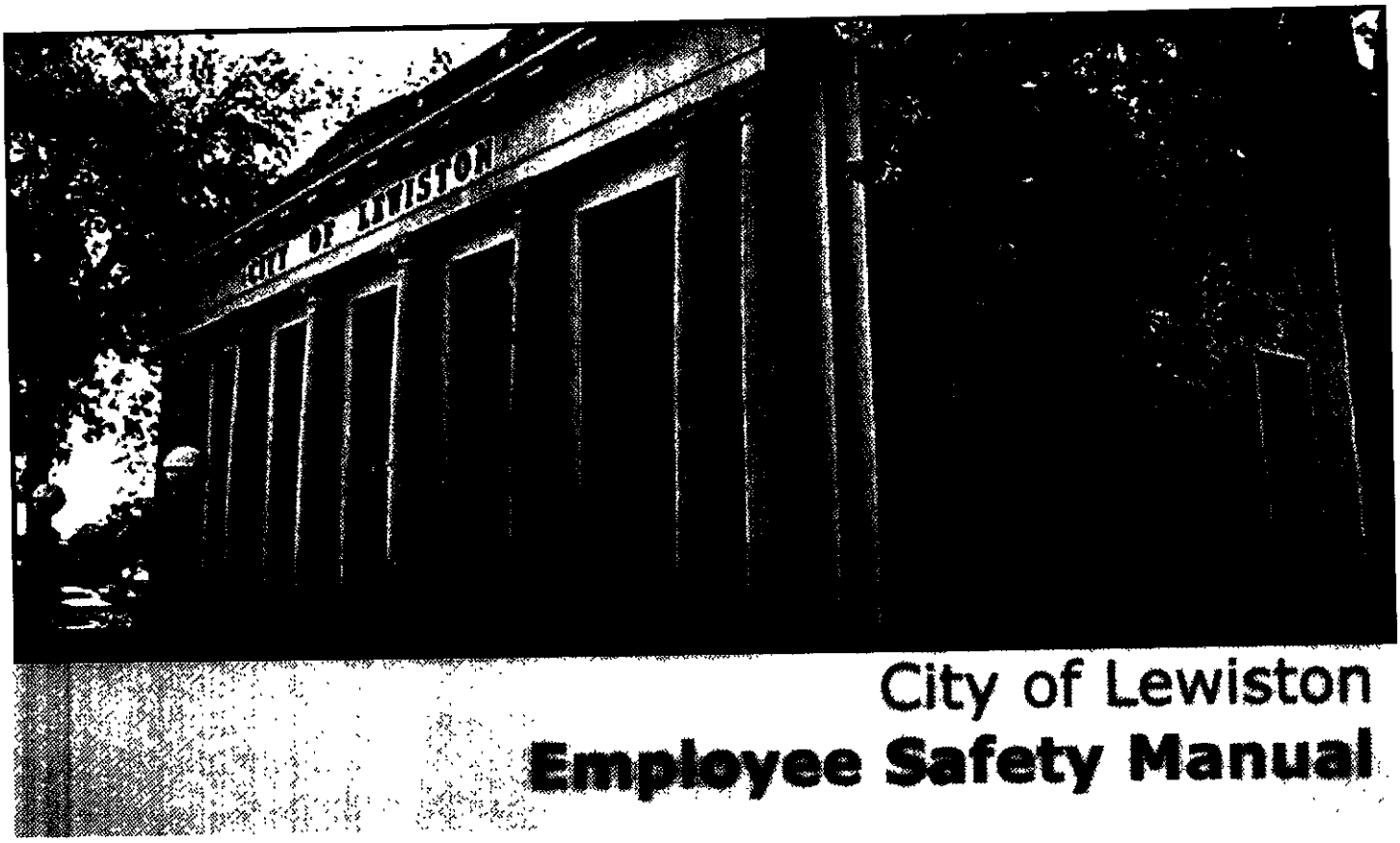

City of Lewiston
Employee Safety Manual

A Guide to Safety Policies & Procedures
to Support a Safety-Conscious Work Environment

06/02/2014

Preface

The City of Lewiston recognizes that our important role in the community is shaped by our citizens. As our most critical resource, employees will be safeguarded through training, provision of appropriate work surroundings and procedures that foster protection of health and safety. All work conducted by city employees will take into account the intent of this policy. No duty, no matter what its perceived result, will be deemed more important than employee health and safety.

The city is firmly committed to the safety of our employees. We will do everything possible to prevent workplace accidents and provide a safe working environment for all employees.

We value our employees not only as employees but also as human beings critical to the success of their families, the local community and the city.

Employees are encouraged to report any unsafe work practices or safety hazards encountered on the job. All accidents or incidents (no matter how slight) are to be immediately reported to the supervisor on duty.

A key factor in implementing this policy will be strict compliance to all applicable federal, state, local and city policies and procedures. Failure to comply with these policies may result in disciplinary actions, up to and including termination.

Respecting this, the city will make every reasonable effort to provide a safe and healthful workplace that is free from any recognized or known potential hazards. Additionally, the city subscribes to these principles:

- All accidents are preventable through implementation of effective safety and health control policies and programs.
- Safety and health controls are a major part of our work every day.
- Accident prevention minimizes human suffering, promotes better working conditions for everyone and increases productivity. This is why the city will comply with all safety and health regulations that apply to the course and scope of operations.
- Management is responsible for providing the safest possible workplace for employees. Consequently, management is committed to allocating and providing all of the resources needed to promote and effectively implement this safety policy.
- Employees are responsible for following safe work practices and city rules and for preventing accidents and injuries. Management will establish lines of communication to solicit and receive comments, information, suggestions and assistance from employees where safety and health are concerned.
- Management and supervisors will set an exemplary example with good attitudes and strong commitment to safety and health in the workplace. Toward this end, management will monitor city safety and health performance, working environment and conditions to ensure that program objectives are achieved.
- Our safety program applies to all employees and persons affected by or associated in any way with the scope of this business. Employees should strive to constantly improve safety awareness and to prevent accidents and injuries.

Everyone must be involved and committed to safety. Together, we can prevent accidents and injuries. Together, we can keep each other safe and healthy in the work that provides our livelihood and serves an important purpose in the community.

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Employee Safety Responsibilities

The primary responsibility of employees of the city is to perform all duties in a safe manner to prevent injury to themselves and the public, protecting the health of employees and preventing damage to public and private property.

To ensure that quality service with safety and health in mind is a cornerstone of operation at the city, employees *must* become familiar with, observe and obey the City of Lewiston's rules and established policies for health, safety and preventing injuries while at work. Additionally, employees *must* learn the approved safe practices and procedures that apply to their work. The protection of fellow employees and the public is the shared responsibility of every employee.

Before beginning special work or new assignments, an employee must review applicable and appropriate safety rules.

If employees have any questions about how a task should be done safely, they are under instruction ***not*** to begin the task until they discuss the situation with their supervisor. Together, they will determine the safe way to do the job.

If, after discussing a safety situation with his or her supervisor, an employee still has questions or concerns, he or she may contact a member of the city's Safety/Wellness Committee.

Employees must immediately (as soon as possible) report fires, accidental damage to property, vehicle accidents, and hazardous material spills to his or her immediate supervisor and call 911. Near misses or unsafe conditions/practices should be reported to his or her immediate supervisor.

No employee is required to perform work that he or she believes is unsafe or that he or she thinks is likely to cause injury or a health risk to themselves or others.

Employee Safety Rules

1. **Conduct:** Employees are required to work in an injury-free manner displaying accepted levels of behavior. Conduct that places the employee or others at risk, or that threatens or intimidates others, is prohibited.

2. **Drugs and Alcohol**: Use and/or possession of illegal drugs or alcohol on the premises or while on the job are forbidden. Reporting for work while under the influence of illegal drugs or alcohol is also forbidden. Use of prescription drugs, which may affect your alertness or ability to work, must be reported to your supervisor. Please refer to the current Drug and Alcohol Substance and Abuse Testing Policy.

3. **Housekeeping:** Always keep your work area and city vehicle clean and all materials properly stored. Place waste and debris in designated containers for proper disposal. The following areas must remain clear of obstructions:

   - Aisles and exits
   - Fire extinguishers and emergency equipment
   - All electrical breakers, controls and switches
   - Eye washes and safety showers

   Clean up several times throughout the day, disposing of trash and waste in approved containers, wiping up any drips/spills immediately and putting equipment and tools away as you are finished with them.

   See attached Exposure Control Plan titled "Housekeeping".

4. **Injury Reporting:** All work-related injuries must be reported to your supervisor immediately or as soon as possible. An Employee Accident form must be completed and submitted to the City Clerk's office within three days of the accident. Failure to immediately report injuries can result in loss of workers' compensation benefits and/or disciplinary action.

   Employees are required to go to the city's designated Occupational Health Care Provider which is Valley Medical Center's Express Care. Express Care is open Monday through Saturday from 7:30 a.m. to 7:30 p.m., and from 12:00 Noon until 5:00 p.m. on Sunday. If the accident occurs at a time services are not available, please report to St. Joseph Regional Medical Center's Emergency Department.

   In the case of an occupational disease, employees must give notice to the city when they are informed by a competent medical authority of the nature of the work-related causes of the illness. Employees must also report to his/her supervisor after each practitioner appointment to review his/her progress and to provide any paperwork received at the appointment.

   In case of an accident, an investigation will be conducted by the supervisor to determine the root cause of the accident. The injured employee will be asked to participate in the investigation.

   The city provides transitional return to work (light duty) jobs for those injured at work. Transitional work is meant to allow the injured employee to heal under a doctor's care while he/she remains productive. Employees are required to return to work immediately upon release.

   Any attempt to defraud the city with a false worker's compensation claim may result in disciplinary action, up to and including termination.

   See attached Exposure Control Plan titled "Worker's Compensation 101/Accident Investigations".

5. **First Aid:** Anything other than treatment of minor cuts and scratches should be performed by certified or trained first aid personnel only. In the event of an emergency, call 911.

6. **Personal Protective Equipment (PPE):** Employees are required to inspect PPE prior to each use and may not use damaged PPE. You are required to maintain and keep PPE clean.

   - Safety glasses – must be worn at all times in designated areas.

- Hard hats – must be worn at all times in designated areas.
- Gloves – appropriate work gloves must be worn at all times when performing jobs that could cause hand injuries or pose a health risk.
- Welding equipment – appropriate filter lens, welding helmet, gloves and sleeves are required for welders at all times.
- Respirators – only employees trained and authorized to use respirators are allowed to do so.
- Hearing protection – required in areas where noise exposure is more than 90dBA (85dBA if you already have experienced hearing loss).

See attached Exposure Control Plan titled "Personal Protective Equipment Program".

7. **Asbestos:** If possible, do not remove or disturb asbestos or material suspected of containing asbestos. Materials that may contain asbestos include:

- Adhesives and mastics
- Ceiling areas
- Duct work
- Flooring
- Floor tiles
- Insulation
- Lab fume hoods
- Piping
- Vented enclosures

Where contact with asbestos is unavoidable, employees must receive proper training, wear required protective clothing and use proper procedures for hygiene and decontamination. Where applicable, make use of proper respirators for the level of exposure.

See attached Exposure Control Plan titled "Asbestos Exposure Safety Program".

8. **Equipment Operation:** All employees, including part-time, must specifically be trained and authorized by their supervisor to operate all city vehicles, equipment and machinery.

When operating machines: do not wear loose clothing, tie long hair up and back, remove jewelry and roll sleeves all the way up or all the way down.

Never operate damaged or defective equipment. Turn the machine off and report it to your supervisor as soon as practical.

Never tamper with, remove or deactivate machine guards or controls designed to ensure safe operations. Never reach into an operating machine or moving machine part.

9. **Tools – Hand and Power:**

- Use all required PPE.
- Maintain tools in safe operating condition.
- Inspect tools and equipment guards before use for defects or wear. If a defect is found, notify a supervisor immediately.
- Never leave tools on stepladders, scaffolds, roofs or other places where they might fall.
- Impact-type hand tools, such as wedges and chisels, should be kept free of mushroomed heads.

See attached Exposure Control Plan titled "Hand Tools – Proper Care" and "Portable Electric Tools".

10. Ladders:

- Inspect all ladders prior to each use.
- Ladders must be placed on secure footing.
- Only one person is allowed on a ladder at a time.
- Never stand on the top two steps of a stepladder.
- Always maintain 3-point contact when working on ladders.
- Never reach beyond arm length when working on a ladder.
- Trained personnel should use only listed fiberglass ladders when working on or around electrical equipment.
- Employees shall follow standard operating procedures of their respective departments.

See attached Exposure Control Plan titled "Ladder Safety".

11. Cranes/Hoists/Lifting Devices:

- Inspect all cranes, hoists and lifting devices (slings, hooks, etc.) prior to each use. Never use damaged equipment.
- Never walk under a load suspended from a hoist or crane.
- Keep all personnel clear of the fall zone of the crane or hoist.
- Know the weight of material being lifted. Never overload a crane or hoist.

See attached Exposure Control Plans titled "Aerial Lifts" and "Slings and Lifting Devices".

12. Industrial Power Equipment:

- Only qualified personnel (trained and licensed) may operate powered industrial trucks.
- All vehicles must receive proper inspection prior to operation.
- Defective or damaged items must be reported to your supervisor for correction before use or operation.
- Equipment must be operated safely at all times, keeping the load under complete control.
- Operators may not permit passengers to ride on equipment unless it is designed with seats and seat belts to accommodate them.

See attached Exposure Control Plan titled "Industrial Power Equipment".

13. Lockout/Tagout: Prior to working on any machinery when guards are removed, every energy source (electrical, hydraulic, chemical, mechanical, etc.) must be deactivated, stored energy dissipated and the control locked in the off (safe) position.

Never remove or tamper with a lockout performed by another employee or contractor. A lockout could consist of a lock applied to a control such as a switch, breaker or valve. A tag containing words such as "DANGER - DO NOT OPERATE" may also be used for lockout. If you see the lock, the tag or both applied to an energy control device, it means "Keep your hands off." Each section or location shall be responsible for their specific LO/TO program that employees must follow.

See attached Exposure Control Plan titled "Control of Hazardous Energies Program – Lockout/Tagout".

14. Hazard Communication:

The chemical hazard communication process is aligned with the OSHA standard 1910.1200. Learn which health hazards are present in the workplace by reading the city's Hazard Communication Program. If you are concerned about a potential health hazard, contact your supervisor so that an evaluation can be conducted and appropriate action can be taken for the safety of all employees.

- For complete details of the city's Chemical Hazard Communication program, please refer to the Chemical Hazard Communication exposure control plan.
- Labels will use a Globally Harmonized System (GHS) of labeling to include:
  - Standard pictographs to describe a substance's hazards.
  - Precautionary Statements: One or more phrases that describe recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling of a hazardous chemical.
  - Signal words: A single word used to indicate the relative level of severity of the hazard and alert the reader to a potential hazard on the label. The signal words used are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.
  - Hazard Statement: A phrase assigned to each hazard category; examples include "harmful if swallowed," "highly flammable liquid and vapor," etc.
- Each of the divisions will be responsible for developing and maintaining a list of all hazardous materials used within their operations.
- Safety Data Sheet (SDS) will be obtained for each of these hazardous materials, with SDS obtained for any new hazardous materials purchased or brought on site. All employees have a right to access any SDS.
- All employees who work with hazardous materials will receive training on the following;
  - The city's Chemical Hazard Communication Program
  - Where the SDS are located within their workplace
  - What information is contained in the SDS
  - Labeling requirements for secondary use containers
- Employees shall follow all label and SDS instructions.
- Do not mix chemicals unless authorized to do so, following all listed mixing instructions.
- Keep all chemicals in closed containers.
- Store all flammable liquids in safety cabinets or safety cans. Never use flammable chemicals around ignition sources such as smokers, pilot lights or arcing/sparking electrical equipment.
- Refer to the hazardous materials SDS for the required PPE, and always wear the appropriate PPE.
- Do not eat, drink or smoke while using chemicals, and always wash your hands after handling chemicals.

Learn which health hazards are present in the workplace by reading the city's Hazard Communication Program. If you are concerned about a potential health hazard, contact your supervisor so that an evaluation can be conducted and appropriate action can be taken for the safety of all employees.

Additional concerns may be brought to the attention of a member of the Safety/Wellness Committee. A list of members can be obtained from the City Clerk's office.

See attached Exposure Control Plan titled "Hazardous Communication Program".

15. Confined Space Entry: Only trained and authorized employees are permitted to enter confined spaces such as manholes, sewers, tanks, trenches or vaults. If you believe that your job requires confined space entry, contact your supervisor prior to undertaking the work.(Confined spaces are areas not meant for human occupancy, have limited means of entry/exit and have electrical, chemical, thermal, atmospheric or entrapment hazards). Each site will have specific identified confined spaces and designations of attended or non-attended entry for their locations. The site will also have a specific protocol for confined space entry.

See attached Exposure Control Plan titled "Confined Space Operating Procedure"

16. Fire Prevention – Flammable and Combustible Liquids:

- Store all flammable liquids in approved safety containers with flame arrestors and spring-actuated caps.
- Keep acids and bases or oxidizers in separate cabinets.
- Store poisons separately.
- Keep fire equipment, such as extinguishers, accessible at all times.
- If your clothing catches fire, smother the flame by rolling on the ground. Never run, as this could cause the flames to spread.
- Never use oil or grease on oxygen equipment.

See attached Exposure Control Plan titled "Flammable and Combustible Liquids Policy".

17. Emergency Response: Obtain and learn the city's Emergency Response Plan (ERP) for fire, chemical release, severe weather, bomb threat or any other urgent situation. Learn the location of alarms, exits and meeting areas outside the building. The following general rules and actions apply in the event of an emergency.

- In the event of any serious injury or fire, call 911. Send someone to the facility entrance to meet the fire department. If in doubt about the severity of an injury or emergency, call 911.
- Upon discovering a fire, alert others in immediate danger, initiate a facility-wide fire notification and evacuate the facility.
- When the evacuation notification is given, all employees should immediately proceed to the designated evacuation area, closing doors behind them and using stairwells instead of elevators. Attendance will be taken to account for all personnel. Stay with the group until further instruction.
- If you have a visitor, escort him or her to the designated meeting area. Never re-enter the building after an evacuation until you have been instructed to do so by management or Fire/Police personnel.
- Do not attempt to fight any fire which is uncontained, too hot, too smoky or if you are too frightened.
- To use a fire extinguisher, remember PASS:
  - P = Pull (the safety pin)
  - A = Aim (at the base of the fire)
  - S = Squeeze (the lever)
  - S = Sweep (side to side)
- If you use a fire extinguisher, remember:
  - Stay low
  - Keep yourself between the fire and an exit
  - Do not turn your back on a fire
  - Immediately report the use of the fire extinguisher to your supervisor

See attached Exposure Control Plan titled "Emergency Action Plan" (specific to each facility).

18. Public Vehicles and Driver Safety: You cannot operate a vehicle for the city unless you can present a valid driver's license. If your license is suspended or revoked, report the condition to your supervisor immediately. Follow these rules when on the road in a city vehicle.

- Verify that the vehicle is in safe operating condition before use, and report any defects immediately.
- Avoid parking in high-risk areas.
- When possible, position the vehicle so that backing will not be necessary.
- Only employees authorized by the city are permitted to operate city vehicles.

- No side trips or personal use of vehicles is permitted. Seat belts/shoulder harnesses must be worn whenever the vehicle is in motion. Employees who drive personal vehicles or rental vehicles for city business must also wear safety belts and harnesses.
- All local and state traffic regulations and signs must be followed.
- No unauthorized riders, hitchhikers, etc., are allowed.
- All moving violations must be reported to your supervisor.
- Any accident, regardless of the extent of the damage, is to be investigated by a police officer with jurisdiction in the area. Accident report forms and instructions may be obtained from your supervisor.
- Driving while under the influence of alcohol or other drugs is forbidden.
- All employees are subject to drug and alcohol testing per the Drug and Alcohol Substance and Abuse Testing Policy.

See attached Exposure Control Plan titled "Defensive Driving Safety Policy".

19. **Electrical Safety:** Employees who work on or near exposed energized parts are required to be trained in safe electrical practices that pertain to their job assignments.

- Whenever possible, all work on electrical equipment or circuits must be done with power off.
- Never operate or tamper with the electrical main switch or breakers. You are authorized only to operate switches/disconnects on/for individual machines. Only if you are trained and authorized to operate switches or breakers, should you operate them.
- Report all electrical problems and suspected problems to your supervisor.
- All junction boxes, control boxes, connections and other wiring must have covers securely installed to prevent accidental contact.
- Inspect all plugs, cords and portable equipment prior to use. Any non-current carrying metal parts of portable and/or plug connected equipment must be grounded or protected by a system of double insulation.
- Report any damaged electrical equipment to your supervisor. Only authorized personnel are permitted to make repairs. Worn, frayed or damaged electrical cords or connectors may not be used and must be tagged "Danger: Out of Service, Do Not Use."
- Extension cords are to be used only for temporary applications, never for more than 60 days. Never stretch cords across aisles or areas where others may trip over them. Do not attach extension cords to the building or run them under rugs, mats or through walls.
- Ground fault circuit interrupters should be used on power circuits serving outlets in damp, wet or outdoor locations and in any other areas where people using electrical equipment may become grounded.
- Outlets at construction sites that are not part of the permanent wiring of the building or structure must have ground fault circuit interrupters that comply with the National Electric Code and Occupational Safety and Health Administration (OSHA) requirements. It should be de-energized when not in use.

