor's Initials**

Personal Protective Equipment:

Item	**√ If Issued**	**√ If Available In Work Location**	**Employee's Initials**	**Supervisor's Initials**

I have instructed the employee on the items initialed above and believe he/she can perform assigned duties in a safe manner.

Date Supervisor's Signature

I have received orientation on the items initialed above.
I have received training on and understand the items initialed above.

Date Employee's Signature

Supervisor, make a copy of this form and retain with your files, return original to personnel for entry into employee's file.

RECORD OF HAZARD OBSERVED

Reported By: (Optional) _____ Date: _____

Reported To: _____ Date: _____

Nature of Hazard: (Describe-Act, Equipment Situation, etc.)

_____

_____

_____

_____

Location of Hazard: (Be specific, i.e., custodial closet, West Wing, XYZ Elementary School)

_____

_____

_____

_____

Action Taken: (By Supervisor)

_____

_____

_____

_____

_____

Signature Date

Forward to Safety Committee for review:

_____

Safety Committee Review Date

_____

Safety Committee Chairperson Date

Safety Committee Meeting Minutes

School District_____

Meeting Date	School Building	Chairperson

Elected Employee Members Present	Appointed Management Members Present	Members Absent

(Use additional pages if necessary to describe events fully)

1. Read, approve, and correct minutes from the previous meeting.

2. Old business (progress report on items and/or uncorrected hazards from previous meetings.)

3. New business (assign someone to research and follow-up, on each hazard and/or item listed.)

(continued on back)

4. Review accident and inspection records and reported hazards.

5. Other business, including student and visitor safety issues (describe.)

6. Items referred to Safety Director/Management with recommendations.

7. Comments on the overall effectiveness of the school district's safety program.

Date next meeting _____ **Time** _____ **Place** _____

Secretary _____ **Chairperson** _____

REPORT OF ACCIDENT/INCIDENT

DISTRICT_____SCHOOL_____
NAME OF EMPLOYEE_____
DATE OF ACCIDENT_____TIME OF ACCIDENT_____
WHEN REPORTED_____
JOB POSITION_____DATE OF HIRE_____
HOURS USUALLY WORKED PER DAY_____PER WEEK_____
SPECIFIC BODY PART INJURED_____
TYPE OF INJURY (Puncture, sprain, etc.)_____
WAS FIRST AID REQUIRED? Y____N____
LOST TIME INVOLVED? Y____N____
PROPERTY DAMAGE INVOLVED? Y____N____ DESCRIBE_____
HOW DID THE ACCIDENT OCCUR? (Object, activity, or substance involved?)

_____

_____

WAS PERSONAL PROTECTIVE EQUIPMENT NEEDED? Y__N____ USED? Y__N____
IN YOUR OPINION, HOW COULD THIS ACCIDENT HAVE BEEN PREVENTED?

_____

_____

WHAT UNSAFE CONDITIONS CONTRIBUTED TO THE ACCIDENT?_____

_____

HAD THIS CONDITION BEEN REPORTED PREVIOUSLY? Y____N____NOT SURE__
IF SO, TO WHOM?_____
CORRECTIVE ACTION TO BE TAKEN FOR UNSAFE CONDITION:_____

_____

WITNESSES? Y___N____NAMES_____
WITNESS STATEMENT:_____

_____

_____

_____

Signature of Employee_____Date_____

***To be completed within 24 hours and routed to the immediate supervisor and District Safety Committee**

SUPERVISOR'S REPORT OF INVESTIGATION

SCHOOL DISTRICT_____ **School**_____

WHO

Person injured/ill _____
Address _____ Telephone No. _____
Social Security No._____ Marital Status _____ Number of Dependent Children_____
Occupation _____ Immediate Supervisor _____
Witnesses_____
Was the injury or exposure caused by someone other than an employee of the district? Y____ N____
Please identify_____

WHERE

Exact Location of Incident_____

WHEN

Time/Date of Incident or Exposure_____ Date Investigated_____
Time/Date Reported_____ To Whom?_____
Last Day Worked_____ Date expected to return to work_____

WHAT

Describe the event(s) leading up to the incident_____

Describe the type of injury/illness and body parts affected_____

Describe the object/exposure or activity that inflicted injury, illness, or damage_____

Describe any personal protective equipment required_____ Used? Y_____ N_____
Describe any property damage_____

WHY (Use guide to identify)

Direct causes_____
Indirect causes_____
Basic causes_____
Explain why causes exist_____
Had this condition/procedure been reported previously? Y_____ N_____ Not Sure_____
When?_____ To Whom?_____

HOW

Explain action you have taken or recommended to prevent recurrence_____

Identify other departments that may benefit from similar corrective actions_____

SIGN AND DATE

Immediate Administrator/Supervisor_____ Date_____

Employee Representative_____ Date_____

Claims Manager_____ Date_____

Superintendent_____ Date_____

White: District Claims Liaison Yellow: Safety Committee Pink: Puget Sound Workers' Compensation Trust