See attached Exposure Control Plan titled "Electrical Work Practices Program".

20. **Laboratory Safety:** Workers in the laboratory must attend training that describes the laboratory standard, hazardous material handling and waste disposal regulations, where to find chemical safety information, emergency procedures and required laboratory safety plans. The following guidelines always apply in the laboratory:

- Never smoke, eat or drink in the laboratory.
- Properly label hazardous waste for disposal.
- Do not store food in refrigerators with chemical, biological or radioactive materials.

- Use proper laboratory hoods to control chemical fumes, mist, vapors and biological and radioactive agents.
- Always wear proper personal protective equipment as required when handling chemicals.

21. Lifting:

- Do not unnecessarily place objects on the ground if they must be picked up again soon after.
- Use a mechanical device to lift heavy objects when possible.
- Avoid lifting above shoulder height.
- If you need help moving material, request assistance.
- When you lift, use your leg muscles by squatting close to the load, preserving the curve in your back, spreading your feet and lifting with your legs, keeping the load close to your body.
- When you turn holding an object, move your feet, and do not twist.
- Minimize your risk of injury by getting proper exercise and building up leg and abdominal muscles.

See attached Exposure Control Plan titled "Proper Lifting Techniques".

22. Falls: Take proper precautions to prevent falls. Use caution on stairs and on surfaces containing ice, snow, rock, oil, water or any other slippery materials. Indoors, clean up spills immediately and keep walkways clear of cords, loose materials or other objects.

See attached Exposure Control Plan titled "Fall Protection".

23. Staying Safe: Report any unsafe conditions or situations to your supervisor. If you have suggestions on improving any aspect of safety in the facility, discuss it. If you are unsure of how to operate a piece of equipment or complete an assignment, **ask for help**. Asking for help when you are unsure reduces the chance of injury.

These rules are established to help you stay safe and injury free. Violation of the above rules, or conduct that does not meet minimum accepted work standards, will result in discipline, up to and including termination.

When working at a customer location, employees are required to follow the above rules as well as all customer rules and procedures, working in a manner that reflects positively on the city. Before operating any equipment at a customer location, permission must first be secured from the customer contact. Police, Fire, and Public Works employees are exempt from obtaining permission or following customer rules for them or their equipment in an emergency situation.

Safety/Wellness Committee Responsibilities

In order to promote better communication between employees and management, a Safety/Wellness Committee has been established for city operations. Its primary function is to serve as a two-way channel of communication and to promote safety awareness throughout the workplace.

ORGANIZATION: The Safety/Wellness Committee is made up of a representative from each department. A list of members may be obtained from the City Clerk's office.

The Employee Safety/Wellness Committee will meet monthly. Should a scheduled meeting need to be postponed, it will be rescheduled at a later date.

FUNCTION: The Safety/Wellness Committee has the following functions:

- Conduct annual safety/housekeeping inspection(s) of city facilities.
- Review and update safety rules and safe operating procedures.
- Review accidents and near-miss incidents reported since the last meeting, and suggest means for preventing future occurrences.
- Convey, review and comment on safety suggestions submitted by employees.
- Plan and carry out various safety promotion activities, such as contests, award programs, etc.
- Promote safety awareness among all employees through safe attitudes and day-to-day interactions.
- Review safety impacts of equipment/facility changes and multi-shift operations.
- Promote the health and wellness of employees through training and education.

When selecting the department representative for the Safety/Wellness Committee, take into account an employee's personal experience with safety. Someone from a specific work area with a history of accident or injury problems can bring valuable insights to the committee.

Volunteers or individuals who show they have an interest in safety are also good candidates. Likewise, individuals with a good safety record can bring their own experience to the group.

Rotate membership so that members exposed to Safety/Wellness Committee issues are circulated back into the workforce and others are brought in.

Occasionally, specialists or consultants may be added to the committee to address a specific situation or problem. Also, ad hoc subcommittees may be used to analyze and formulate recommendations on a particular problem.

The Safety/Wellness Committee should also be involved with developing safety incentive programs and in recognizing individual employees who have contributed to safety efforts and positive results.

Written documentation of Safety/Wellness Committee meetings should be maintained.

Offsite Visits

Employees of the city are required to follow all safety and security procedures during offsite visits.

If your host does not advise you regarding safety hazards, consider the following:

Emergency exit location(s);

- Keep your eye on the path you are walking and avoid any tripping/slipping hazards. On stairs, maintain three point contact (hand on rail and feet on stairs);
- When visiting manufacturing or construction sites, eye protection, hearing protection and hard hats are frequently required. Ideally, this equipment will be in the possession of the city employee and not provided by the host.

If you will be touring a factory, construction site or other similar venue that is out of the course of your normal day, dress appropriately. Wear shoes that support your feet and are slip resistant. Avoid clothing that is either constrictive or too loose; loose clothing may get caught in machinery or other equipment.

Worker's Compensation/Return to Work Program

It is our goal to prevent work-related injuries. We are always concerned when one of our employees is injured or ill due to a work-related condition. We believe that such absences negatively impact both the city and its employees. We want our injured employees to get the best possible medical treatment immediately to assure the earliest possible recovery and return to work.

The city has a workers' compensation program available for employees who have suffered work-related injuries. The program's administrator will determine, based upon their guidelines, whether you are eligible for wage loss or medical expenses compensation under that program.

The city wants to provide meaningful work activity for all employees who become unable to perform all, or portions, of their regular work assignment. Thus, we have implemented a return to work program, which includes transitional or light duty work. The return to work program is temporary and not to exceed six months.

Employee Procedures

- All work-related injuries must be reported immediately to your supervisor no later than the end of the shift on which the injury occurs, if the employee is physically able.
- If a post-accident drug screen is not performed the same day as the injury, the employee will only be paid up to one hour to have the drug screen sample collected.
- You must complete and sign an Employee Accident form.
- When medical treatment is sought, the injured employee must advise their supervisor that they are seeking treatment. Under the guidelines of the City's Worker's Compensation Program, all employees are required to seek medical treatment at Valley Medical Center's Express Care during business hours. If it is after business hours, employees must seek treatment at the St. Joseph Regional Medical Center's Emergency Department. A Return To Work form will be provided by the physician and must be provided to your supervisor and the City Clerk. **The city will not accept a general note stating that you are only to be off work.**
- Under this program, temporary light duty work is available for up to 60 days (with a review of your progress every 30 days) while you are temporarily unable to work in your regular job capacity. Transitional or light duty work beyond 60 days, up to a maximum of six months, will be evaluated on a case-by-case basis.
- If you are unable to return to your regular job but are capable of performing transitional duty, you must return to transitional duty. Failure to do so will result in not being eligible for full disability benefits under the Workers' Compensation Program and may result in disqualification for certain employee benefits and, in some cases, be a basis for termination.
- **Employees who are unable to work and have approved absences must keep his or her supervisor informed on a weekly basis of their status**. The supervisor will then inform the City Clerk of the employee's status. Failure to do so will result in a reduction in benefits available and discipline, up to and including termination.
- If you are unable to return to your regular job or transitional duty, your absence must be approved under the Family Medical Leave Act (FMLA) program. For this purpose, you need to complete a Family Medical Leave Request form and submit it to the Human Resources Department. You must also have your practitioner complete both the Return to Work Evaluation form and Return to Work Request / Physician's Authorization form.
- Employees who are not eligible for leave under FMLA must return to light duty or regular work if possible. If you are unable to return to any available work, your job position may be filled after a reasonable time. When able to do so, you will be entitled to return to a suitable position, if available and consistent with any limitations. However, you must keep the city regularly informed of your status and any changes in your condition.
- Employees must provide a Return to Work form indicating they are capable of returning to full duty. Permanent restrictions will be evaluated on a case-by-case basis and related to the performance of essential job functions. No permanent light duty positions will be created.

Worker's Compensation/Return to Work Program

- Cooperate with our third-party administrator (Intermountain Claims) and provide accurate and complete information as soon as possible so that you receive all benefits to which you are entitled. If you have problems or concerns, please contact your supervisor, manager or the City Clerk.

See attached Exposure Control Plan titled "Worker's Compensation".

Ergonomics, Office Safety and Security

Ergonomics:

Musculoskeletal disorders can result from repetition and inadequate rest, forceful exertions, awkward and extreme positions of the body and sustained or static positioning. Assess and correct your workstation to avoid undue stress on muscles, bones, ligaments, tendons and nerves.

- Sit with your lower back against your chair, your upper legs parallel to the floor and your feet flat on the floor or on a footrest.
- Adjust your table and chair so your elbows are bent at right angles and your forearms are approximately parallel to the floor.
- Keep your wrists straight by using a wrist rest.
- Keep your mouse at the same height as your keyboard.
- Position your monitor an arm's length away at eye level.
- Use a document holder to position work at eye level close to the screen.
- Adjust your lighting and monitor to prevent glare, or use an anti-glare filter.
- When performing tasks involving repetitive motions or awkward positions, take periodic stretching breaks or alternate with other tasks.

See attached Exposure Control Plan titled "Ergonomics Policy".

Office Safety:

- Never leave file drawers open or open multiple file drawers at once. Never climb on open file drawers.
- Do not place computers or other large equipment close to the edge of a desk or counter.
- Stand away from the path of the door swing, and open doors with caution.
- Use caution on stairs. Falls on stairs often happen because of distraction in conversation or when a person turns to another while descending.
- Do not stack heavy or bulky objects on top of cabinets.
- Use sharp objects such as razor blades, knives, scissors and paper cutters with caution.
- Do not store frequently used objects above shoulder height or below knee height.
- Never reach into office machines without turning them off and unplugging them if possible.
- Keep your work area free of trip hazards such as storage in walkways, cords across aisles and damaged floor coverings. Avoid using extension cords.
- Inspect step stools/ladders before use. Be sure to keep a stationary object in front of you when using a step stool to provide stability.
- Never use defective or broken equipment. Report these equipment concerns to your supervisor.

See attached Exposure Control Plan titled "Office Safety".

Security:

- Always be aware of your surroundings. Keep your head up and hands out of your pockets while walking to and from your car.
- Immediately report any suspicious activity or persons to your supervisor and immediately report any theft to the Lewiston Police Department by dialing 911.
- When parking, remove all valuables from sight and lock car doors.

- Do not enter an elevator car if you are concerned about other riders; instead, wait for the next car.
- Keep all valuables (money, purse, jewelry, etc.) out of sight when at your desk. Do not bring large sums of money or other valuables into the work place.
- Secure laptop computers, PDAs and other small electronic devices before leaving your workspace for extended periods of time.
- If you are working alone and are in the office before or after regular business hours, on weekends or on holidays, observe these additional guidelines:
  - Be sure doors close and lock after you.
  - Turn on lights as you move through the building.
  - Always be aware of the closest telephone, and do not hesitate to call 911 if you feel threatened.
  - Be sure that someone at home knows that you are at work and is expecting you to check in by a specified time.
  - As you leave the office, be sure to turn off all equipment, lights, etc., after use.

See attached Exposure Control Plans titled "Ergonomics Policy" and "Office Safety".

Considerations Following an Accident

Any work-related accident resulting in serious injury or the death of an employee presents significant emotional challenges for fellow employees as well as management. Following are some guidelines that may reduce the effects on fellow employees.

- Be prepared to talk to local police/fire officials, city attorney, investigators, or coroners. Be aware that police can conduct criminal investigations. Be truthful, but do not speculate or offer unsolicited opinions, information or theories. Also be prepared for contacts from local news media. Consult with legal advisors if in doubt. Always operate under the assumption that the serious injury or death will be investigated and take steps to be sure that your entire facility is as prepared as possible.
- The supervisor or his or her designee shall contact the employee's next of kin to inform her/him of the circumstances. If possible, this contact should be made in person. Offer to provide transportation and/or other support.
- The supervisor must complete an Accident Investigation Form and submit a copy to the City Clerk's office.
- Take pictures to document the scene. Note anything that may help you identify specific equipment involved such as serial numbers, license plate numbers, etc.
- Follow the city's procedures for bloodborne pathogens in cleaning any bodily fluid spills.
- Consider meeting with employees in small groups to discuss:
    - The serious accident that occurred
    - That all the necessary steps were taken to care for the person involved
    - That an accident investigation is being performed
    - That all employees will be kept informed
    - The availability of the Employee Assistance Program (EAP).
- Provide encouragement and request that employees work safely.
- Request your supervisors be alert for employees who may not be paying full attention to their jobs, thereby jeopardizing their own safety. During these discussions, do not discuss fault, discipline, opinions, etc.
- Be prepared to submit to an alcohol and drug test per city policy.

Bloodborne Pathogens

Do not touch blood or any other bodily fluid during or following an incident. If you are trained to administer first aid, gloves and other barriers are located with the first aid equipment. If you think that you have been exposed to bodily fluid, notify your supervisor immediately.

- Blood and other bodily fluids can carry pathogens, which are capable of causing diseases in others. This includes hepatitis and HIV, which leads to AIDS.
- Because we cannot tell by looking at a person if he or she is infected with a pathogenic disease, we must take precautions following an illness or injury when bodily fluids are released.
- In the event of a person losing bodily fluids, stay away from the area and warn others to do the same. You can still stay close to the ill/injured person to support him/her, just be sure to stay out of contact with any bodily fluids.
- In the event that you find spilled bodily fluids, a syringe or other medically contaminated materials, do not attempt clean up by yourself unless you are authorized to do so. Contact your supervisor immediately for instructions or call in authorized personnel for back up.

See attached Exposure Control Plan titled "Bloodborne Pathogens Program".

Employee Acknowledgement Form

The City of Lewiston is firmly committed to your safety. We will do everything possible to prevent workplace accidents and are committed to providing a safe working environment for you and all employees.

We value you not only as an employee but also as a human being critical to the success of your family, the local community and our organization.

You are encouraged to report any unsafe work practices or safety hazards encountered on the job. All accidents/incidents (no matter how slight) are to be immediately reported to the supervisor on duty.

A key factor in implementing this policy will be the strict compliance to all applicable federal, state, local and City of Lewiston policies and procedures. Failure to comply with these policies may result in disciplinary actions.

Respecting this, the city will make every reasonable effort to provide a safe and healthful workplace that is free from any recognized or known potential hazards. Additionally, the city subscribes to these principles:

1. Most accidents are preventable through implementation of effective safety and health control policies and programs.

2. Safety and health controls are a major part of our work every day.

3. Accident prevention is good business. It minimizes human suffering, promotes better working conditions for everyone, holds the city in higher regard with customers and increases productivity. This is why the city will comply with all safety and health regulations that apply to the course and scope of operations.

4. Management is responsible for providing the safest possible workplace for employees. Consequently, management of the city is committed to allocating and providing all of the resources needed to promote and effectively implement this safety policy.

5. Employees are responsible for following safe work practices, the City Personnel Policy, and for preventing accidents and injuries. Management will establish lines of communication to solicit and receive comments, information, suggestions and assistance from employees where safety and health are concerned.

6. Management and supervisors of the city will set an exemplary example with good attitudes and strong commitment to safety and health in the workplace. Toward this end, management must monitor the company's safety and health performance, working environment and conditions to ensure that program objectives are achieved.

7. Our safety program applies to all employees and persons affected or associated in any way by the scope of this business. Everyone's goal must be to constantly improve safety awareness and to prevent accidents and injuries.

Everyone at the city must be involved and committed to safety. Together, we can prevent accidents and injuries and keep each other safe and healthy in the work that provides our livelihood.

By signing this document, I confirm receipt of the City's Employee Safety Handbook.

_____ _____

Employee Signature Date

_____ _____

Printed Name Department

City of Lewiston
Aerial Lifts
Exposure Control Plan

Aerial Lift Exposure Control Plan

Effective Date:
Revision Number: 1

This policy establishes how the City of Lewiston will enhance safe working conditions at this facility through the establishment of specific guidelines for the use of aerial lifts.

This policy applies to all City of Lewiston employees and all company contractors, visitors, or vendors.

Responsibilities:

Senior management will:

- Require the full application and integration of this policy into daily operations, as applicable, in all areas of responsibility and with all direct reports.
- Assess managers and supervisors on their ability to apply this policy in their areas of responsibility.
- Provide fall protection to affected employees.

The Manager will administer all aspects of this policy to include:

- Maintaining and updating the written program as required.
- Coordinate necessary training for all affected employees.
- Providing necessary technical assistance to supervisors.
- Periodically assessing the effectiveness of this program and its implementation in all affected areas of the community.

Supervisors will:

- Know this policy applies to those under their direct control.
- Integrate and enforce the provisions of this policy in the areas of responsibility.
- Periodically audit the effectiveness of this policy in their areas of responsibility.
- Coordinate training for all affected employees.
- Provide appropriate coaching and corrective action when necessary to ensure tis policy is fully integrated.
- Investigate and document all incidents that result in employee injury.

All affected employees will:

- Integrate the provisions of this policy into their daily activities as applicable.
- Follow all training, instructions and directives relative to this policy.
- Seek clarification whenever there are questions concerning the all application of this policy into daily operations.
- Bring to management's attention any unsafe or hazardous conditions or practices that may cause injury to themselves or other employees.
- Report any incident that causes injury to an employee, regardless of its nature.

Definitions:

Aerial Lift: Any vehicle-mounted aerial devices used to elevate personnel to job sites above ground, including:

- Extensible boom platforms
- Aerial ladders
- Vertical towers
- A combination of any such devices

Aerial equipment may be made of metal, wood, fiberglass reinforced plastic (FRP) or other material; may be powered or manually operate; and are deemed to be aerial lifts whether or not they are capable of rotating about a substantially vertical axis.

Lift Modifications:

Aerial lifts may be field modified for uses other than those intended by the manufacturer. However field modifications must be certified in writing by the manufacturer or by any other equivalent entity, such as a nationally recognized testing laboratory, to be in conformity with all applicable provisions and to be at least as safe as the equipment was before modification.

Use Procedures:

When using any form of aerial lift, employees are expected to adhere to the following guidelines:

- Lift controls must be tested each day prior to use to determine that controls are in safe working conditions.
- Only authorized persons can operate an aerial lift.
- Employees must always stand firmly on the floor of the basket and may not sit or climb on the edge of the basket or use planks, ladders or other devises for a work position.
- A body belt as part of a tethering system or restraint system must be worn and a lanyard attached to the boom or basket when working from an aerial lift.
- Belting off to an adjacent pole, structure or equipment while working from an aerial lift is not permitted.
- Do not exceed boom and basket load limits specified by the manufacturer.
- The brakes must be set, and when outriggers are used, they must be positioned on pads or a solid surface. Wheel chocks must be installed before using an aerial lift on an incline provided they can be safely installed.
- An aerial lift truck must not be moved when the boom is elevated in a working position with men in the basket, except for equipment that is specifically designed for this type of operation.
- Before moving an aerial lift for travel, the boom(s) must be inspected to see that it is properly cradled and outriggers are in the stowed position.
- Ladder trucks and towers trucks:

- Aerial ladders must be secured in the lower traveling position by both the locking device on the top of the truck cab and the manually operated device at the base of the ladder before the truck is moved for highway travel.

- Articulating boom and extensible boom platforms, primarily designed as personnel carriers, must have both platform (upper) and lower controls. Upper controls must be in or beside the platform within easy reach of the operator. Lower controls must provide for overriding the platform within easy reach of the operator. Lower controls must provide for overriding the upper controls. Controls must be plainly marked with their function. Lower level controls may not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.
- Climbers may not be worn while performing work from an aerial lift.
- The insulated portion of an aerial lift cannot be altered in any manner that might reduce its insulating value.
-

Enforcement:

Compliance with these and all other company safety rules are considered conditions of employment at the City of Lewiston. The crew supervisor or foreman reserves the right to recommend disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines in this plan.

Accident Investigation:

All incidents that result in the injury to workers and near misses, regardless of their nature must be reported and investigated. All incidents will be investigated as soon as possible to identify the cause and means of prevention of future occurrences.

In the event of an incident, this Aerial Lift Plan will be reviewed to determine if additional provisions or practices, procedures or training should be implemented to prevent similar incidents in the future.

City of Lewiston

Asbestos

Exposure Control Plan

Asbestos Exposure Plan

Effective Date:
Revision Number: 1

Purpose:

This program establishes minimum requirements and guidelines for employee interaction with materials in the workplace that contain asbestos in order to minimize harmful exposure.

Scope:

This procedure applies to all company employees, contractors and vendors performing work on company property and all other individuals who are visiting or have business with City of Lewiston.

Responsibilities:

Management is responsible for the development and periodic review of this program as well as appropriate employee training. Management and supervisors are responsible for enforcement of this program. Employees must comply with all procedures outlined in this policy. Contractors and vendors must comply with all procedures outlined in this policy.

Definitions:

Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these minerals that has been chemically treated and/or altered. For purposes of this standard, asbestos also includes PACM, as defined below.
Asbestos-containing material (ACM) means any material containing more than 1 percent asbestos.
Aggressive method means removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles or disintegrates intact ACM.
Competent person is one who is capable of identifying existing asbestos hazards in the workplace, selecting the appropriate control strategy for asbestos exposure and who has the authority to take prompt corrective measures to eliminate them.
Class I asbestos work means activities involving the removal of TSI and surfacing ACM and PACM.
Class II asbestos work means activities involving the removal of ACM that is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile, sheeting, roofing, siding shingles and construction mastics.
Class III asbestos work means repair and maintenance operations where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed.
Class IV asbestos work means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM as well as activities to clean up dust, waste and debris resulting from Class I, II and III activities.
Disturbance means activities that disrupt the matrix of ACM/PACM, crumble or pulverize ACM/PACM or generate visible debris from ACM/PACM. Disturbance includes cutting away

small amounts of ACM and PACM, no greater than the amount which can be contained in one standard-sized glove bag or waste bag in order to access a building component. In no event may the amount of disturbed ACM or PACM exceed that which can be contained in one glove bag or waste bag, which may not exceed 60 inches in length and width.
Excursion limit requires that the employer ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (1 f/cc) as averaged over a sampling period of 30 minutes.
Glovebag means not more than a 60 x 60 inch impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.
Presumed Asbestos Containing Material (PACM) means thermal system insulation and surfacing material found in buildings constructed no later than 1980.
Regulated area is an area established by the employer where Class I, II and III asbestos work is conducted as well as any adjoining area where debris and waste from such asbestos work accumulate. Also includes a work area within which airborne concentrations of asbestos exceed, or may be reasonably expected to exceed, the permissible exposure limit.
Surfacing material means material that is sprayed, troweled-on or otherwise applied to surfaces, including acoustical plaster on ceilings and fireproofing materials on structural members or other materials on surfaces for acoustical, fireproofing and other purposes.
Surfacing ACM means surfacing material that contains more than 1 percent asbestos.
Time-weighted average limit (TWA) requires that the employer ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of air as an 8-hour time-weighted average (TWA).
Thermal system insulation (TSI) means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.
Thermal system insulation ACM is thermal system insulation that contains more than 1 percent asbestos.
Program Application This program will be applicable to all incidences in which employees interact with asbestos in any form, except when it is contained in asphalt roof coatings, cements and mastics.

Procedure:

Initial Exposure Assessment:

Before the start of any operation that will entail dealing with asbestos, the supervisor will ensure that a **competent person** conducts an exposure assessment to ascertain expected exposures levels. The assessment must be completed in time to comply with the requirements that are triggered by exposure data and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly. Representative eight-hour TWA employee exposure must be determined on the basis of one or more samples representing full-shift exposure for employees in each work area. Representative 30-minute short-term employee exposures must be determined on the basis of one or more samples representing 30-minute exposures associated with operations that are most likely to produce exposures above the excursion limit for employees in each work area.

Periodic Monitoring:

During Class I or II operations, the supervisor will monitor daily the exposure levels of each employee who is assigned to work in a regulated area. The supervisor will then provide the results to each affected employee within five days, ether individually in writing or by posting the results in an appropriate location accessible to employees. The only exception to this daily monitoring standard is if employees are equipped every day with supplied-air respirators operated in the pressure demand mode or other positive pressure mode respirators.

Methods of Compliance:

Regardless of the level of exposure, when dealing with asbestos, the following engineering controls and work practices must be used:

- Vacuum cleaners equipped with HEPA filters to collect all debris and dust containing ACM and PACM;
- Wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application and cleanup, except where employers demonstrate that the use of wet methods is infeasible due to, for example, the creation of electrical hazards, equipment malfunction and in roofing operations; and
- Prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers.

The following control methods must be used to keep the TWA at a permissible limit:

- Local exhaust ventilation equipped with HEPA filter dust collection systems;
- Enclosure or isolation of processes producing asbestos dust; and
- Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter.

Prohibited Methods:

The following work practices may never be used in asbestos-related work:

- High-speed, abrasive disc saws that are not equipped with point-of-cut ventilator or enclosures with HEPA-filtered exhaust air;
- Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air;
- Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM or PACM; or
- Employee rotation as a means of reducing employee exposure to asbestos.

Class I Requirements:

In addition to the aforementioned methods of compliance, while doing Class I asbestos work, the following guidelines must be followed:

- All Class I work, including the installation and operation of the control system, must be supervised by a competent person;
- For all Class I jobs involving the removal of more than 25 linear or 10 square feet of thermal system insulation or surfacing material, or when employees are working in areas adjacent to the regulated area while the Class I work is being performed, the employer

must use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:
    - Critical barriers placed over all the openings to the regulated area, except where activities are performed outdoors; and
    - Another barrier or isolation method that prevents the migration of airborne asbestos from the regulated area, as verified by perimeter-area surveillance during each work shift at each boundary of the regulated area, that shows no visible asbestos dust;
- HVAC systems must be isolated in the regulated area by sealing them with a double layer of six mil plastic or the equivalent;
- Impermeable drop cloths must be placed on surfaces beneath all removal activity;
- All objects within the regulated area must be covered with impermeable drop cloths or plastic sheeting that is secured by duct tape or an equivalent;
- Where the supervisor cannot produce a negative exposure assessment, or where exposure monitoring shows that a PEL is exceeded, the regulated area will be ventilated to move contaminated air away from the breathing zone of employees and toward a HEPA filtration or collection device; and
- In addition, Class I asbestos work will be performed using one or more of the following control methods pursuant to the limitations stated below:
    - Negative Pressure Enclosure (NPE) systems: NPE systems may be used where the configuration of the work area does not make the erection of the enclosure infeasible;
    - Glove bag systems may be used to remove PACM and/or ACM from straight runs of piping, elbows and other connections; and
    - A water spray process system may be used for removal of ACM and PACM from cold-line piping if employees carrying out such process have completed a 40-hour separate training course in its use in addition to training required for employees performing Class I work.

Class II Requirements:

In addition to the methods of compliance mentioned above, while doing Class II asbestos work, the following guidelines will be followed:
All Class II work, including the installation and operation of the control system, will be supervised by a **competent person**;
For all indoor Class II jobs where changed conditions indicate there may be exposure above the PEL or where the supervisor does not remove the ACM in a substantially intact state, the supervisor will use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:

- Critical barriers placed over all openings to the regulated area; or
- Another barrier or isolation method that prevents the migration of airborne asbestos from the regulated area, as verified by perimeter area monitoring or clearance monitoring;
- Impermeable drop cloths must be placed on surfaces beneath all removal activity; and
- When removing vinyl and asphalt flooring materials that contain ACM or in buildings constructed before 1980 where the supervisor has not verified the absence of ACM, the supervisor will ensure that employees comply with the following work practices:

Flooring or its backing may not be sanded;

  - Vacuums equipped with HEPA filter, disposable dust bag and metal floor tool (no brush) must be used to clean floors;
  - All scraping of residual adhesive and/or backing must be performed using wet methods;
  - Cutting machines must be continuously misted during use unless a competent person determines that misting substantially decreases worker safety;

- The material must be removed in an intact state unless the supervisor demonstrates that intact removal is not possible;
- Cutting, abrading or breaking materials is prohibited unless approved by the supervisor because methods less likely to result in asbestos fiber release are not feasible; and
- Asbestos-containing material removed must be immediately bagged, wrapped or kept wetted until transferred to a closed receptacle, but no later than the end of the work shift.

Class III Requirements:

Class III asbestos work must be conducted using engineering and work practice controls that minimize the exposure of bystanders and employees performing the asbestos work.

The work must be performed using wet methods;

- To the extent feasible, the work must be performed using local exhaust ventilation;
- Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking or sawing of thermal system insulation or surfacing material, employees must use impermeable drop cloths and isolate the operation using mini-enclosures or glove bag systems;
- Where monitoring results show the PEL has been exceeded, the supervisor will either contain the area using impermeable drop cloths and plastic barriers or their equivalent or isolate the operation using a control system; and
- Employees performing Class III jobs that involve the disturbance of thermal system insulation or surfacing material, or where monitoring results show a PEL has been exceeded, are required to wear respirators.

Class IV Requirements:

Class IV asbestos jobs must be conducted by employees trained pursuant to the asbestos awareness program. These jobs must be conducted using wet methods and HEPA vacuums, followed by a prompt clean-up of debris containing ACM or PACM.

- Employees cleaning up debris and waste in a regulated area where respirators are required must wear respirators; and
- Employees who clean up waste and debris in areas where friable thermal system insulation or surfacing material is accessible must assume that such waste and debris contain asbestos and follow applicable City of Lewiston procedures.

Respiratory Protection:

Respirators must be used during:

- Class I asbestos work;
- Class II asbestos work when ACM is not removed in a substantially intact state;
- Class II and III asbestos work that is not performed using wet methods, except for removal of ACM from sloped roofs when a negative-exposure assessment has been conducted and ACM is removed in an intact state;
- Class II and III asbestos work for which a negative-exposure assessment has not been conducted;
- Class III asbestos work when TSI, surfacing ACM or PACM is being disturbed.
- Class IV asbestos work performed within regulated areas where employees who are performing other work are required to use respirators;
- Work operations for which employees are exposed above the TWA or excursion limit; and
- Emergencies.

The City will provide employees with:

- HEPA filters for powered- and non-powered air-purifying respirators;
- A tight-fitting, powered air-purifying respirator (PAPR) instead of a negative-pressure respirator when the employee chooses to use it and it is deemed to provide adequate protection; and
- An air-purifying half-mask respirator, other than a filtering face piece respirator, whenever employees perform:
    - Class II or Class III asbestos work for which no negative exposure assessment is available; or
    - Class III asbestos work involving disturbance of TSI or surfacing ACM or PACM.

Protective Clothing:

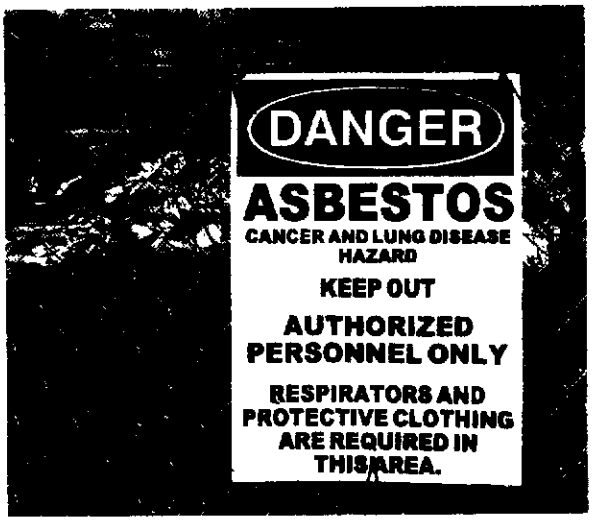
Supervisors will provide, and require the use of, protective clothing—including coveralls and similar whole-body clothing, head coverings, gloves and foot coverings—for any employee exposed to airborne concentrations of asbestos that exceed the TWA and/or excursion limit or for any employee performing Class I operations that involve the removal of more than 25 linear or 10 square feet of TSI or surfacing ACM/PACM.

Employee Information and Training:

Each employee who is likely to be exposed in excess of a PEL, and each employee who performs Class I through IV asbestos operations, will receive training prior to, or at the time of, initial assignment and at least annually thereafter. The training will be conducted at no cost to the employee. The City will institute, and employees will participate in, a training program that includes:

- Ways to recognize asbestos;
- Adverse health effects of asbestos exposure;

- Relationship between smoking and asbestos in causing lung cancer;
- Operations that could result in asbestos exposure and the importance of protective controls to minimize exposure;
- Purpose, proper use, fitting instruction and limitations of respirators;
- Appropriate work practices for performing asbestos jobs;
- Medical surveillance program requirements;
- Contents of the standard; and
- Sign and label requirements and the meaning of their legends.



Asbestos Exposure

YOU HAVE A RIGHT TO KNOW ABOUT:

- **OUR WRITTEN PROGRAM**
- **YOUR EXPOSURE LEVELS**
- **OUR RESPONSIBILITY TO YOU**

Dangers of Asbestos Exposure

Asbestos fibers enter the body when a person inhales or ingests airborne particles that become embedded in the tissues of the respiratory or digestive systems. Exposure to asbestos can cause:

- ✓ Asbestosis, an emphysema-like condition
- ✓ Lung cancer
- ✓ Mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs
- ✓ Gastrointestinal cancer

situations in which you may interact with asbestos, such as:

- ✓ Demolishing or salvaging structures where asbestos is present.
- ✓ Removing or encapsulating asbestos-containing material (ACM).
- ✓ Constructing, altering, repairing, maintaining or renovating asbestos-containing structures or substrates.
- ✓ Installing asbestos-containing products.
- ✓ Cleaning up asbestos spills/emergencies.
- ✓ Transporting, disposing, storing, containing and housekeeping involving asbestos or

To ensure your own safety, make sure you always follow the established guidelines for dealing with asbestos. If you are unsure if something contains asbestos or are not certain what procedures need to be followed, don't hesitate to talk to your supervisor.

City of Lewiston
Bloodborne Pathogens
Exposure Control Plan

Bloodborne Pathogens

Effective Date:
Revision Number: 1

It is assumed that all body fluids may potentially be infectious with HEP, HIV other bloodborne pathogens. Therefore, caution must be continually applied when there is an exposure or potential exposure to such fluids. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses is prohibited until proper safeguards are met, such as washing hands or other types of decontamination.

A. The plan shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

B. The plan shall include at a minimum, the following:

1) An exposure determination of tasks and procedures where there is actual or anticipated occupational exposure to blood or other potentially infectious materials.
    i. The exposure determination shall be made without regard to the use of PPE and shall include:
    ii. A list of all job classifications where all employees have occupational exposure;
    iii. A list of job classifications where some employees have occupational exposure;
    iv. A list of all tasks and procedures or groups of closely related tasks and procedures where occupational exposure occurs, the procedures that must be followed and PPE that must be worn

2) Procedures requiring employees to follow universal precautions when providing emergency care since medical history and examination cannot identify patients infected with HIV, HEP or other bloodborne pathogens, or where other anticipated exposures may occur.

3) Engineering, work practice controls and sound personal hygiene practices shall be used to minimize or eliminate employee exposure.

4) Provisions for and training in the use of PPE (universal precautions), such as gloves, gowns, disposable suits, shoe covers, face shields, masks, eye protection, mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. PPE shall be provided by the department and used by the employee. Non-permeable bio-hazard collection bags should also be made available.

5) All personal protective equipment is to be inspected periodically and repaired or replaced to be maintained for effectiveness. Reusable equipment is to be cleaned, laundered, and decontaminated as needed. All

equipment and surfaces are to be cleaned and decontaminated after contact with potential bloodborne pathogens. Decontamination is to be done according to current standards.

C. Employees shall maintain proper hygiene during the course of the work day, and are required to wash hands rigorously with proper antimicrobial antibacterial soaps after restroom use, prior to food preparation etc.

D. Employees are required to wash hands rigorously with proper antimicrobial or antibacterial soaps after exposure or potential exposure to suspected bloodborne pathogens.

E. For each exposure incident, a report will be made to evaluate engineering controls, work practices, and PPE and clothing worn at the time of the incident; to identify control failures; and to recommend corrective measures. The department head will approve the recommended corrective measures. A copy of the written evaluation will be placed in the exposed employee`s medical record and communicated to the safety committee

F. A medical surveillance program shall be implemented for all employees with potential exposure to bloodborne pathogens. This program will include:
   1) a) A medical evaluation prior to job assignment to ensure the employee`s ability to wear PPE and receive vaccinations.
   2) b) A HBV vaccination to be available within 10 working days of initial assignment. HBV vaccination declinations will be documented (see addendum, Hepatitis B Vaccination Declination).
   3) c) A post exposure counseling program for any employee exposed to a bloodborne pathogens
   4) Continual training is required.

City of Lewiston
Confined Space
Exposure Control Plan

Confined Space
Operating Procedure

Effective Date:
Revision Number: 1

Procedure:

Explanation: This is a Confined Space program to be used City wide. First you will need to go through the electronic copy and change all of the ***Bold and Italic*** wording to fit your department. Then you will need to identify the Confined Spaces that are specific to your department and list them, then use the numbers that you have given them on the evaluations. Now you are ready to fill out an evaluation to determine the level of confined space you have.

When you are done you should have a SOP that labels all of the appropriate people and their position within the confined space program in your Department. You should also have a list of the confined spaces that are specific to your department and with each of those an evaluation explaining the possible dangers for each.

Confined Space Program

For

The City of Lewiston

Confined Space Program
Table of Contents

Confined Space Program
For
City of Lewiston

I. Objective:

The purpose of The City of Lewiston's Confined Space Program is to set procedures that will ensure workers safe entry into confined spaces and permit-required confined spaces to perform routine tasks associated with their employment.

II. Background:

A confined space is defined as any location that has limited openings for entry and egress, is not intended for continuous employee occupancy, and is so enclosed that natural ventilation may not reduce air contaminants to levels below the threshold limit value (TLV). Examples of confined spaces include: manholes, stacks, pipes, storage tanks, trailers, tank cars, pits, sumps, hoppers, and bins. Entry into confined spaces without proper precautions could result in injury, impairment, or death due to:

A. An atmosphere that is flammable or explosive;
B. Lack of sufficient oxygen to support life;
C. Contact with or inhalation of toxic materials; or
D. General safety or work area hazards such as steam or high pressure materials.

III. Assessment of Responsibility:

A. Employer:
In administering this Confined Space Program, The City of Lewiston will:

1. Monitor the effectiveness of the program.
2. Provide atmospheric testing and equipment as needed.
3. Provide personal protective equipment as needed.
4. Provide training to affected employees and supervisors.
5. Provide technical assistance as needed.
6. Preview and update the program on at least an annual basis or as needed.

B. Program Manager:
Section Supervisor is responsible for managing the Confined Space Program, and shall:

1. Ensure that a list of confined spaces at all of their worksites is maintained.
2. Ensure that canceled permits are reviewed for lessons learned.

3. Ensure training of personnel is conducted and documented.
4. Coordinate with outside responders.
5. Ensure that equipment is in compliance with standards.
6. Ensure that the Entry Supervisor in charge of confined space work shall:

    a. Ensure requirements for entry have been completed before entry is authorized.
    b. Ensure confined space monitoring is performed by personnel qualified and trained in confined space entry procedures.
    c. Ensure a list of monitoring equipment and personnel qualified to operate the equipment is maintained.
    d. Ensure that the rescue team has simulated a rescue in a confined space within the past twelve (12) months.(Call the Fire Department and set up training in at least one of the sections confined spaces)
    e. Know the hazards that may be faced during entry, including the mode (how the contaminant gets into the body), signs or symptoms, and consequences of exposure.
    f. Fill out a permit.
    g. Determine the entry requirements.
    h. Require a permit review and signature from the authorized Entry Supervisor.
    i. Notify all involved employees of the permit requirements.
    j. Post the permit in a conspicuous location near the job.
    k. Renew the permit or have it reissued as needed (a new permit is required every shift).
    l. Determine the number of Attendants required performing the work.
    m. Ensure all Attendant(s) know how to communicate with the entrants and how to obtain assistance.
    n. Post any required barriers and signs.
    o. Remain alert to changing conditions that might affect the conditions of the permits (i.e., require additional atmospheric monitoring or changes in personal protective equipment).
    p. Change and reissue the permit, or issue a new permit as necessary.
    q. Ensure periodic atmospheric monitoring is done according to permit requirements.
    r. Ensure that personnel doing the work and all support personnel adhere to permit requirements.
    s. Ensure the permit is canceled with the work is done.
    t. Ensure the confined space is safely closed and all workers are cleared from the area.

C. Entry Supervisors:

(Employees designated by the Section supervisor) shall serve as the Entry Supervisor(s), and shall be qualified and authorized to approve confined space entry permits. The Entry Supervisor(s) shall be responsible for:

1. Determining if conditions are acceptable for entry.
2. Authorizing entry and overseeing entry operations.
3. Terminating entry procedures as required.

4. Serving as an Attendant, as long as the person is trained and equipped appropriately for that role.
5. Ensuring measures are in place to keep unauthorized personnel clear of the area.
6. Checking the work at least twice a shift to verify and document permit requirements are being observed (more frequent checks shall be made if operations or conditions are anticipated that could affect permit requirements).

D. ***Section Supervisors*** shall be responsible for:

1. Ensuring that necessary information on chemical hazards is kept at the worksite for the employees or rescue team.
2. Ensuring a rescue team is available and instructed in their rescue duties (i.e., an onsite team or a prearranged outside rescue service).
3. Ensuring the rescue team members have current certification in first aid and cardiopulmonary resuscitation (CPR).