ACCIDENT CAUSATION GUIDE

DIRECT CAUSES OF ACCIDENTS

Energy Sources

1. Mechanical:
   machinery, compressed gases, moving objects, tools
   explosives, strain (self)
2. Electrical:
   uninsulated conductors, high voltage sources
3. Chemical:
   acids, fuels, bases, reactive materials
4. Thermal
5. Radiation:
   noise, x-rays, lasers, microwave, radioactive materials

Hazardous Materials

1. Compressed or liquefied gases:
   flames, hot surfaces
2. Corrosive material
3. Flammable material:
   solid, liquid, gas
4. Oxidizing material
5. Poison
6. Radioactive material
7. Etiological agent
8. Dust
9. Explosives

INDIRECT CAUSES OF ACCIDENTS

Unsafe Acts

1. Failing to use personal protective equipment
2. Failing to warn co-workers or to secure equipment
3. Engaging in horseplay
4. Lifting improperly
5. Loading or placing equipment or supplies improperly
6. Rendering safety devices inoperable
7. Operating equipment at improper speeds
8. Operating equipment without authority
9. Servicing equipment in motion
10. Improper work position
11. Using alcoholic beverages
12. Using drugs
13. Using defective equipment
14. Using equipment improperly

Unsafe Conditions

1. Congestion of workplace
2. Defective tools, equipment, or supplies
3. Excessive noise
4. Fire and explosion hazards
5. Hazardous atmospheric conditions:
   gases, dusts, fumes, vapors
6. Inadequate supports or guards
7. Inadequate warning system
8. Poor housekeeping
9. Poor illumination
10. Poor ventilation
11. Radiation exposure

BASIC CAUSES OF ACCIDENTS

Management Safety Policies and Decisions

1. Health and safety policy is not:
   in writing, reviewed periodically; signed by top management; distributed to each employee
2. Health and Safety procedures do not provide for:
   a written manual; accident investigation
   safety meetings; job safety analysis;
   adequate housekeeping; medical surveillance;
   preventive maintenance; reports; safety inspections
3. Health and safety not considered in procurement of:
   supplies; equipment; services
4. Inadequate personnel practices regarding:
   employee selection; communication; training;
   assigned responsibility; assignment;
   accountability; job observation

Personal Factors

1. Behavior factors:
   frequent accidents; risk taking; lack of hazard awareness
2. Experience factors:
   insufficient knowledge; accident record
   inadequate skills; unsafe practices
3. Physical factors:
   size; strength; stamina
4. Mental factors:
   emotional; alcoholism; depression; drug use
5. Motivational factors:
   needs; capabilities
6. Attitude factors:
   people; company; job

Environmental Factors

1. Unsafe facility designs:
   mechanical layout; access ways; electrical systems
   material handling; hydraulic systems; illumination
   air conditioning; noise
2. Unsafe operating procedures
3. Unsafe projections:
   physical plant; equipment; procedures; supplies
4. Unsafe location factors:
   geographic area; surroundings; terrain; weather

FALL PROTECTION WORK PLAN

Note: Employees must review the requirements of this fall protection work plan prior to starting work. This plan must be available at the jobsite during work activities. Also, employees must be trained and instructed in accordance with Washington Administrative Code, WAC 296-155-245, and Part C-1. This program involves establishing a fall protection work plan, system, or a combination of prevention and protection measures.

Job Location:

Date:

Description of Work:

1. Identify all fall hazards (10 ft) or more in the work area:

☐ Leading edge	☐ Stairways	☐ Floor openings
☐ Perimeter edge	☐ Ladders	
☐ Scaffold erection/disassembly	☐ Through a roof	
☐ Other (describe):		

2. Method of fall protection to be provided:

☐ Fall Restraint	Type of Harness: Full Body Harness and Lanyard Anchor Point:
☐ Fall Arrest	Type of Harness: Full Body Harness and Lanyard Anchor Point:
☐ Safety Warning Line System	Note: Warning line must be erected 15 feet back from the unprotected edge. Caution or danger tape is acceptable for a warning line. WISHA will accept it as equivalent to a flagged rope or chain warning line.
☐ Safety Watch System	Note: Can be used when the employee is conducting any repair work or servicing equipment on a roof that has a pitch no greater than four in twelve. There can only be two people on the roof while the safety watch system is used. The employee acting as the safety watch and the employee engaged in repair work.

FALL PROTECTION WORK PLAN

3.	Describe the correct procedure for handling, storage, and securing of tools and material:		
5.	Describe the method for prompt, safe removal of injured workers:		
	☐ Initiate emergency response (911)	☐ Use drop lines or retraction devices	☐ Use ladders
	☐ Utilize lift truck or personnel platform	☐ Utilize scaffolds	
	☐ Other (describe):		

8. Identify the employees working at/near a “leading edge.”

Fall Protection Plan Completed By:

ABBREVIATIONS

AHERA-Asbestos Hazard Emergency Response Act

ANSI-American National Standards Institute

ASTM-American Society for Testing and Materials

DOE-Department of Energy

EPA-Environmental Protection Agency

L&I-Department of Labor and Industries

SDS-Safety Data Sheets

OSHA-Occupational Safety and Health Administration

OSPI-Office of Superintendent of Public Instruction

WAC-Washington Administrative Code

WIAA-Washington Interscholastic Athletic Association

WISHA-Washington Industrial Safety and Health Act