E. Attendants:

(Employees designated by the Section Supervisor) shall function as an Attendant(s) and shall be stationed outside of the confined workspace. The Attendant(s) shall:

1. Be knowledgeable of, and be able to recognize potential confined space hazards.
2. Maintain a sign-in/sign-out log with a count of all persons in the confined space, and ensure all entrants sign in and out.
3. Monitor surrounding activities to ensure the safety of personnel.
4. Maintain effective and continuous communication with personnel during confined space entry, work, and exit.
5. Order personnel to evacuate the confined space if he/she:

    a. observes a condition which is not allowed on the entry permit;
    b. notices the entrants acting strangely, possibly as a result of exposure to hazardous substances;
    c. notices a situation outside the confined space which could endanger personnel;
    d. notices a hazard within the confined space that has not been previously recognized or taken into consideration;
    e. must leave his/her work station; or
    f. must focus attention on the rescue of personnel in some other confined space that he/she is monitoring.

6. Immediately summon the Rescue Team if crew rescue becomes necessary.
7. Keep unauthorized persons out of the confined space, order them out, or notify authorized personnel of an unauthorized entry.

F. Rescue Team (**Lewiston Fire Department**):

The Rescue Team members shall:

1. Complete a training drill using mannequins or personnel in a simulation of the confined space prior to the issuance of an entry permit for any confined space and at least annually thereafter.
2. Respond immediately to rescue calls from the Attendant or any other person recognizing a need for rescue from the confined space.
3. In addition to emergency response training, receive confined space training.
4. Have current certification in first aid and CPR.

G. Entrants/Affected Employees:

Employees who are granted permission to enter a confined space shall:

1. Read and observe the entry permit requirements.
2. Remain alert to the hazards that could be encountered while in the confined space.
3. Properly use the personal protective equipment that is required by the permit.
4. Immediately exit the confined space when:
   a. they are ordered to do so by an authorized person;
   b. they notice or recognize signs or symptoms of exposure;
   c. a prohibited condition exists; or
   d. the automatic alarm system sounds.
5. Alert Attendant(s) when a prohibited condition exists and/or when warning signs or symptoms of exposure exist.

IV. Training:

The City of Lewiston shall provide training so that all employees whose work is regulated by this Confined Space Program acquire the understanding, knowledge, and skills necessary for the safe performance of their duties in confined spaces.

A. Training Frequency
Section Supervisor shall provide training to each affected employee:

1. Before the employee is first assigned duties within a confined space;
2. Before there is a change in assigned duties;
3. When there is a change in permit space operations that presents a hazard for which an employee has not been trained; and
4. When The City of Lewiston has reason to believe that there are deviations from the confined space entry procedures required in this program, or that there are inadequacies in the employee's knowledge or use of these procedures.

The training shall establish employee proficiency in the duties required in this program, and shall introduce new or revised procedures, as necessary, for compliance with this program.

B. General Training:

All employees who will enter confined spaces shall be trained in entry procedures. Personnel responsible for supervising, planning, entering, or participating in confined space entry and rescue shall be adequately trained in their functional duties prior to any confined space entry. Training shall include:

1. Explanation of the general hazards associated with confined spaces.
2. Discussion of specific confined space hazards associated with the facility, location, or operation.
3. Reason for, proper use, and limitations of personal protective equipment and other safety equipment required for entry into confined spaces.
4. Explanation of permits and other procedural requirements for conducting a confined space entry.
5. A clear understanding of what conditions would prohibit entry.
6. Procedures for responding to emergencies.
7. Duties and responsibilities of the confined space entry team.
8. Description of how to recognize symptoms of overexposure to probable air contaminants in themselves and co-workers, and method(s) for alerting the Attendant(s).

Refresher training shall be conducted as needed to maintain employee competence in entry procedures and precautions.

C. Specific Training:

1. Training for atmospheric monitoring personnel shall include proper use of monitoring instruments, including instruction on the following:
   a. Proper use of the equipment;
   b. Calibration of equipment;
   c. Sampling strategies and techniques; and
   d. Exposure limits (PELs, TLVs, LELs, UELs, etc.).

2. Training for Attendants shall include the following:
   a. Procedures for summoning rescue or other emergency services; and
   b. Proper utilization of equipment used for communicating with entry and emergency/rescue personnel.

3. Training for Emergency Response Personnel shall include(**Section Supervisor will need to provide the Lewiston Fire Department with a list of all Identified Confined Spaces on site and should ask to train on location a minimum of once a year)**:

a. Rescue plan and procedures developed for each type of confined space that is anticipated to be encountered;
b. Use of emergency rescue equipment;
c. First aid and CPR techniques; and
d. Work location and confined space configuration to minimize response time.

D. Verification of Training:

Periodic assessment of the effectiveness of employee training shall be conducted by ***Section Supervisor***. Training sessions shall be repeated as often as necessary to maintain an acceptable level of personnel competence.

Identification of Hazards and Evaluation of Confined Spaces:

E. Survey:

Section Supervisor shall ensure a survey of the worksite is conducted to identify confined spaces. This survey can be partially completed from initial and continuing site characterizations, as well as other available data (i.e., blueprints and job safety analyses). The purpose of the survey is to develop an inventory of those locations and/or equipment at ***The City of Lewiston Wastewater Collections system*** that meet the definition of a confined space ***(Confined Space Identification And Risk Assessment will be provided as an attachment).*** This information shall be communicated to personnel, and appropriate confined space procedures shall be followed prior to entry. The initial surveys shall include air monitoring to determine the air quality in the confined spaces. The potential for the following situations shall be evaluated by Entry Supervisor.

1. Flammable or explosive potential;
2. Oxygen deficiency; and
3. Presence of toxic and corrosive material.

F. Hazard Reevaluation:

The Entry Supervisor shall identify and reevaluate hazards based on possible changes in activities or other physical or environmental conditions that could adversely affect work. A master inventory of confined spaces shall be maintained. (*See attached form*) Any change in designation of a confined space will be routed to all affected personnel by ***Section Supervisor***.

G. Pre-Entry Hazard Assessment:

A hazard assessment shall be completed by Entry Supervisor prior to any entry into a confined space. The hazard assessment should identify:

1. The sequence of work to be performed in the confined space;
2. The specific hazards known or anticipated; and
3. The control measures to be implemented to eliminate or reduce each of the hazards to an acceptable level.

No entry shall be permitted until the hazard assessment has been reviewed and discussed by all persons engaged in the activity. Personnel who are to enter confined spaces shall be informed of known or potential hazards associated with said confined spaces.

H. Hazard Controls:

Hazard controls shall be instituted to address changes in the work processes and/or working environment. Hazard controls must be able to control the health hazards by eliminating the responsible agents, reduce health hazards below harmful levels, or prevent the contaminants from coming into contact with the workers.

The following order of precedence shall be followed in reducing confined space risks.

1. Engineering Controls:
Engineering controls are those controls that eliminate or reduce the hazard through implementation of sound engineering practices.

Ventilation is one of the most common engineering controls used in confined spaces. When ventilation is used to remove atmospheric contaminants from a confined space, the space shall be ventilated until the atmosphere is within the acceptable ranges. Ventilation shall be maintained during the occupancy if there is a potential for the atmospheric conditions to move out of the acceptable range. When ventilation is not possible or feasible, alternate protective measures or methods to remove air contaminants and protect occupants shall be determined by ***Entry Supervisor and or Section Supervisor*** prior to authorizing entry.

When conditions necessitate and can accommodate continuous forced air ventilation, the following precautions shall be followed:

a. Employees shall not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.
b. Forced air ventilation shall be directed so as to ventilate the immediate areas where an employee is or will be present within the space.
c. Continuous ventilation shall be maintained until all employees have left the space.
d. Air supply or forced air ventilation shall originate from a clean source.

2. Work Practice (Administrative) Controls:
Work practice (administrative) controls are those controls which eliminate or reduce the hazard through changes in the work practices (i.e., rotating workers, reducing the amount of worker exposure, and housekeeping).
3. Personal Protective Equipment (PPE):
If the hazard cannot be eliminated or reduced to a safe level through engineering and/or work practice controls, PPE should be used. ***Section Supervisor*** shall determine the appropriate PPE needed by all personnel entering the

confined space, including rescue teams. PPE that meets the specifications of applicable standards shall be selected in accordance with the requirements of the job to be performed.

V. Entry Permits (see attached forms):

The Confined Space Entry Permit is the most essential tool for assuring safety during entry in confined spaces with known hazards, or with unknown or potentially hazardous atmospheres. The entry permit process guides the supervisor and workers through a systematic evaluation of the space to be entered. The permit should be used to establish appropriate conditions. Before each entry into a confined space, an entry permit will be completed by Entry Supervisor. The Entry Supervisor will then communicate the contents of the permit to all employees involved in the operation, and post the permit conspicuously near the work location. A standard entry permit shall be used for all entries.

A. Key Elements of Entry Permits:

A standard entry permit shall contain the following items:

1. Space to be entered.
2. Purpose of entry.
3. Date and authorized duration of the entry permit.
4. Name of authorized entrants within the permit space.
5. Means of identifying authorized entrants inside the permit space (i.e., rosters or tracking systems).
6. Name(s) of personnel serving as Attendant(s) for the permit duration.
7. Name of individual serving as Entry Supervisor, with a space for the signature or initials of the Entry Supervisor who originally authorized the entry.
8. Hazards of the permit space to be entered.
9. Measures used to isolate the permit space and to eliminate or control permit space hazards before entry (i.e., lockout/tagout of equipment and procedures for purging, ventilating, and flushing permit spaces).
10. Acceptable entry conditions.
11. Results of initial and periodic tests performed, accompanied by the names or initials of the testers and the date(s) when the tests were performed.
12. Rescue and emergency services that can be summoned, and the means of contacting those services (i.e., equipment to use, phone numbers to call).
13. Communication procedures used by authorized entrants and Attendant(s) to maintain contact during the entry.
14. Equipment to be provided for compliance with this Confined Space Program (i.e., PPE, testing, communications, alarm systems, and rescue).
15. Other information necessary for the circumstances of the particular confined space that will help ensure employee safety.
16. Additional permits, such as for hot work, that has been issued to authorize work on the permit space.

B. Permit Scope and Duration:
A permit is only valid for one shift. For a permit to be renewed, the following conditions shall be met before each reentry into the confined space:

1. Atmospheric testing shall be conducted and the results should be within acceptable limits. If atmospheric test results are not within acceptable limits, precautions to protect entrants against the hazards should be addressed on the permit and should be in place.
2. Entry Supervisor shall verify that all precautions and other measures called for on the permit are still in effect.
3. Only operations or work originally approved on the permit shall be conducted in the confined space.

A new permit shall be issued, or the original permit will be reissued if possible, whenever changing work conditions or work activities introduce new hazards into the confined space. ***Section Supervisor*** shall retain each canceled entry permit for at least one (1) year to facilitate the review of the Confined Space Entry Program. Any problems encountered during an entry operation shall be noted on the respective permit(s) so that appropriate revisions to the confined space permit program can be made.

VI. Entry Procedures:

When entry into a confined space is necessary, either the Entry Supervisor or ***Section Supervisor*** may initiate entry procedures, including the completion of a confined space entry permit. Entry into a confined space shall follow the standard entry procedure below.

A. Prior to Entry:
The entire confined space entry permit shall be completed before a standard entry. Entry shall be allowed only when all requirements of the permit are met and it is reviewed and signed by an Entry Supervisor. The following conditions must be met prior to standard entry:

1. Affected personnel shall be trained to establish proficiency in the duties that will be performed within the confined space.
2. The internal atmosphere within the confined space shall be tested by Entry Supervisor with a calibrated, direct-reading instrument.
3. Personnel shall be provided with necessary PPE as determined by the Entry Supervisor.
4. Atmospheric monitoring shall take place during the entry. If a hazardous atmosphere is detected during entry:
   a. Personnel within the confined space shall be evacuated by the Attendant(s) or Entry Supervisor until the space can be evaluated by ***Entry Supervisor or Section Supervisor*** to determine how the hazardous atmosphere developed; and
   b. Controls shall be put in place to protect employees before reentry.

B. Opening a Confined Space:

Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent anyone from falling through the opening. This barrier or cover shall protect each employee working in the space from foreign objects entering the space. If it is in a traffic area, adequate barriers shall be erected.

C. Atmospheric Testing:

Atmospheric test data is required prior to entry into a confined space. Atmospheric testing is required for two distinct purposes: (1) evaluation of the hazards of the permit space, and (2) verification that acceptable conditions exist for entry into that space. If a person must go into the space to obtain the needed data, then Standard Confined Space Entry Procedures shall be followed. Before entry into a confined space, Entry Supervisor shall conduct testing for hazardous atmospheres. The internal atmosphere shall be tested with a calibrated, direct-reading instrument for oxygen, flammable gases and vapors, and potential toxic air contaminants, in that order.

Testing equipment used in specialty areas shall be listed or approved for use in such areas by ***Section Supervisor***. All testing equipment shall be approved by a nationally recognized laboratory, such as Underwriters Laboratories or Factory Mutual Systems.

1. Evaluation Testing:

The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity. The analysis shall identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data and development of the entry procedure should involve a technically qualified professional (i.e., consultant, certified industrial hygienist, registered safety engineer, or certified safety professional).

2. Verification Testing:

A confined space that may contain a hazardous atmosphere shall be tested for residues of all identified or suspected contaminants. The evaluation testing should be conducted with specified equipment to determine that residual concentrations at the time or testing and entry are within acceptable limits. Results of testing shall be recorded by the person performing the tests on the permit. The atmosphere shall be periodically retested (frequency to be determined by Entry Supervisor to verify that atmospheric conditions remain within acceptable entry parameters.

3. Acceptable Limits:

The atmosphere of the confined spaces shall be considered to be within acceptable limits when the following conditions are maintained:

a. Oxygen: 19.5 percent to 23.5 percent;
b. Flammability: less than 10 percent of the Lower Flammable Limit (LFL); and
c. Toxicity: less than recognized American Conference of Governmental Industrial Hygienists (ACGIH) exposure limits or other published exposure levels [i.e., OSHA Permissible Exposure Limits (PELs) ***(H2S***

attached) or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs)].

D. Isolation and Lockout/Tag out Safeguards:
All energy sources that are potentially hazardous to confined space entrants shall be secured, relieved, disconnected, and/or restrained before personnel are permitted to enter the confined space. Equipment systems or processes shall be locked out and/or tagged out as required by the City of Lewiston's Lockout/Tag out Program [which complies with OSHA's 29 CFR 1910-147 and American National Standards Institute (ANSI) Z244.1-1982, Lockout/Tag out of Energy Sources] prior to permitting entry into the confined space. In confined spaces where complete isolation is not possible, ***Section Supervisor or Entry Supervisor*** shall evaluate the situation and make provisions for as rigorous isolation as practical. Special precautions shall be taken when entering double-walled, jacketed, or internally insulated confined spaces that may discharge hazardous material through the vessel's internal wall.

Where there is a need to test, position, or activate equipment by temporarily removing the lock or tag or both, a procedure shall be developed and implemented to control hazards to the occupants. Any removal of locks, tags, or other protective measures shall be done in accordance with the ***City of Lewiston's*** Lockout/Tag out Program.

E. Ingress/Egress Safeguards:
Means for safe entry and exit shall be provided for confined spaces. Each entry and exit points shall be evaluated by Entry Supervisor to determine the most effective methods and equipment that will enable employees to safely enter and exit the confined space.

Appropriate retrieval equipment or methods shall be used whenever a person enters a confined space. Use of retrieval equipment may be waived by the ***Entry Supervisor or Section Supervisor*** if use of the equipment increases the overall risks of entry or does not contribute to the rescue. A mechanical device shall be available to retrieve personnel from vertical confined spaces greater than five (5) feet in depth.

F. Warning Signs and Symbols:
All confined spaces that could be inadvertently entered shall have signs identifying them as confined spaces. Signs shall be maintained in a legible condition. The signs shall contain a warning that a permit is required before entry. Accesses to all confined spaces shall be prominently marked.

VII. Emergency Response:

A. Emergency Response Plan:
Section Supervisor (LFD shall be our rescuers) shall maintain a written plan of action that has provisions for conducting a timely rescue of individuals within a confined space, should an emergency arise. The written plan shall be kept onsite where the confined space work is being conducted. All affected personnel shall be trained on the Emergency Response Plan. (The City of Lewiston's Fire Department Shall be contacted and given a list of Confined Spaces and Dangers that lye with in)

B. Retrieval Systems and Methods of Non-Entry Rescue:
Retrieval systems shall be available and ready when an authorized person enters a permit space, unless such equipment increases the overall risk of entry, or the equipment would not contribute to the rescue of the entrant. Retrieval systems shall have a chest or full-body harness and a retrieval line attached at the center of the back near shoulder level or above the head. If harnesses are not feasible, or would create a greater hazard, wristlets may be used in lieu of the harness. The retrieval line shall be firmly fastened outside the space so that rescue can begin as soon as anyone is aware that retrieval is necessary. A mechanical device shall be available to retrieve personnel from vertical confined spaces more than five (5) feet deep.

Process: Tank Steam/Wash Rack	
Entry Supervisor	**Entrants**
1. Upon receipt of a tank for cleaning, do a visible check for product. If product is visible in the tank, then the tank will be refused. If it is to be cleaned anyway the depth should be checked before continuing. 2. Complete and attach certification and danger tag to tank. 3. Provide confined space entry permit for the tank. 4. Verify that entrants have proper training and knowledge of known hazards, including the mode of exposure (how it gets into the body), signs or symptoms, and results of exposure.	1. Purge tanks with cold water prior to steam cleaning. 2. Obtain the confined space entry permit and authorized signature. 3. Complete a safe entry checklist prior to entering the confined space. 4. Fill out and attach the caution tag after tank is purged and cleaned. 5. Know space hazards, including information on the mode of exposure (how it gets into the body), signs or symptoms, and results of exposure. 6. Use the correct personal protective equipment (PPE) properly. 7. Maintain communication with standby person to enable them to monitor entrant's actions and alert the entrant to evacuate if necessary. 8. Exit from permit space as soon as possible: when ordered to by authorized persons; when entrant notices or recognizes the signs or symptoms of exposure; when a prohibited condition exists; and/or when the automatic alarm system sounds. 9. Alert the standby person when a prohibited condition exists and/or when warning signs or symptoms of exposure exist.
Process: Tank Maintenance	

Entry Supervisor	Entrants
1. Upon receipt of a tank for maintenance, do a visible check for product. If product is visible in the tank, then the tank will be refused. If it is to be cleaned anyway the depth should be checked before continuing. 2. Complete and attach certification and danger tag to tank. 3. Provide confined space entry permit for the tank. 4. Verify that entrants have proper training and knowledge of known hazards, including the mode of exposure (how it gets into the body), signs or symptoms, and the results of exposure.	1. Prior to moving any tank into the maintenance bay, ensure tank has been cleaned and/or purged per attached caution tag, test atmosphere, and record results on hot tag. (Tank will not be moved into bay until the atmosphere has been tested and is determined to be within acceptable limits.) 2. In bay, if work will require confined space entry, obtain confined space entry permit from the Service Writer. 3. Obtain the confined space entry permit and the authorized signatures. 4. Complete the safe entry checklist prior to confined space entry. 5. Know space hazards, including information on the mode of exposure (how it gets into the body), signs or symptoms, and results of exposure. 6. Use the correct personal protective equipment (PPE) properly. 7. Maintain communication with standby person to enable them to monitor the entrant's actions and alert the entrant to evacuate if necessary. 8. Exit from permit space as soon as possible: when ordered to by authorized persons; when entrant notices or recognizes signs or symptoms of exposure; when a prohibited condition exists; and/or when the automatic alarm system sounds. 9. Alert the standby person when a prohibited condition exists and/or when warning signs or symptoms of exposure exist.

Hydrogen Sulfide

OSHA comments from the January 19, 1989 Final Rule on Air Contaminants Project extracted from 54FR2332 et. seq. This rule was remanded by the U.S. Circuit Court of Appeals and the limits are not currently in force

CAS: 7783-06-4; **Chemical Formula:** H_2S

OSHA's former limits for hydrogen sulfide were a 20-ppm STEL (10-minute maximum duration) and a 50-ppm ceiling limit. The proposed and final rules for this substance are 10 ppm as an 8-hour TWA and 15 ppm as a STEL. These limits are consistent with those of the ACGIH. NIOSH has a REL for hydrogen sulfide of 10 ppm as a 10-minute ceiling. Hydrogen sulfide is a colorless, flammable gas with the odor of rotten eggs. It is widely used as an agricultural disinfectant, chemical intermediate, analytical reagent, and in the manufacture of heavy water in the utilities sector. However, occupational exposure to hydrogen sulfide occurs most frequently when it is encountered in natural oil or gas deposits or as a by-product in chemical reactions.

Space Number	City of Lewiston ***Section*** Confined spaces	Address/on site location (i.e., out back behind the blue tank on the n/w side of the property.)
1		
2		
3		
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6		
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23		
24		

25		

Date:	**Location:**	**Space Number:**
Head of Department:	**CSE Authorizing Officer(s):**	
Classification of Space: Confined☐ Nil☐		
Description of the space:		

SECTION 1: CRITERIA			
No.	**CONFINED SPACE CRITERION** – For the space to be confined all points, 1.1 to 1.4, must be answered with a yes.	**Yes**	**No**
1.1	Is the space intended to be, or is likely to be entered by any persons for any reason (e.g maintenance, production or inspection)?	☐	☐
1.2	Does the space have a limited or restricted means of entry and exit for personnel?	☐	☐
1.3	Is the space intended to be at normal atmosphere pressure while any person is in the space?	☐	☐
1.4	Is the space likely to contain or once contained: • an atmosphere that has a harmful level of any contaminant (e.g. fumes, vapor, gas, steam, mist or explosive gas)? or • an atmosphere that does not have a safe oxygen level (e g. too low or too high)? or • any stored substance that could cause engulfment (e.g. sand, garnet, grit, blast, grain)?	☐	☐

SECTION 2: CLASSIFICATION				
2.1	Confined space classification	A full risk assessment is required – complete Section 3	☐	☐
2.3	Nil Classification	A full risk assessment is required – Section 3 can be used for this purpose	☐	☐

SECTION 3: RISK ASSESSMENT					
No.	**Hazard**	**Yes**	**No**	**Give Details**	**Action/Controls Required**
3.1	Entry: Is the space likely to or intended to be entered? (e g inspection of parts, maintenance requirements)	☐	☐		

SECTION 3: RISK ASSESSMENT					
3.2	Atmosphere: Is there a risk of the atmospheric pressure within the space changing to an unsafe level?	☐	☐		
3.3	Prior to entering the space, is there any risk of the atmosphere being unsafe? (e.g. fuel vapors, lack of oxygen due to decomposing material or explosive vapors)	☐	☐		
3.4	Once inside the space, is there a risk of any harmful contaminant or process entering the space or being created from inside? (e.g. fumes, carbon monoxide or gas leak, pipes, ducts, sewers)	☐	☐		
3.5	Are any of the processes occurring inside or adjacent to the space likely to cause any oxygen deficiency?	☐	☐		
3.6	Can any other substances be introduced into the space whilst being occupied? (e g water, oil	☐	☐		
3 7	Lighting. Could there be insufficient lighting?	☐	☐		
3.8	Are there any possible hazards associated with the lighting in the space? (e g an explosive atmosphere)	☐	☐		
3.9	Electricity: Are any electrical hazards present?	☐	☐		
3 10	Communication: Is continual communication between the personnel inside the space and the standby difficult?	☐	☐		

3.11	Personal Protective Equipment: Does the design, purpose or layout of the space require PPE irrespective of the work carried out inside the space?	☐	☐		

SECTION 4: EMERGENCY ASSESSMENT		
4.1: Describe the features of the confined space e.g. type of access, number access point, conditions inside the space	**4.2:** Description of emergency process to be taken in an emergency e.g. will require emergency services –	**4.3:** Description emergency equipment required for the confined space entry e.g. lifting equipment, torch, leather gloves

Assessment Team	
CSE Authorizing Officer:	**Signature:**
Name:	**Signature:**

Permit #

CONFINED SPACE ENTRY PERMIT PART 1 OF 2

1.0 GENERAL INFORMATION

1.1 DATE: / /	1.2 GOOD FROM : am/pm	1.3 TO : am/pm
1.4 LOCATION:		
1.5 REASON FOR ENTRY		
☐ PRE-ENTRY PREPARATION	☐ WORK	☐ HOT WORK/Permit Attached? ___yes ___no

2.0 PERSONNEL INVOLVED

PERSONNEL JOB FUNCTION	NAME	COMPANY/CONTRACTOR	Certification Date
Certified Confined Space Worker			
Certified Confined Space Worker			
Certified Confined Space Observer			
Certified Rescuer			

3.0 POTENTIAL HAZARDS OF THIS CONFINED SPACE : Check all that apply

CONFIGURATION	OTHER HAZARDS	ATMOSPHERE	CHEMICALS	BIOLOGICAL
☐ Poor Lighting	☐ Electrical shock	☐ Flammable vapors	☐ Unknown contents	☐ Raw Sewage
☐ Difficult exit	☐ Mechanical hazards	☐ Combustible dusts	☐ Corrosive materials	☐ Sludge
☐ Heat or cold	☐ Pressure/vaouum	☐ Oxygen >23.5%,<19.5%	☐ Toxic materials	ENGULFMENT
☐ Falling objects/toppling	☐ Sharp objects	☐ Explosives	☐ Reactivity	☐ Drowning
☐ Communications interference	☐ Slopes/slippery	☐ IDLH conditions	☐ Radioactivity	☐ Solids engulfment
☐ No line of sight possible	☐ Tapering	☐ Poor ventilation	☐ Introduced material	☐ Crushing possibility

4.0 PRE-ENTRY PREPARATION

4.1 AIR TESTING & CONTINUOUS MONITORING

ATMOSPHERE/ENVIRONMENT	Preliminary Test %	Continuous Test %
☐ Oxygen content (between 19.3 & 23%) *		
☐ LEL (should be less than 10%)		
☐ H2S (<10 ppm)		
☐ Ammonia (<25 ppm)		
☐ Chlorine (<1 ppm)		
☐ Carbon Monoxide (<35 ppm)		
☐ Sulfur Dioxide (<2 ppm)		
☐ Strong odors, other hazards:		
☐ Temperature (various points) °F		
☐ Humidity (high, medium, low)		
☐ Noise level (high, medium, low)		
Name of tester:		
Signature of tester:		Date:

4.2 ELIMINATE HAZARDS

Check Items Required / Check Items Done
☐ Ventilate with air (___forced, ___natural)
☐ Purge space with inert (nitrogen, other)
☐ Lockout tag out of mechanical and electrical equipment/list specific areas below:
1.
2.
☐ Blank off pipes carrying engulfing liquids/solids/gases. Specify below:
1.
2.
☐ Eliminate slipping hazards
☐ Guards placed on sharp edges and moving parts
☐ Review MSDS data
☐ Check nearby showers and eyewashes
☐ Alert nearby personnel & contractors
☐ Erect barriers and post "NO SMOKING" signs

Permit #

CONFINED SPACE ENTRY PERMIT PART 2 OF 2

5.0 EQUIPMENT ISSUED FOR ENTRY

ENTRANT 1	ENTRANT 2	OBSERVER
☐ Harness/rescue line attached to outside point	☐ Harness/rescue line attached to outside point	☐ Harness/rescue line attached to tripod, fixed point
☐ Wristlets	☐ Wristlets	☐ Air supply for worker
☐ Air hose attached to air source outside	☐ Air hose attached to air source outside	☐ Mechanical lifting/Rescue Power Device
☐ Gas mask type:_____ Tested?_____	☐ Gas mask type:_____ Tested?_____	☐ Eye Protection
☐ SCBA	☐ SCBA	☐ Radio, Horn or Portable phone
☐ PAPR Air Purifying Cartridge	☐ PAPR Air Purifying Cartridge	☐ Barricades
☐ ESCBA (10 minutes)	☐ ESCBA (10 minutes)	☐ Fire Extinguisher
☐ Radio, Horn or Alarm	☐ Radio, Horn or Alarm	☐ Head Protection
☐ Pocket Monitor, Motion Detector	☐ Pocket Monitor, Motion Detector	☐ Protective Suit, Boots, Gloves
☐ Continuous monitor in space	☐ Continuous monitor in space	☐ Hearing protection
☐ Protective suit, boots, gloves head protection type:_____	☐ Protective suit, boots, gloves head protection type:_____	☐ Battery Power Lighting
☐ Explosion Proof Lighting	☐ Explosion Proof Lighting	☐ First Aid Kit
☐ Fire Extinguisher	☐ Fire Extinguisher	☐ Air Monitors
☐ Hearing Protection	☐ Hearing Protection	☐ Other (specify)
NON SPARKING TOOLS ISSUED (list all)	**NON SPARKING TOOLS ISSUED (list all)**	**RESCUER'S EQUIPMENT**
1.	1.	☐ First Aid Kit/Stretcher
2.	2.	☐ Emergency Eye Wash, Shower, Portable
3.	3.	☐ Resuscitator/Oxygen Tank
4.	4.	☐ Communications, Radio, Phone
5.	5.	☐ Battery Explosion Proof Lights
6.	6.	☐ SCBA/Protective Gear/Egress 10 min. Bottle
7.	7.	☐ Antidotes for:
8.	8.	☐ Vertical retrieval device, Winch
9.	9.	

6.0 SPECIAL ENTRY INSTRUCTIONS/PLAN/COMMENTS	7.0 RESCUE NUMBERS
	Rescue
	Plant
	Other

8.0 AUTHORIZATIONS CANCELLATION

I authorize entry by the entrants listed here into the confined space. All of the above requirements of the permit have been completed. I further certify that all entrants, observer and rescuers are properly trained and certified."	
	Confined Space Entry Supervisor Date
THE WORK AUTHORIZED UNDER THIS PERMIT IS COMPLETE AND THIS PERMIT IS CANCELLED	
	Confined Space Entry Supervisor Date

C:\Documents and Settings\SLHood\My Documents\My Documents Wastewater\Supervisor's Files\John T\Confined Space Entry Permit Form.xls

CONFINED SPACE ENTRY LOG

No:	Location:
Date of permit:	Reason for entering:
Date cancelled:	Comments:

No:	Location:
Date of permit:	Reason for entering:
Date cancelled:	Comments:

No:	Location:
Date of permit:	Reason for entering:
Date cancelled:	Comments:

No:	Location:
Date of permit:	Reason for entering:
Date cancelled:	Comments:

No:	Location:
Date of permit:	Reason for entering:
Date cancelled:	Comments:

City of Lewiston
Defensive Driving
Exposure Control Plan

Defensive Driving Safety Policy

Effective Date:
Revision Number: 1

Purpose: This policy establishes the responsibilities of all City of Lewiston employees, in maintaining a safe and productive working environment. It is in place to ensure that all parties take the utmost precaution to drive safe and defensively while operating all city equipment, thereby lowering the chance of having an accident resulting in a serious injury or death.

Scope: All employees can drive defensively by employing a number of tactics. Be aware of your surroundings, whether it's obstacles, other drivers, pedestrians or bicyclists.

Definitions: Defensive driving is defined as "driving to save lives, time, and money, in spite of the conditions around you and the actions of others."

To drive defensively means making sound decisions ahead of time rather than reacting at the last second.

Procedures: The following are guidelines employees should follow when operating city equipment:

- Scan your surroundings. Always be aware and anticipate what others may do, whether it's a vehicle, pedestrian or bicyclist.
- Maintain a safe following distance of 2-3 seconds. To calculate following distance, count when the end of the vehicle in front of you passes an object to the time the front of your vehicle passes the same object. By maintaining a safe following distance, you greatly increase the response time you have in case you need to take evasive action.
- Always drive for road conditions. Slow down during inclement weather; do not use your bright lights in the fog.
- Limit backing your vehicle. Always use extreme caution when backing. A good practice is to get out of the vehicle to assess obstacles before backing. If your vehicle is not equipped with a backup alarm, sound the horn before proceeding to back up.
- When stopped behind a vehicle, make sure that you can see the back wheels of the vehicle in front of you. This allows you to have a "cushion" should the need arise to go around the vehicle, or if you are hit from behind.
- Clear all snow from the windows, taillights and headlights before you start driving.
- Always wear your seatbelt.
- Eliminate all distractions. A distraction is anything that takes your attention away from driving (cellphone, eating, drinking, etc.).
- Adjust all controls (radio, mirrors, A/C, etc.) before you start driving.
- Look left-right-left before proceeding into an intersection.

- When stopped at a red light, wait 3 seconds before proceeding to make sure the intersection is clear.

City of Lewiston
Electrical Work Practices
Exposure Control Plan

Electrical Work Practices' Program

Effective Date:
Revision Number: 1

Purpose:
This program establishes safe work practices to be used to prevent electrical shock or other injuries resulting from either direct or indirect contacts, when work is performed near or on equipment or circuits which are or may be energized.

Scope:
This procedure applies to all company employees, contractors and vendors performing work on company property, and all other individuals who are visiting or have business with our company.

Responsibilities:
Management and supervisors are responsible for enforcement of this program.

Management will ensure that required training is conducted.

Employees, Contractors and vendors are required to comply with all procedures outlined in thiS policy.

Definitions:

De-energized: Free from any electrical connection to a source of potential difference and from electrical
charge.
Energized: Electrically connected to a source of potential difference.
Insulated: Separated from other conducting surfaces by a dielectric (including air space) offering a high
resistance to the passage of current.
Qualified person: One who has received training in and has demonstrated skills and knowledge in the
construction and operation of electric equipment and installations and the hazards involved.

Procedure:

De-energized parts:
Live parts to which an employee may be exposed must be de-energized before the employee works on or near them, unless the employer can demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations.
Live parts that operate at less than 50 volts to ground need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs.

Energized parts:
If the exposed live parts are not de-energized (i.e., for reasons of increased or additional hazards or infeasibility), other safety-related work practices must be used to protect employees who may be exposed to the electrical hazards Involved. Such work practices must protect employees against contact with energized circuit parts directly with any part of their body or indirectly through some

other conductive object. The work practices that are used must be suitable for the conditions under which the work is to be performed and for the voltage level of the exposed electric conductors or circuit parts.

Working on or near exposed de-energized parts:
This applies to work on exposed de-energized parts or near enough to them to expose the employee to any electrical hazard they present. Conductors and parts of electric equipment that have been de--energized but have not been locked out or tagged must be treated as energized parts.

Lockout and tagging:
While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been de-energized, the circuits energizing the parts must be locked out or tagged or both in accordance with the requirements below.

De-energizing equipment:
Safe procedures for de-energizing circuits and equipment must be determined before circuits or equipment are de-energized.

- The circuits and equipment to be worked on must be disconnected from all electric energy sources. Control circuit devices, such as push buttons, selector switches and interlocks, may not be used as the sole means for de-energizing circuits or equipment. Interlocks for electric equipment may not be used as a substitute for lockout and tagging procedures.
- Stored electric energy which might endanger personnel must be released. Capacitors must be discharged and high capacitance elements must be short-circuited and grounded, if the stored electric energy might endanger personnel. Note: If the capacitors or associated equipment are handled in meeting this requirement, they must be treated as energized.
- Stored non-electrical energy in devices that could reenergize electric circuit parts must be blocked or relieved to the extent that the circuit parts could not be accidentally energized by the device.

- Application of locks and tags
    - A lock and a tag must be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be performed. The lock must be attached so as to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools.
    - Each tag must contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.
    - If a lock cannot be applied, or if the employer can demonstrate that tagging procedures will provide a level of safety equivalent to that obtained by the use of a lock, a tag may be used without a lock.
    - If a tag is used without a lock it must be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by use of a lock. Examples of additional safety measures include the removal of an Isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.
- A lock may be placed without a tag only under the following conditions:

- Only one Circuit or piece of equipment is de-energized, and
- The lockout period does not extend beyond the work shift, and
- Employees exposed to the hazards associated with re-energizing the circuit or equipment are familiar with this procedure.

The requirements of this paragraph must be met before any circuits or equipment can be considered and worked as de-energized.
A qualified person must operate the equipment operating controls or otherwise verify that the equipment cannot be restarted. They also must use test equipment to test the circuit elements and electrical parts of equipment to which employees will be exposed and must verify that the circuit elements and equipment parts are de-energized. The test must also determine if any energized condition exists as a result of inadvertently induced voltage or unrelated voltage backfeed even though specific parts of the circuit have been de-energized and presumed to be safe. If the circuit to be tested is over 600 volts, nominal, the test equipment must be checked for proper operation immediately after this test.

Re-energizing equipment:
These requirements must be met, in the order given, before circuits or equipment are reenergized, even temporarily.

- A qualified person must conduct tests and visual inspections, as necessary, to verify that all tools, electrical Jumpers, shorts, grounds, and other such devices have been removed, so that the circuits and equipment can be safely energized.
- Employees exposed to the hazards associated with reenergizing the circuit or equipment must be warned to stay clear of circuits and equipment.
- Each lock and tag must be removed by the employee who applied it or under his or her direct supervision. However, if this employee is absent from the workplace, then the lock or tag may be removed by a qualified person designated to perform this task provided that:
  - The employer ensures that the employee who applied the lock or tag is not available at the workplace, and
  - The employer ensures that the employee is aware that the lock or tag has been removed before he or she resumes work at that workplace.
- There must be a visual determination that all employees are clear of the circuits and equipment.

Working on or near exposed energized parts:
This applies to work performed on exposed live parts (involving either direct contact or by means of tools or materials) or near enough to them for employees to be exposed to any hazard they present.

Work on energized equipment:
Only qualified persons may work on electric circuit parts or equipment that have not been de-energized under the procedures of the previous section. Such persons must be capable of working safely on energized circuits and must be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.

Overhead lines:
If work is to be performed near overhead lines, the lines must be de-energized and grounded, or other protective measures must be provided before work is started. If the lines are to be de-energized, arrangements must be made with the person or organization that operates or controls the electric circuits Involved to de-energize and ground them. If protective measures, such as guarding, isolating or insulating, are provided, these precautions must prevent employees from contacting such lines directly with any part of their body or indirectly through conductive materials, tools or equipment.

Unqualified persons:
When an unqualified person is working in an elevated position near overhead lines, the location must be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

- For voltages to ground 50kV or below -10 feet (305 cm);
- For voltages to ground over 50kV -10 feet (305 cm) plus 4 inches (10 cm) for every 10kV over 50kV.

When an unqualified person is working on the ground in the vIcinity of overhead lines, the person may not bring any conductive object closer to unguarded, energized overhead lines than the distances given in Table 1.

Qualified persons
When a qualified person is working in the vicinity of overhead lines, whether in an elevated position or on the ground, the person may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in Table 1 unless:

- The person is insulated from the energized part (gloves, with sleeves if necessary, rated for the voltage involved are considered to be insulation of the person from the energized part on which work is performed).
- The energized part is insulated both from all other conductive objects at a different potential and from the person.
- The person is insulated from all conductive objects at a potential different from that of the energized part.

Table 1 Approach Distances for Qualified Employees Alternating Current

Voltage range (phase to phase)	Minimum approach distance
300V and less	Avoid Contact
Over 300V, not over 750V	1 ft. 0 In. (30.5 cm)
Over 750V, not over 2kV	1 ft. 6 in. (46 cm)
Over 2kV, not over 15kV	2 ft. 0 in. (61 cm)
Over 15kV, not over 37kV	3 ft. 0 In. (91 cm)
Over 37kV, not over 87.5kV	3 ft. 6 in. (107 cm)
Over 87.5kV, not over 121kV	4 ft. 0 in. (122 cm)
Over 121kV, not over 140kV	4 ft. 6 in. (137 cm)

Vehicular and mechanical equipment:

Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines must be operated so that a clearance of 10 ft. (305 cm) is maintained. If the voltage is higher than 50kV, the clearance must be increased 4 in. (10 cm) for every 10kV over that voltage. However, under any of the following conditions, the clearance may be reduced:

- If the vehicle is in transit with its structure lowered, the clearance may be reduced to 4 ft. (122 cm). If the voltage is higher than 50kV, the clearance must be increased 4 in. (10 cm) for every 10 kV over that voltage.
- If insulating barriers are installed to prevent contact with the lines, and if the barriers are rated for the voltage of the line being guarded and are not a part of or an attachment to the vehicle or its raised structure, the clearance may be reduced to a distance within the designed working dimensions of the insulating barrier.
- If the equipment is an aerial lift insulated for the voltage involved, and if the work is performed by a qualified person, the clearance (between the un-insulated portion of the aerial lift and the power line) may be reduced to the distance given in Table 1.

Employees standing on the ground may not contact the vehicle or mechanical equipment or any of its attachments, unless:

- The employee is using protective equipment rated for the voltage.
- The equipment is located so that no un-insulated part of its structure (that portion of the structure that provides a conductive path to employees on the ground) can come closer to the line than permitted in the opening paragraph of this section.

If any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines is intentionally grounded, employees working on the ground near the point of grounding may not stand at the grounding location whenever there is a possibility of overhead line contact. Additional Precautions, such as the use of barricades or insulation, must be taken to protect employees from hazardous ground potentials, depending on earth resistivity and fault currents, which can develop within the first few feet or more outward from the grounding point.

Illumination:

Employees may not enter spaces containing exposed energized parts, unless illumination is provided that enables the employees to perform the work safely.
Where lack of illumination or an obstruction affects clear visibility of the work to be performed, employees may not perform tasks near exposed energized parts. Employees may not reach blindly into areas which may contain energized parts.

Confined or enclosed work spaces:

When an employee works in a confined or enclosed space (such as a manhole or vault) that contains exposed energized parts, the employer must provide, and the employee must use, protective shields, protective barriers or insulating materials as necessary to avoid inadvertent contact with these parts. Doors, hinged panels and the like must be secured to prevent their swinging into an employee and causing the employee to contact exposed energized parts.

Conductive materials and equipment
Conductive materials and equipment that are in contact with any part of an employee's body must be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts. If an employee must handle long dimensional conductive objects (such as ducts and pipes) in areas with exposed live parts, the employer must institute work practices (such as the use of insulation, guarding and material handling techniques), which will minimize the hazard.

Portable ladders:
Portable ladders must have non-conductive side rails if they are used where the employee or the ladder could contact exposed energized parts.

Conductive apparel:
Conductive articles of jewelry and clothing (such a watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread or metal headgear) may not be worn if they might contact exposed energized parts. However, such articles may be worn if they are rendered nonconductive by covering, wrapping or other insulating means.

Housekeeping duties:
Where live parts present an electrical contact hazard, employees may not perform housekeeping duties at such close distances to the parts that there is a possibility of contact, unless adequate safeguards (such as insulating equipment or barriers) are provided. Electrically conductive cleaning materials (including conductive solids such as steel wool, metalized cloth and silicon carbide, as well as conductive liquid solutions) may not be used in proximity to energized parts unless procedures are followed which will prevent electrical contact.

Training:
Employees will be trained in and familiar with the safety-related work practices required by this program that pertain to their respective job assignments.
Qualified persons (i.e. those permitted to work on or near exposed energized parts) must, at a minimum, be trained in and familiar with the following:

- The skills and techniques necessary to distinguish exposed live parts from other parts of electric
- equipment.
- The skills and techniques to determine the nominal voltage of exposed parts.
- The clearance distances specified in Table 1 and the corresponding voltages to which the qualified person will be exposed.

Training can be either classroom or on-the-job, or a mixture of both. The degree of training provided is determined by the risk of the employee.

Follow Safe Electrical Work Practices

De-energized parts:
Any live parts that you may come Into contact with need to be de-energized before you work on or near them.
Live parts that operate at less than 50 volts to ground need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs.

Lockout/tagout of de-energized parts:
Whenever you are exposed to contact with parts of fixed electric equipment or circuits which have been de-energized, the circuits energizing the parts must be locked out or tagged or both

- Disconnect circuits and equipment from all electric energy sources. Control circuit devices, such as push buttons, selector switches and interlocks, may not be used as the sale means for de-energizing circuits or equipment.
- Release stored electric energy. Capacitors must be discharged and high capacitance elements must be short-circuited and grounded, if the stored electric energy might present a hazard.
- Block or relieve all stored non-electrical energy in devices that could reenergize electric circuit parts.

Re-energizing equipment:
These requirements must be met. In the order given, before circuits or equipment are re-energized, even temporarily.

- A qualified person must conduct tests and visual inspections, as necessary, to verity that all tools,
- electrical Jumpers, shorts, grounds and other such devices have been removed so that the circuits and equipment can be safely energized.
- Any employees exposed to the hazards associated with reenergizing the circuit or equipment must be warned to stay clear of circuits and equipment.
- Each lock and tag must be removed by the employee who applied it or under his or her direct supervision. However, if this employee is absent from the workplace then the lock or tag may be removed by a qualified person designated to perform this task provided that:
    - The employer ensures that the employee who applied the lock or tag IS not available at the workplace, and
    - The employer ensures that the employee is aware that the lock or tag has been removed before he or she resumes work at that workplace.
- There must be a visual determination that all employees are clear of the circuits and equipment.

Energized Parts:
If the exposed live parts are not de-energized (i.e., for reasons of increased or additional hazards or infeasibility), other safety related work practices must be used to protect against contact with the energized circuit parts directly, with the body, or indirectly, through some other conductive object.

City of Lewiston
Emergency Response
Exposure Control Plan

Emergency Response Plan

Effective Date:
Revision Number: 1

Purpose:

This procedure establishes minimum measures for responding to various emergencies in our facility.

Scope:

This procedure applies to all of our company employees, all contractors and vendors performing work on company property, and all other individuals who are visiting or have business with our company.

Responsibilities:

Management is responsible for plan development and periodic review of this plan. Management is also responsible for appropriate employee training.

Management and supervisors are responsible for enforcement of this program.

Employees shall comply with all procedures outlined in this policy.

Contractors and vendors shall comply with all procedures outlined in this policy.

Definitions:

911 Notification System: Method that is used by our facility to call outside emergency services (police, fire, EMS)
Contractor: A non-company employee being paid to perform work in our facility.
Defensive Action: Response to a chemical spill or release that does not require personal protective equipment or hazardous material response training. Examples are: closing an open valve, placing absorbent material in front of a running spill or closing a door.
Emergency: An unplanned event that could jeopardize the safety of people or property in our facility. An emergency can originate on our site or off-site: either can impact the people and property within our facility.
Emergency Coordinator: A staff member who is responsible for decision making during the initial phase of an emergency (generally this stage is defined by: discovery, activating the alarm, evacuation, employee accounting, initial response by off-site emergency services, etc.) An Emergency Coordinator will be assigned whenever the facility is operating.
Evacuation Location: The location that employees, visitors and contractors report to following an evacuation.
Vendor: A non-company employee being paid to perform a service in our facility.
Visitor/Contractor Log: A written log maintained at the entrance for visitors, contractors and vendors. Each non-employee is required to sign-in upon entering our facility and sign-out when leaving.

Procedure:

Overview:

All actions taken during an emergency will serve to protect the life and safety of employees, contractors, visitors and our facility neighbors. To the extent possible, we will minimize damage to property and the environment. Our emergency response activity will never knowingly jeopardize the safety of any individual.

Evacuation Routes and Maps:

All evacuation exit routes are permanent and are maintained as accessible and passable at all times. Evacuation maps are posted at various locations throughout our facility. These maps reflect the location of the evacuation routes, exits and evacuation destination locations. Appendix A contains copies of these maps.

Accounting for Personnel:

Employee roster sheets will be used for personnel accounting following an evacuation. Supervisors or designees will be responsible for using the roster sheets to accomplish a head count immediately following evacuation. Visitor, Contractor and Vender Logs will be used to account for individuals in these groups.

Individuals who have disabilities that may impair their ability to evacuate will be encouraged to discuss the issue with Human Resources or another member of management. Necessary arrangements will be made confidentially to assist with evacuation.

Contractors, Vendors and Visitors:

Contractors, vendors and visitors should evacuate to the outdoor area adjacent to the door through which they entered and signed the Visitor/Contractor Log. The receptionist or an alternate will perform the head count. During severe weather evacuations contractors, vendors and visitors should evacuate to the Shelter area assigned to their host.

Emergency Notification System:

In the event of an emergency the following methods can be used to communicate:

- Our alarm system is for example a megaphone/bullhorn and/or panic buttons and annunciates an emergency condition as follows: Emergency responses based on pre-determined notification methods.
- Word of mouth

911 Notification System: Outside emergency services (police, fire, EMS) will be contacted as follows: Activation of panic button/s and/or direct communication with the 911 system.

Fire Emergency:

Employees discovering a fire will take the following action:

- Alert others in the area who are at risk and initiate the 911 Notification System
- Initiate the fire notification procedure
- Turn off involved equipment (if safe to do so)
- Consider using a fire extinguisher, *if trained and authorized to do so*

- Evacuate

Upon being alerted to a fire evacuation, all employees, visitors, contractors and vendors will:

- Turn off equipment (if safe to do so)
- Walk in an orderly and quiet manner to the exit closest to you *not blocked by fire, smoke or other hazards and exit the building*
- Do not delay evacuation or re-enter hazardous areas to retrieve personal possessions such as keys, coats purses, or lunches
- Report to designated fire Evacuation Location for head count. See Appendix B for Evacuation Location
- Stay together with their assigned group until further instructions are given
- The facility will not be reoccupied until approved by the fire department

Note: The supervisor or other designated employee will be the last to exit the department. she/he will check lavatories and other cut-off rooms to assure evacuation and will close doors upon leaving (if safe to do so).

Medical Emergency:

In the event of a medical emergency the following actions will be taken:

- Notify a member of management who will initiate the 911 Notification System and evaluate scene safety-if there is any concern all personnel should stay at a safe distance
- Do not move the ill/injured person (unless she/he is in danger from their surroundings)
- Avoid all contact with blood and other bodily fluids (never attempt to provide first aid unless you are trained and equipped to do so)
- A calm employee may stay with the ill/injured person to provide comfort
- The supervisor will assign at least two employees to wait for the EMS responders at the parking lot entrance and guide the responders to the scene of the emergency
- All uninvolved personnel should clear the area
- If there has been any blood or bodily fluid release, trained personnel will clean and sanitize the area after the emergency phase has concluded

Severe Weather:

In the event of a severe weather notification, the following actions will be taken:

- Turn off equipment (if safe to do so)
- Walk in an orderly and quiet manner to the designated Shelter-in-Place Location where a weather alert radio and other supplies are available. See Appendix B for Shelter-in-Place Locations
- A head count will be conducted to account for all personnel
- When the severe weather warning expires personnel will be released from the shelter

Note: The supervisor or other designated employee will be the last to exit the department. She/he will check lavatories and other cut-off rooms to assure evacuation and will close doors upon leaving (if safe to do so).

Hazardous Chemical Spill or Release:

Hazardous chemical spills or releases can be recognized visually by seeing evidence of a chemical escaping from its' normal containment or by detecting an unusual odor. If a chemical spill is suspected all personnel will do the following:

- Alert others in the area who are at risk and notify a member of management who will initiate the 911 Notification System
- Turn off equipment (if safe to do so)
- If the hazardous spill or release is within the building, walk in an orderly and quiet manner to the exit closest to you *not blocked by the chemical release*
- Report to designated Evacuation Location for head count. See Appendix B for Evacuation Location
- If the hazardous spill or release is outside the building, walk in an orderly and quiet manner to the nearest designated shelter-in-place location.
- The Emergency Coordinator or another member of management will observe the wind direction if applicable and determine the best shelter area for evacuated personnel
- Stay together with their assigned group until further instructions are given
- The facility will not be reoccupied until approved by the fire department

No employee will take any action other than defensive actions to attempt to control a hazardous chemical spill or release unless she/he has been trained and equipped to respond.

Electrical Utility Failure:

In the event of an electrical failure the following procedure will be followed:

- If the failure is in a partial area of the facility notify a supervisor or member of management
- Turn off equipment using normal controls
- Expect sudden equipment restart-stay away from the point of operation and other moving surfaces
- Do not attempt to move around dark areas-supervisors will use flashlights to guide employees to a safe area to wait for power restoration
- After power is restored follow supervisor's directions for equipment restart
- Only the city manager or acting city manager is authorized to close a facility for the rest of the day due to an electrical utility failure

Workplace Violence:

Workplace violence will be handled as follows:

- Any employee who witnesses a violent act, threat of violence or is otherwise concerned should report it to a member of management
- If immediate action is necessary, she/he will:
    - advise personnel most at risk to take shelter behind closed doors or to evacuate to a designated shelter-in-place location within the facility
    - contact emergency services or delegate another person to do so
    - notify the Emergency Coordinator who will evaluate the situation, meet the police, expand the evacuation and coordinate a head count
- If immediate action is not deemed necessary, the member of management will notify the Emergency Coordinator of the incident. The Emergency Coordinator will begin an immediate investigation and evaluate the threat to personnel.

Emergency Duties:

Emergency Coordinator

- Verify that necessary Emergency Services have been notified
- Coordinate the employee accounting procedure in the case of evacuation emergency
- Meet responding Emergency Service units and:
    - issue a situation report
    - keep in contact to provide needed information
    - advise them of evacuation status (during evacuation emergencies)
- Issue updated instructions to personnel as necessary taking into account comfort of evacuees, duration of the evacuation, time of day, etc.
- Coordinate incidents of workplace violence

Supervisors:

- Assist with responding to all emergencies and communicate emergency instructions to employees
- Communicate facts surrounding an emergency occurring in their area to the Emergency Coordinator
- Develop plans to assist employees with disabilities to evacuate safely
- Verify all employees are evacuated before leaving
- Perform the head count procedure to account for all employees and communicate missing personnel to the Emergency Coordinator
- Be the initial contact and coordinator for incidents involving workplace violence

Critical Operations Duties:

Employees who are required to remain behind during evacuation, or who are assigned special response duties, will be fully trained and equipped to ensure their safety and readiness.

Training:

At a minimum, training will be conducted:

- Upon hire
- When this plan changes
- When employee duties change

Training will consist of:

- Methods of alerting employees of an emergency
- Employee duties upon discovering an emergency
- Evacuation routes and Evacuation Locations
- Shelter-in-Place Locations
- Procedures to be followed upon notification of emergency
- Special Critical Operations duties assigned to Floor Wardens

Evacuation Maps

Evacuation Locations

Important Things For You to Remember ...

Emergencies in the Workplace

REMEMBER YOUR RESPONSIBILITY IN EMERGENCY SITUATIONS:

- ✓ FOLLOW YOUR TRAINING
- ✓ REACT CALMLY AND QUICKLY
- ✓ DON'T BE A HERO

IF YOU DISCOVER A FIRE

- Alert others at risk
- Notify a manager
- Activate the emergency notification system for fire
- Turn off involved equipment (if safe to do so)
- Proceed to the evacuation location

MEDICAL EMERGENCY

- Alert a manager
- Follow written procedures for medical emergencies

SEVERE WEATHER

- Turn off equipment
- Activate the emergency notification system for severe weather
- Report to evacuation/shelter-in-place location as instructed

HAZARDOUS CHEMICAL SPILL

- Report to a manager
- Based on internal or external hazard, follow procedure for hazardous chemicals/materials emergencies

POTENTIAL HOSTAGE/KIDNAPPING SITUATION

- Activate the emergency notification system for imminent physical threat and/or activate panic buttons
- Avoid drastic actions
- If it is necessary to speak, ask for permission first – maintain eye contact but do not stare
- Listen carefully to directives and follow accordingly
- Be observant so you can provide details to the authorities
- **DO NOT UNDER ANY CIRCUMSTANCES LEAVE THE BUILDING OR AREA**

ROBBERY/BOMB THREAT

- Robbery - follow "Potential Hostage/Kidnapping Situation" instructions
- Bomb Threat - utilize Bomb Threat work sheet to provide detailed information to the police
- Bomb Threat - activate the emergency notification system for evacuation

City of Lewiston
Ergonomics
Exposure Control Plan

Ergonomics Policy

Effective Date:
Revision Number: 1

Purpose:
This policy establishes how City of Lewiston will enhance employee comfort and well-being by identifying and correcting ergonomic risk factors on the job.

Scope:
This policy applies to all City of Lewiston employees who are exposed to ergonomic risk factors.

Responsibilities:
The following responsibilities apply to various levels within the company.

Department Directors will:

- Require the full application and integration of this policy into daily operations, as applicable, in all areas of responsibility and with all direct reports
- Assess managers and supervisors on their ability to apply this policy in their areas of responsibility.

The managers will administer all aspects of this policy to include:

- Maintaining and updating the written program as required.
- Coordinating training for affected employees
- Providing necessary technical assistance to supervisors
- Periodically assessing the effectiveness of this program and its implementation in all affected areas of the company.

Department Directors and supervisors will:

- Know how this policy applies to those areas under their direct control
- Integrate and enforce the provisions of this policy in their areas of responsibility
- Periodically audit the effectiveness of this policy in their areas of responsibility
- Coordinate training for affected employees
- Provide appropriate coaching and corrective action when necessary to ensure this policy is fully integrated.

All affected employees will:

- Integrate the provisions of this policy into their daily activities as applicable.
- Follow all training, instructions and directives relative to this policy
- See clarification whenever there are questions concerning the application of this policy into daily operations.

Policy Evaluations and Updates:

It is our goal to maintain a safety program that is understandable, effective and promotes a safe work environment. Any employee can make recommendations for improvement to this program or any other aspects of our safety system. These suggestions should be directed to any member of management or safety committee member.

As a matter of policy, this program will be reviewed on an annual basis by the safety committee to determine if all aspects still meet the needs of this organization. If there are significant events that take place during the year that indicate the program is less than effective, an immediate evaluation will be conducted and appropriate steps taken to increase the reliability of this plan.

Date of Review	**Name of Reviewer**	**Changes Required** Yes or No	**Current Revision Number**
Published Date		Original Issue	#1

Definitions:

The following definitions help to clarify words or phrases found on this policy:

Ergonomics: The science of fitting the job to the worker.
Ergonomic Assessment: The process of documenting the job/task MSD risk factors including force, repetition, posture and others created by the workstation design.
Musculoskeletal Disorder (MSD): Disorders of the muscles, tendons, ligaments, joints, cartilage, nerves and blood vessels; usually a result of repetitive or forceful motions that place strain on the body.

Injury/Medical Management:

Employees are responsible for recognizing and reporting early symptoms or musculoskeletal injuries and illnesses. The employee should direct reports to an immediate supervisor or to Human Resources.

After any report of an employee job-related musculoskeletal disorder, injury or illness, the Wellness Committee will be responsible to determine if additional practices, procedures, or redesign of the workstation could be implemented to prevent similar injuries.

Identifying Problem Jobs:

There are several methods used to identify jobs that are most likely to result in ergonomic disorders:

- Reactive: City of Lewiston annually reviews its injury and illness records to identify any patterns of ergonomic-related injuries and illnesses.
- Proactive: City of Lewiston reviews jobs with significant ergonomic risk factors. They may include, but are not limited to:
    - **Repetition:** Performance of the same motion or motion patterns every few seconds for more than two hours at a time.
    - **Awkward Postures:** Fixed or awkward postures including overhead reaching, maintaining a twisted or bent back, maintaining bent wrists, stooping or squatting.
    - **Vibration**: Use of vibrating tools.

- **Heavy Material Handling**: Lifting, lowering or carrying anything weighing more than 25 pounds more than once an hour.
- **Force**: Pushing, pulling or tight gripping of objects more than two hours at a time.

Additionally, employees with individual concerns about their workstation may request an in-person evaluation by contacting a member of your Safety/Wellness Committee.

Ergonomic Assessments:

The Safety/Wellness Committee will conduct an ergonomic assessment of a workstation when triggered by a reactive or proactive request. The Safety Committee will use the checklist identified in Appendix B.

Solutions:

When problems are identified for correction, supervisors and employees in the affected areas are notified. The Safety/Wellness Committee, in conjunction with the affected employee(s), will develop possible solutions, choose the most appropriate solution, implement the changes, and follow up to determine the effectiveness. Appendix C provides recommendations of possible solutions for common office ergonomic risk factors.

For each problem job that has been altered, a file of the improvements and changes completed will be maintained. The file contains documentation of ergonomic-related illnesses or injuries, actual changes made, and any similar incidents which occurred after the changes were implemented. These files are kept in the office of the Safety/Wellness Committee Chair.

In addition, employees will take steps to prevent musculoskeletal disorders by taking brief breaks and stretching periodically throughout the day. Stretching is an effective way to reduce the effect of risk factors on the bond.

Employee Training:

Training will be conducted on sound ergonomic principles and practices to include the following:

- How to recognize workplace risk factors associated with work-related musculoskeletal disorders and the ways to reduce exposure to those risk factors.
- The signs and symptoms of work-related musculoskeletal disorders, the importance of early reporting and proper medical management procedures.
- Reporting procedures and the person to whom the employee is to report workplace risk factors and work-related musculoskeletal disorders.
- Opportunity to practice and demonstrate proper use of implemented control measures and safe work methods that apply to the job.

Appendix A
Office Ergonomics Evaluation Form

City of Lewiston
Explosive-Actuated Tools
Exposure Control Plan

Explosive-Actuated Tools

Effective Date:
Revision Number: 1

- Tools shall be maintained in good condition; inspected to determine if it is clean, if moving parts operate freely, and if the barrel is free from obstruction; and serviced regularly by qualified persons. The material upon which these tools is to be used shall be examined before work is started for the purpose of determining its suitability and eliminating the possibility of hazard to the operator and others.
- A defective tool shall be tagged and immediately removed from service.
- Explosive-actuated tools shall not be used in an explosive or flammable atmosphere.
- Tools shall not be loaded until just prior to the intended firing.
- Only cartridges with an explosive charge adequate for the job and with proper penetration shall be used.
- Tools and cartridges shall never be left unattended where they could be available to unauthorized persons.
- Tools shall never be pointed at any person.
- In case of a misfire, the operator shall hold the tool in place for 30 seconds. The employee shall then try to operate the tool a second time and then wait another 30 seconds. Misfired cartridges shall be placed in a metal container and returned to the supervisor.

City of Lewiston
Eye and Face Protection
Exposure Control Plan

Eye and Face Protection

Effective Date:
Revision Number: 1

When exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation, appropriate eye and face protections shall be used. Eye protection must meet ANSI Z87.1 standard.

Side protection shall be used when there is a hazard from flying objects.

For further information on approved eye protection, see table below, Eye and Face Protection Selection Chart.

Eye and Face Protection Selection Chart

Source	Assessment of Hazard	Protection
IMPACT - Chipping, grinding, machining, drilling, chiseling, riveting, sanding, etc.	Flying fragments, objects, large chips, particles, sand, dirt, etc.	Spectacles with side protection, goggles, face shields. For severe exposure, use face shield over primary eye protection.
CHEMICALS - Acid and chemicals handling	Splash	Goggles, eyecup and cover types. For severe exposure, use face shield over primary eye protection
	Irritating mists	Special-purpose goggles
DUST - Woodworking, buffing, general dusty conditions	Nuisance dust	Goggles, eyecup and cover types.
LIGHT and/or RADIATION Welding - electric arc	Optical radiation	Welding helmets or welding shields. Typical shades: 10-14
Welding - gas	Optical radiation	Welding goggles or welding face shield. Typical shades: gas welding 4-8, cutting 3-6, brazing 3-4
Cutting, torch brazing, torch soldering	Optical radiation	Spectacles or welding face shield. Typical shades: 1.5-3
Glare	Poor vision	Spectacles with shaded or special-purpose lenses, as suitable.

City of Lewiston
Fall Protection
Exposure Control Plan

Fall Protection Exposure Control Plan

Effective Date:
Revision Number: 1

Purpose:

This policy establishes how City of Lewiston will enhance safe working conditions at its facilities through establishment of specific walking and working surface requirements and protection from fall hazards.

Scope:

This policy applies to all Lewiston employees and all City contractors visitors or vendors.

Responsibilities:

Senior management will:

- Require the full application and integration of this policy into daily operations, as applicable, in all areas of responsibility and with all direct reports.
- Assess managers and supervisors on their ability to apply this policy in their areas of responsibility.
- Provide fall protection to affected employees.

The Safety Administrator will administer all aspects of this policy to include:

- Maintaining and updating the written program as required.
- Coordinate necessary training for all affected employees.
- Providing necessary technical assistance to managers and supervisors.
- Periodically assessing the effectiveness of this program and its implementation in all affected areas of the community.

Managers and Supervisors will:

- Know this policy applies to those under their direct control.
- Integrate and enforce the provisions of this policy in the areas of responsibility.
- Periodically audit the effectiveness of this policy in their areas of responsibility.
- Coordinate training for all affected employees.
- Provide appropriate coaching and corrective action when necessary to ensure tis policy is fully integrated.
- Investigate and document all incidents that result in employee injury.

All affected employees will:

- Integrate the provisions of this policy into their daily activities as applicable.
- Follow all training, instructions and directives relative to this policy.
- Seek clarification whenever there are questions concerning the all application of this policy into daily operations.
- Bring to management's attention any unsafe or hazardous conditions or practices that may cause injury to themselves or other employees.
- Report any incident that causes injury to an employee, regardless of its nature.

Definitions:

The following definitions help to clarify words or phrases found in this policy:

Affected employee: Any employee or contractor that is required to work at a height.
Authorized employee: Any employee or contractor that by the nature of their job is required to perform work at heights of 4 feet or more than the next lower level.
Platform: A working space where people can stand to perform work that is elevated above the surrounding ground, floor machinery or other type of landing.
Standard railing: A standard railing consists of top rail, a mid rail and support posts. The top rail height must be 42 inches from the working surface and the mid rail must be 21 inches from the working surface.
Standard toe board: A vertical barrier at the floor level, erected along exposed edges of a floor or wall opening, platform/landing or ramp to prevent objects from falling over the edge. A standard toe board must be 4 inches in height from its top edge to the working surface. It must be securely fastened and not more have more than 1.4 inch gap from the base to the toe board working surface.

Walking-Working Surfaces – General Requirements:

The following requirements will apply to all walking and/or working surfaces in the facility. The responsible manager for each area shall periodically survey their areas of responsibility to ensure these requirements are being met. When necessary, adjustments to physical conditions shall be made to meet these requirements.

Housekeeping: Passageways, storerooms and service rooms will be kept clean, orderly and in a sanitary condition. In all areas of the facility, workroom floors must be maintained in a clean, and as much as possible, dry condition. Where wet conditions exist, management will install proper drainage or, when drainage is impossible, mats will be used to keep workers feet on a dry surface.

Aisles and Passageways: All aisles and passageways will have sufficient safe clearance when material handling equipment is in operation. Consideration shall be given to the type of work performed in all areas so there el so completion between people and moving equipment. At a minimum, aisles and passageways must be at least 22 inches wide. Sufficient space for people must always be maintained n aisles and passageways.

All aisles and passageways will be kept clear of obstructions and maintained in good repair, and all permanent aisles will e marked either with tape or paint.

Floor Loading Protection: Load rating plaques will be conspicuously posted in appropriate locations throughout the facility. At no time will load limits be exceeded in any location. This is particularly true when equipment is stored on top of mezzanine areas, office areas or other single-storied areas.

Floor or Wall Openings:

Stairway Openings: Standard railings will be provided on all sides except at the stairway entrance.

Stairway Railings and Guards: Every flight of stairs having **four** or more risers (steps) will be equipped with standard stair railing as described below:

- On stairways less than 44 inches wide with both sides enclosed, at least one handrail on the right side descending.
- On stairways less than 44 inches wide having one side open, at least one stair railing on the open side.
- On stairways less than 44 inches wide but with both sides open, one stair railing on each side.
- On stairways less than 44 inches wide but less than 88 inches wide, one handrail on each enclosed side, one stair railing on each open side.
- On stairways 88 inches or more wide, one handrail on each enclosed side, one stir railing on each open side and one intermediate stair railing located approximately midway of the width.

Stairway Railing and Handrail Specifications: The following provides guidance on how all railings and handrails will be constructed. When purchasing equipment, these requirements must be followed:

- A stair railing system must be of similar construction to a guardrail system except that the vertical height may not be more than 34 inches or less than 30 inches from the upper surface of the top rail to the surface of the tread.
- The height f the handrails may not be more than 34 inches nor less than 30 inches from upper surface of the handrail to surface of the tread, with a clearance of not less than 3 inches between the handrail and wall.

Fixed Industrial Stairs: All fixed industrial stairs, purchased or installed, must meet the following requirements:

- Fixed stairs will be provided for access from one level to another where operations necessitate normal travel between levels and for access to operating platforms for any equipment that requires routine attention.
- Fixed stairs must be capable of carrying a load five times the normal live load anticipated with a minimum ability to safely carry a moving concentrated load of 1,000 pounds.
- Fixed stairs must have a minimum width of 22 inches.
- Fixed stairs will be installed at angles to the horizontal of 30 to 50 degrees. Any uniform combination of tread width and rise height shall be in accordance with the chart in Appendix B. When prefabricated stairs are ordered, these requirements must be specified, Note: Appendix B contains the same requirements as outlined in the OSHA standard for fixed industrial stairs (29 CFR 1910.24 (e) Table D-1).
- All treads must be slip resistant.
- Stairway platforms may be no less than the width of the stairway and a minimum of 30 inches in length, measured in the direction of travel.
- Standard railings must be provided on the open sides of all exposed stairways and platforms, and handrails must be provided on at least one side of closed stairways.
- The vertical clearance above any stair tread to an overhead obstruction must be at least 7 feet measured from the leading edge of the tread.

Floor Opening of Hole: Every floor opening or hole must be guarded by either a railing system with toe boards along the exposed sides or a load-bearing cover. When the cover is not in place, the roof, floor opening or hole must be protected by a removable guard railing.
Protection of Wall Openings/Holes: Every wall opening from which there is a drop of more than 4 feet will be guarded by a railing system. Where there is a potential of exposure to falling objects, a removable toe board will be provided.

> **Note: The next section on open-sided floors and platforms is very important because it addresses most fall protection issues in our facility.**

Protection of Open-Sided Floors and Platforms: Every open-sided floor or platform (see definitions section for the definition of platform) 4 feet or more above the adjacent floor or ground level must be guarded by a standard railing and toe board (see definition section) on all open sides except where there is an entrance to a ramp, stairway or fixed ladder. The railing systems are required to have a toe board wherever a person can pass beneath the open sides o there is moving machinery.

> **Note:** When a working platform is adjacent to dangerous equipment, there must be a standard railing and toe board regardless of the height difference.

Fall Protection Hierarchy:

The following hierarchy, or preferred order of control, will be used to choose methods to eliminate or control fall hazards.

1. Eliminate the need to work at height.
2. Use of engineering controls such as guardrails and/or work platforms.
3. Use of personal positioning system to prevent a fall.
4. Use of a personal fall arrest system.
5. Administrative controls.

Securing the work area: Overhead work shall not be performed when there are other people directly underneath the overhead work. If other people need to be in the immediate area, the steps must be taken to secure the work area and the safety of people working below overhead work. This may include the use of head protection (hard hats) or other guards to keep debris from falling on people below the overhead work. Whenever possible, work below overhead work will be suspended until the overhead work is complete.

A sign reading "workers overhead" shall be put in the area where workers are performing overhead work to warn people who may be passing through the work area. The area directly beneath the overhead work must be secured to prevent unauthorized people from entering the area.

Scissor lifts. When using a scissor lift, occupants will be protected from falling by restraint systems, fall arrests or guard rails. Fall restraint/arrest systems are not required where protection is affordable by guardrails and where the occupant does not step above the platform of the lift.

Audits and Inspections:

Appendix C contains a walking/working surface audit that will be completed on at least a monthly basis. All "NO" answers must be addressed when identified. On an annual basis, overhead working areas will be surveyed to ensure proper fall protection methods. The fall hazard survey (Appendix A) must be reviewed on an annual basis to ensure elements within the survey are current and accurate.

Enforcement:

Compliance with these and all other company safety rules are considered conditions of employment at the City. The crew supervisor or foreman reserves the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines in this plan.

Accident Investigation:

All incidents that result in the injury to workers and near misses, regardless of their nature must be reported and investigated. All incidents will be investigated as soon as possible to identify the cause and means of prevention=on if future occurrences.

In the event of an incident, this Aerial Lift Plan will be reviewed to determine if additional provisions or practices, procedures or training should be implemented to prevent similar incidents in the future.

City of Lewiston
Fire Emergency
Exposure Control Plan

General Guidelines for Fire Emergency

Effective Date:
Revision Number: 1

Become familiar with your facility's fire and life safety systems.

Know which of the following your building has, as well as their location and use:

Manual Pull Stations	Fire Extinguishers
Smoke Detectors	Fire Alarm Monitoring Service
Exit Doors & Stairwells	Voice Alarm
Fire Sprinklers	Fire Doors

Common fire and life safety hazards to watch for in the workplace:

Missing or broken fire safety equipment	Accumulated trash
	Open fire doors
Burned out exit signs	Blocked stairways

Create a fire emergency plan; Teach it; Practice it; Use it;
Get together with the people that work in your building and put together a well thought out plan that takes into consideration the unique features of each building and its occupants. Be sure to consider how you will help those who are physically impaired. There are lots ideas and examples on the internet.

Evacuation Procedures:

Stay calm, do not rush, do not panic

Call 911 (never wait to notify the fire department; even if the alarm is activated, call.)

Notify occupants and/or activate the fire alarm

Exit the building:

- If safe, close doors and windows (do not lock them)
- Assist physically impaired individuals, escort visitors out of the building
- Use the nearest safe stairs and proceed to the nearest exit.
- Never use elevators during a fire emergency
- Go to the pre-determined meeting spot and report to your supervisor
- Supervisors should ensure that all employees are out of the building and accounted for.
- Supervisors should report to the in-coming emergency crews that all employees are out of the building, or how many are missing and where they might be within the building

Each facility needs to look at their specific needs. After you have prepared your plan contact the Fire Prevention Division if you have specific questions regarding best practice for your facility.

City of Lewiston

Flammable and Combustible Liquids Exposure Control Plan

Flammable and Combustible Liquids Policy

Effective Date:
Revision Number: 1

Purpose:

This procedure establishes minimum procedure for the storage and use of flammable and combustible liquids. Flammable and combustible liquid use is an integral part of City business and as such we strive to minimize use but meet all applicable safety standards.

Scope:

This procedure applies to all City employees, all contractors and vendors performing City work on or off of City property, and all other individuals who are visiting or have business with the City.

Responsibilities:

- Management is responsible for development and review of the program.
- Management is also responsible for appropriate employee training.
- Management and supervisors are responsible for enforcement of this policy.
- Employees shall comply with all procedures specified in this policy.
- Contractors and vendors shall comply with all procedures specified in this policy.

Definitions:

Aerosol: A material that is dispersed from its container as a mist, spray, or foam by a propellant under pressure.
Approved: Means a formal approval for flammable and combustible liquid service from a nationally recognized testing laboratory.
Bonding: Connecting containers used to transfer liquids with a conductive wire (or similar device) to equalize the static charge.
Bulk Plant: An area where flammable or combustible liquids are received by tank vessel, pipelines, tank cars or tank vehicle, and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle or container.
Chemical Plant: A large integrated plant or that portion of such a plant (other than a distillery or refinery) where flammable or combustible liquids are produced by chemical reactions or used in chemical reactions.
Combustible Liquid: Any liquid with a flashpoint at or above 100 degrees Fahrenheit. Combustible liquids are divided into two classes:

- **Class II Liquids:** Liquids with a flashpoint at or above 100 degrees Fahrenheit and below 140 degrees Fahrenheit, except for mixtures where 99 percent of the mixture or greater is composed of the liquid with a flashpoint of 200 degrees Fahrenheit or greater.
- **Class III Liquids:** Liquids with a flashpoint at or above 140 degrees Fahrenheit. Class III liquids are divided into two subclasses:
- **Class IIIA:** Liquids with a flashpoint at or above 140 degrees Fahrenheit and below 200 degrees Fahrenheit, except for mixtures where 99 percent or greater of the mixture is composed of liquid with a flashpoint of 200 degrees Fahrenheit or greater.
- **Class IIIB:** Liquids with a flashpoint at or above 200 degrees Fahrenheit. This written program does not cover IIIB Liquids because of the minimal risks.

Contractor: A non-City employee being paid to perform work for the City.
Fire Area: An area of a building separated from the remainder of the building by construction having a fire resistance of at least one hour and having communication openings properly protected by an assembly having a fire resistance of at least one hour.

Flammable Liquid: A liquid having a flashpoint below 100 degrees Fahrenheit, except for mixtures where 99 percent or greater of the mixture is composed of a liquid with a flashpoint of 100 degrees Fahrenheit or greater. Flammable liquids are called Class I Liquids and are divided into three classes:

- **Class IA:** Liquids with a flashpoint below 73 degrees Fahrenheit and a boiling point below 100 degrees Fahrenheit.
- **Class IB:** Liquids with a flashpoint below 73 degrees Fahrenheit and a boiling point above 100 degrees Fahrenheit.
- **Class IC:** Liquids with a flashpoint at or above 73 degrees Fahrenheit and below 100 degrees Fahrenheit.

Flashpoint: The minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture in air near the surface of the liquid.
Grounding: Connecting a flammable liquid transfer system to earth ground through the use of a wire or similar device.
Hot Work Permit: A documented procedure that is followed prior to and during maintenance and repair work that could introduce ignition sources into flammable and combustible liquid storage and handling areas.
Industrial Plant: A plant in which the use of flammable or combustible liquids is incidental to the principle business, or where flammable or combustible liquids are handled or used only in physical operations such as mixing, drying, evaporating, filtering, distillation, and similar operations which do not involve chemical reaction.
Safety Can: An approved container of not more than five gallons, having a spring closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure.
Vendor: A non-City employee being paid to perform a service for the City.

Procedure:

Stationary Tank Storage:

- All stationary flammable or combustible liquid tank design, installation and operation in City facilities will meet the requirements of the authority having jurisdiction and the City insurance carrier.
- All storage tanks will have adequate venting and relief devices for anticipated excess pressure and vacuum.
- All tank areas will be secure to prevent unauthorized access.
- Weeds, debris and other combustible materials that could contribute to fire ignition and growth will be eliminated.
- No non-metallic fittings will be used on flammable and combustible liquid storage tank systems.
- All systems will be evaluated for proper continuity to ground. Bonding and grounding equipment will be provided at all liquid transfer locations.
- All tanks will be marked with permanent signs indicating the contents and the flammable or combustible nature of the product.
- Stationary tanks will not be filled unless attended by a knowledgeable operator watching for overfill unless a properly calibrated and functioning level indicator is installed to annunciate a full condition or remotely stop the transfer.
- Ignition sources (e.g. smoking, welding, regular service electrical equipment, etc.) will be controlled within the vicinity of tank storage.

Small Container Storage:

The maximum container size will be:

Maximum Allowable Size of Containers And Portable Tanks

Container Types	Flammable Liquids			Combustible Liquids	
	Class IA	Class IB	Class IC	Class II	Class III
Glass or approved plastic	1 pt	1 qt	1 gal	1 gal	1 gal
Metal (other than DOT drums)	1 gal	5 gal	5 gal	5 gal	5 gal
Safety cans	2 gal	5 gal	5 gal	5 gal	5 gal
Metal drums (DOT specifications)	60 gal	60 gal	60 gal	60 gal	60 gal
Approved portable tanks	660 gal	660 gal	660 gal	660 gal	660 gal

NOTE: Container exemptions: (a) Medicines, beverages, foodstuffs, cosmetics, and other common consumer items, when packaged according to commonly accepted practices, shall be exempt from the requirements of 1910.106 (d) (2) (i)and (ii).

- Glass and plastic containers up to one gallon capacity are permissible if the material would become unfit if stored in metal and/or a legitimate process need exists.
- Storage areas for flammable or combustible liquids will be located at least 25 feet from ignition sources such as smoking areas, welding and grinding areas, ovens, open flames, etc.
- Not more than 60 gallons of Class I and Class II and not more than 120 gallons of Class III liquid will be stored in an approved flammable liquid storage cabinet.
- Storage in approved inside flammable and combustible liquid storage rooms will meet the following requirements:

Fire protection provided	Fire resistance	Maximum size	Total allowable quantities (gals/sq.ft./floor area)
YES	2 hours	500 sq. ft.	10
NO	2 hours	500 sq. ft.	5
YES	1 hour	150 sq. ft.	4
NO	1 hour	150 sq. ft.	2

Footnote (1) Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

All inside storage rooms will meet the following requirements:

- Be equipped with a self-closing, operating fire door.
- Be equiped with spill containment.
- Have a liquids tight floor to wall seam.
- At least one aisle of three feet or more.
- Approved electrical wiring for the Class of liquids stored.
- Ventilation to provide at least 6 air changes per hour.
- Containers over 30 gallons will not be stored on top of each other.

The maximum quantity of flammable and combustible liquid that maybe located outside of an inside flammable room or cabinet in any one fire area (an area segregated by fire walls) of the building shall not exceed:

- 25 gallons of Class IA liquids in containers.
- 120 gallons of Class IB, IC, II or III liquids in containers.
- 660 gallons of Class IB, IC, II or III liquids in a single portable container.

- Oxidizers will be separated from flammable and combustible liquids by at least 25 feet.
- Storage shall be prohibited in office occupancies except for maintenance and operation.

- Flammable liquids will not be used or stored in basements.

General Safety Considerations:

- Flammable liquid containers will not be stored adjacent to exit aisles and exit doors or where they interfere with the emergency exit of an area or building.
- Areas where flammable and combustible liquids are transferred or used will be separated from other areas by distance or by construction having an adequate fire resistance.
- Drainage or containment will be used to control possible spills.
- Adequate ventilation (natural or mechanical) will be provided to control vapor concentrations to below 10% of the LEL.
- Dispensing of flammable or combustible liquids will be by an approved pump or metal self-closing faucet.
- Liquids must be kept in closed containers when not in use.
- Spill and leak control procedures will be in place for each use situation.
- Class I liquids will be used only when no open flame or other ignition source is in the possible path of the vapor.
- Pressurizing flammable and combustible liquid containers to facilitate transfer will not be allowed.
- All transfers of liquid will be attended by an employee who is trained to stop the transfer in the event of a spill or other upset condition.
- Adequate fire extinguishers will be provided to control the Class B fire hazard created by our flammable and combustible liquid operations. In all cases travel will be 10 feet or less to reach a Class B rated fire extinguisher than contains at least 10 lbs of extinguishing agent.
- All fixed fire protection systems will be maintained operational whenever flammable and combustible liquids are being processed.
- Welding, flame cutting, soldering, grinding, etc.. and all other flame, heat or spark producing work will not be allowed within 25 feet of liquid use and storage areas without the issuance of a Hot Work permit.
- Smoking is forbidden in storage and handling areas and for a 25 foot radius around those areas.
- Containers used to transfer Class I liquids will be bonded and the transfer system grounded.

Electrical wiring requirements for processing areas are as follow:

- Class I, Division 1: Locations where flammable vapor-air mixtures may exist under normal operations for 5 feet in all directions around the point(s) of vapor liberation and in pits (unless the pit is provided with mechanical ventilation.)
- Class I, Division 2: Locations where flammable vapor-air mixtures may exist under abnormal operations and for a distance beyond Class I, Division 1. These areas include an area within 20 feet horizontally, three feet vertically beyond a Class I, Division 1 area and up to three feet above floor or grade level within 25 feet, if indoors, or 10 feet if outdoors from any pump, bleeder, withdrawal fitting, meter or similar device handling Class I liquids.
- All electrical wiring in flammable and combustible liquid handling areas will meet requirements of the City fire protection code and the City property insurance carrier.

Proper housekeeping will be enforced in all areas including:

- Maintaining all aisles and walkways clear and passable at all times.
- Maintaining access to fire extinguishers and other emergency response equipment.
- Dispose of flammable and combustible liquid wipes and refuse in closed metal containers.
- All trash containers will be emptied daily and refuse stored outside of our facility.

Emergency Procedures:

Our Facility Emergency Plan will contain a response strategy for the following:
Procedure to respond to anticipated flammable or combustible liquid spills:

- Immediate actions to be taken by employees to contain and control the spill and eliminate ignition sources.
- Evacuation:
  Notification of the Fire Department.
  Contacting a contractor for final mitigation.
- Procedure to respond to a flammable or combustible liquid fire:
  Employee actions to contain and control the fire.
  Evacuation.
  Notification of the Fire Department.

Training:

All personnel who work in the liquid processing areas will receive training in the following:

- Location of MSDS and other reference material.
- PPE requirements.
- Ventilation requirements.
- Bonding and grounding.
- Control of ignition sources.
- Operation of transfer and process equipment.
- Chemical contact emergency procedures (eye and skin contact).
- Use of eye wash stations and safety showers.
- Spill emergency procedures.
- Fire emergency procedures.

Training will be provided at the time of hire or initial assignment and whenever procedures, materials or responsibilities change or when management observations indicate the need for retraining.

City of Lewiston
Hand Tools
Exposure Control Plan

Hand Tools - Proper Care

Effective Date:
Revision Number: 1

All tools shall be maintained in good condition. Employees shall always use the proper tool for the job performed. Tools shall be inspected prior to use, and are subject to inspection at any time. The employer has the authority and responsibility to condemn unserviceable tools.

Defective tools shall be removed from the job site or shall be tagged to prevent their use.

Metallic measuring tapes shall not be used on or near energized electrical circuits or equipment.

Tools shall never be placed unsecured on elevated places.

As impact tools such as chisels, punches, drift pins, etc., become mushroomed or cracked, they shall be dressed, repaired, or replaced before further use.

Tools with sharp edges shall be stored and handled so that they will not cause injury or damage. All cutting tools such as saws, wood chisels, drawknives, or axes shall be kept in suitable guards or in special compartments.

Wooden handles that are loose, cracked, or splintered shall be replaced. The handle shall not be taped or lashed with wire.

Tools shall not be left lying around where they may cause a person to trip or stumble.

The insulation on hand tools shall not be depended upon to protect users from shock.

Tools shall not be lowered or raised by their cords.

City of Lewiston
Hazardous Communication
Exposure Control Plan

Hazardous Communication Program

Effective Date:
Revision Number: 1

Purpose:

This program establishes minimum requirements for the following:

- Identification and labeling of hazardous chemicals.
- Employee access to hazardous chemical information.
- Training required to prevent injury or illness due to hazardous chemical exposure.

Scope:

This program applies to all of our employees, all contractors and vendors performing work on city property, as well as all other individuals who are visiting or have business with our company.

Responsibilities:

Management is responsible for identifying hazardous substances and for maintaining this program.
Management will review this procedure at least annually and when new hazardous substances are introduced.
Management and supervisors are responsible for the Implementation and enforcement of this program.
Employees must comply with all procedures outlined in this program.
Contractors and vendors shall comply with all procedures outlined in this program.

Definitions:

Article: A manufactured item other than a fluid or particle:

- Which is formed to a specific shape or design during manufacture;
- Which has end use function(s) dependent in whole or in part upon its shape or design during end use; and
- Which under normal conditions of use does not release more than very small quantities (for example: minute trace amounts of a hazardous chemical and does not pose a physical or health risk to employees).

Chemical: any element, chemical compound or mixture of elements and/or compounds.
Container: any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. Pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.
Contractor: A non-company employee being paid to perform work in our facility.
Hazardous Chemical: a chemical that is a physical **or** a health hazard.
Health Hazard: A chemical that is carcinogenic, toxic, a reproductive hazard, an irritant, a corrosive, a sensitizer, or damages anybody system or part.

Material Safety Data Sheet: An MSDS is a written document prepared by the chemical manufacturer or supplier that details the contents, hazards, proper use directives and emergency response protocol for a hazardous chemical.
Physical Hazard: A chemical which is a combustible liquid, a compressed gas, explosive, flammable, organic peroxide, oxidizer, pyrophoric, unstable, or water reactive.
Vendor: A non-company employee performing a service in our facility.

Program Application:

This program will be applicable to all chemicals that exhibit or could exhibit health hazards or physical hazards under normal operating conditions or during emergencies.

However, the following materials are exempt from this program:

- Consumer products when used in the workplace in a duration and frequency that is not greater than that experienced by a regular consumer;
- Articles (see Definition above);
- Any drug, as that term is defined In the Federal Food, Drug, and Cosmetic Act, when it is in solid, final form for direct administration to the patient (for example, tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (such as over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (for example, first aid supplies);
- Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace;
- Wood or wood products that will not be processed (wood treated with hazardous chemicals, or that will be processed generating dust are not exempt);
- Food and alcoholic beverages in retail establishments and food that will be consumed In the workplace; and
- Tobacco and tobacco products.

Procedures:

Material Ordering and Hazard Determination:
Any employee wishing to introduce a new chemical into the facility must obtain an MSDS and submit the MSDS to be catalogued. Information on new chemicals or new information pertaining to chemicals that are currently used will be communicated to affected employees. Every effort will be made to select chemicals that are not hazardous or that present the minimum degree of hazard commensurate with necessary chemical capability.

Hazardous Chemical List:

A list of hazardous chemicals currently used within the facility will be maintained (see Appendix A for the Hazardous Chemical Inventory). As new chemicals are purchased, the necessary information will be added to the Inventory. Obsolete chemicals will be removed from the List or maintained in a separate file..

Material Safety Data Sheets:

MSDS will be maintained for all hazardous chemicals, including those purchased at retail locations. The MSDS will be available to all employees on all shifts. If our sites decide to use electronic means to maintain the MSDS file, employee availability will be assured including at all times.
The MSDS file and Hazardous Chemical List will be maintained in the following location(s):
[Add locations here]
Obsolete SDS will be removed from the active file and will be maintained in a separate file for 30 years.

Labels and Other Hazard Warnings:

All containers containing hazardous chemicals will be labeled with the following information:

- Product Identifier: The chemical's name and a list of the substance(s) it contains.
- Supplier Information: Name, address and phone number of the chemical's manufacturer or supplier.
- Pictogram: A symbol inside a diamond with a red border, denoting a particular hazard class.
- Precautionary Statement: One or more phrases that describe recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling of a hazardous chemical.
- Signal words: A single word used to indicate the relative level of severity of the hazard and alert the reader to a potential hazard on the label. The signal words used are "danger" and "warning."
- "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.
- Hazard Statement: A phrase assigned to each hazard category; examples include "harmful if .... swallowed," "highly flammable liquid and vapor," etc.
- Solid metal, wood and plastic not exempted as articles, as well as grain will not be labeled but will have label information available within the MSDS.
- All incoming hazardous chemicals containers will be inspected by receiving personnel. Containers that are not properly labeled will be labeled by the receiving personnel.
- The administrator must approve all labels used within each facility. Each division/section supervisor is responsible for insuring that all hazardous chemical containers, including containers that are refillable from bulk containers, are labeled properly and that the label is visible. Stationary tanks, reservoirs and sumps containing hazardous chemicals will also be labeled. Labels will not be removed or covered over.

Training:

Training as outlined below will be provided at the following times:

At time of initial assignment;
Whenever a new hazardous chemical is introduced, or when the hazard information regarding a currently used chemical changes or when the program elements change; and Whenever management members determine through observation that retraining would be beneficial.

Training will consist of a(n):

- Overview of this program;
- Review of operations where hazardous chemicals are present;
- Location of the written hazard communication program, hazardous chemical list and MSDS file;
- Methods and observations used to detect the presence or release of hazardous chemicals;
- Physical and health hazards of chemicals in the work area (Note: we will present categories of hazards and advise employees to review labels and MSDS for chemical specific information);
- Measures that employees are required to take to protect themselves from hazards including: procedures, work practices, emergency procedures and personal protective equipment requirements; and
- Explanation of the labeling system and how to read an MSDS so that this information can be used appropriately by all personnel.

Non-Routine Tasks:

Whenever a non-routine job involving work with hazardous chemicals is required, special training will be provided for all affected employees prior to the job. The training will include:

- Hazardous chemicals to be used in the non-routine task;
- Protective measure required to perform the work safely;
- Emergency procedures; and
- An opportunity to ask questions or ask for additional information

Contractors:

Contractors who will bring hazardous chemicals into our facility must:
Provide the supervisor with a list and an MSDS for each hazardous chemical that will be used in our facility;

- Maintain a copy of the MSDS for each approved chemical on site;
- Not bring chemicals into our facility unless approved by the supervisor and
- Comply with all provisions of the Hazard Communication Standard that is applicable to their company.
- Our Company reserves the right to refuse the use of chemicals based upon our evaluation. We also reserve the right to terminate the use of chemicals at any time based upon variable conditions within our facility.
- Contractors will be provided the following information whenever their work location could bring them into contact with our hazardous chemicals.

- The hazardous chemicals that they may be exposed to while performing the specified work and how to obtain a copy of appropriate MSDS
- Necessary job precautions to work safely within the proximity of the chemicals involved.

Appendix A

City of Lewiston
Hazardous Chemical List

Chemical Manufacturer	Common Name	Department Used	MSDS Number

Last Review Date: _____

City of Lewiston
Head Protection
Exposure Control Plan

Head Protection

Effective Date:
Revision Number: 1

- All employees entering an area where falling objects, bumping contact, electrical contact, areas posted as hardhat usage required, or other hazards may cause a head injury shall wear approved safety headgear.

- All hard hats shall meet the ANSI standards, and shall be inspected at the beginning of each shift.

- Safety headgear or headband assembly shall not be altered in any manner.

- Appropriate head protection shall be worn while operating all-terrain vehicles and snow machines. Type of head protection should match the activity being performed.

- The industry standard recommends the following replacement schedule:

- Suspension - Replace after NO MORE than one year
- Entire Helmet - Replace after NO More than five years

- Remember that these are MAXIMUM useful service guidelines. Wear or damage noticed during a regular inspection MUST be the determining factor for possible earlier replacement. In any case, ALWAYS replace the hardhat/helmet after it has withstood impact or penetration.

City of Lewiston
Hearing Conservation
Exposure Control Plan

Hearing Conservation Guidelines

Effective Date:
Revision Number: 1

Purpose:

This document establishes minimum guidelines for evaluating noise exposure in facilities and providing hearing protection devices appropriate for the environment at hand.

Scope:
These guidelines apply to all city employees, all contractors and vendors performing work on city property, and all other individuals who are visiting or have business with the city.

Responsibilities:

Management is responsible for guideline development and periodic review of this document.

Management is also responsible for appropriate employee training.

Employees shall comply with all guidelines outlined in this document.

Contractors, vendors, and visitors shall comply with all guidelines outlined in this document.

Definitions:

Action Level: The level for noise exposure is: 87 decibels (dBA) for an 8 hour Time Weighted Average (TWA)
Contractor: A non-city employee being paid to perform work at a city facility.
Decibel: Abbreviated dB-a measure of sound pressure or loudness.
Dosimeter: An electronic device that converts sound pressure into an electronic signal that is stored for future evaluation.
Frequency: Number of occurrences of a repeating event per unit time.
Noise: Unwanted Sound.
Sound Level Meter (SLM): An SLM is a device that is capable of giving a direct, instantaneous reading of the sound pressure or loudness. The SLM can also record the highest impulse noise that has occurred. The SLM has three scales: A, B and C, and a Fast and Slow Response capability.
Vendor: A non-city employee being paid to perform a service at a city facility.
Visitor: Other individuals who are visiting or have business with our city.

Procedures:

Noise Exposure:

Whenever feasible, noise exposure exceeding that listed below will be controlled by administrative means. When it is impractical to use administrative controls, hearing conservation guidelines will be implemented.

Duration per day, Hours	Sound level (dBA, slow response)
8	90
6	92
4	95
3	97
2	100
1.50	102
1	105
.5	110
.25 (or less)	115

Monitoring:

Whenever information indicates that noise exposure may be at or above 85dB, in an area or department, monitoring will be performed utilizing a Dosimeter or Sound Level Meter with frequency measuring capabilities.

All instruments used for monitoring will be calibrated before and after use and a record maintained of the readings.

Monitoring will be repeated whenever a change in process, equipment or controls increases, or could increase exposure.

Hearing Protection:

Ear protection must be worn when there is a possibility of hearing damage, which can occur during continuous exposure to noise or impulse exposure to loud impact noise. When exposed to noise of 90 dB for more than 8 hours, 95dB for more than 4 hours, 100 dB for more than 2 hours, or 105dB for more than 1 hour, proper ear protection must be worn. Protection must be worn when exposed to impact noise of more than 140dB, noise similar to a rifle or shotgun discharge.

Employees shall wear appropriate hearing protection whenever exposed to levels $\geq$ 100dB for the duration of exposure.

Specific work area or equipment operation which generates noise levels exceeding 85dB, similar to a gas lawn mower, shall be identified and posted.

It is strongly recommended that employees who are operating within or working within these identified areas wear proper hearing protection.

Hearing Protection Devices:

Proper ear protection may consist of any of the following: ear muffs, earplugs, or molded ear protectors. Plain cotton is not acceptable. Ear protection devices shall be worn properly to provide the required protection and kept clean to reduce the possibility of ear infection.

Hearing protection devices appropriate for the environment will be available to city employees, contractors, vendors, and visitors when in noise exposure areas of 85dB or above. A couple

types of hearing protectors shall be offered to the individuals, in order to introduce a level of personal choice. Individuals shall use the hearing protection where it is required and the supervisor is responsible for the enforcement.

Training:

Training shall be performed annually or as required by supervisor observation of not following procedures. When training occurs a sign-in sheet will be utilized to record printed name, signature and date for those who were trained plus a general review of the subject material.

City of Lewiston
Hearing Protection
Exposure Control Plan

Hearing Protection

Effective Date:
Revision Number: 1

- Ear protection must be worn when there is a possibility of hearing damage, which can occur during continuous exposure to noise or impulse exposure to loud impact noise. When exposed to noise of 90 decibels (db) for more than 8 hours, 95 db for more than 4 hours, 100db for more than 2 hours, or 105 db for more than 1 hour, proper ear protection must be worn. Protection must be worn when exposed to impact noise more than 140 db, e.g. noise similar to rifle or shotgun.
- Employees shall wear appropriate hearing protection whenever exposed to levels $\geq$ 100 dB for the duration of exposure.
- Specific work area or equipment operation which generates noise levels exceeding 85 db shall be identified.
- It is strongly recommended that employees who are operating within or working within these identified areas wear proper hearing protection.
- Proper ear protection may consist of any of the following: ear muffs, earplugs, or molded ear protectors. Plain cotton is not acceptable. Ear protective devices shall be worn properly to provide the required protection and kept clean to reduce the possibility of ear infection.

City of Lewiston
Heat Illness Prevention
Exposure Control Plan

Heat Illness Prevention Program

Effective Date:
Revision Number: 1

Purpose:

The purpose of the Heat Illness Prevention Program is to meet the requirements set forth in the Standard and to serve as a required supplement of the Injury and Illness Prevention (IIP) Program. This program establishes procedures and provides information to ensure that City of Lewiston employees are knowledgeable in the prevention and recognition of heat stress to ensure their own safety and the safety of others.

Definitions:

Acclimatization: The temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within 4 to 14 days of regular work for at least 2 hours per day in the heat.

Heat Illness: Refers to a serious medical condition resulting from the body's inability to cope with a particular heat load and includes heat cramps, heat exhaustion and heat stroke.

Environmental Risk Factors for Heat Illness: Working conditions that create the possibility that heat illness could occur include air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by workers.

Personal Risk Factors for Heat Illness: Risk factors, such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption and use of prescription medications, which affect the body's water retention or other physiological responses to heat.

Landscaping: Providing landscape care and maintenance services and/or installing trees, shrubs, plants, lawns or gardens, or providing these services in conjunction with the design of landscape plants and/or the construction/installation of walkways, retaining walls, decks, fences, ponds and similar structures, except for employment by an employer who operates a fixed establishment where the work is to be performed and where drinking water is plumbed.

Potentially Impacted Employees: Employees whose job tasks expose them to environmental risk factors for heat illness.

Shade: The blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. Shade may be provided by any natural or artificial means that do not expose employees to unsafe or unhealthy conditions.

Temperature: Dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade. While the measurement must be taken in an area with full sunlight, the bulb or sensor should be shielded from direct contact by sunlight while taking the measurement.

Responsibilities:

Health & Safety Coordinator:

- Establish and update the written Heat Illness Prevention Program.
- Provide consultation/training to departments who fall within the program.
- Assist departments in determining when, where, and how shade and water is provided.

Supervisors:

- Identify and maintain records of all tasks/employees that are required to work outdoors where potential heat illness could occur.
- Require all potentially impacted employees to receive proper training on heat illness prevention and comply with all appropriate procedures.
- Maintain training records.
- Ensure that adequate water is available at the beginning of each shift and throughout the work day.
- Ensure access to shade for purposes of a preventative recovery period is available during the work day.
- Follow proper procedures to contact emergency medical services in the event medical assistance is required.

Employees:

- Awareness and compliance with all appropriate heat illness prevention procedures while performing assigned duties.
- Employees are ultimately responsible for drinking adequate amounts of hydrating fluids when the environmental risk factors for heat illness are present.
- Ensure access to a shaded area is available to recover from heat-related symptoms.
- Inform their supervisor if shade and/or water are inadequate.
- Report symptoms of heat-related illness promptly to their supervisor.
- Follow proper procedures in the event medical assistance is required.

Basic Requirements:

Provision of Water:

Employees shall have access to potable drinking water. Where water is not plumbed, or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift. Sufficient quantity is defined as enough to provide one quart per employee per hour for drinking for the entire shift. The frequent drinking of water, as described in the training section, shall be encouraged.

Access to Shade:

One or more areas with shade – large enough to accommodate 25 percent of the employees on shift sitting in a normal posture – will be present that is either open or provided with ventilation or cooling at all times when the temperature exceeds 85 degrees F. Such access to shade shall be permitted whenever employees are present.

High-Heat Procedures:

When the temperature exceeds 95 degrees F, City of Lewiston will ensure that employees are able to contact a supervisor if necessary, observe employees for signs of heat illness, remind employees to drink water throughout the work shift and supervise employees closely during their first 14 days of outdoor work in 30 days.

Training:

Effective training must be provided for all potentially impacted employees working where environmental risk factors for heat illness are present before they begin work that should reasonably be anticipated to result in exposure to the risk of heat illness. Training information shall include, but is not limited to, the topics listed in the training section of this program. All potentially impacted employees, and supervisors who supervise these employees, must be trained on the risks and prevention of heat illness, including how to recognize heat illness symptoms and how to respond when they appear.

Recordkeeping:

A record of training given to employees and supervisors shall be retained by the City of Lewiston for a minimum of (insert number of years) years. This can be accomplished by requiring employees to sign their name to a training roster when they receive the required training.

Access to Records:

All records shall be provided upon request to employees, former employees and representatives of employees.

Procedures:

Identification of Hazard

All employees shall be identified who are required to work where environmental risk factors for heat illness are present. Identification of potentially impacted employees will be made at the department level, and notifications will be provided to the Health & Safety Coordinator.

Potentially Impacted Employees

Training shall be provided for all potentially impacted employees, and their supervisors, working where environmental risk factors for heat illness are present. Training information shall include, but not be limited to, the topics listed in the training section of this written program. All potentially impacted employees and their supervisors must be trained on the risk and prevention of heat illness, including how to recognize symptoms and how to respond should symptoms be present.

Employee Protection

One quart per hour of drinking water must be available at all times, for each employee, for the duration of their shift, while working outdoors in the heat. Supervisors shall remind employees to drink frequently. Employees must have access to a shaded area to prevent or recover from heat illness symptoms and where they can take rest breaks. When the temperature exceeds 85 degrees F, employees must have access to one or more areas with shade that are either open to the air or provided with ventilation or cooling.

If these procedures are unfeasible or unsafe, City of Lewiston will use alternative procedures for access to shade. When the temperature is less than 85

degrees F, shade will be provided upon request.
Whenever employees feel the need to do so, they can take a cool-down rest in the shade for a period for 5 minutes or more to protect them from overheating.

Training:

All employees and supervisors working on job tasks where environmental risk factors for heat illness are present must receive training.

Supervisors:

Supervisors that oversee employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness shall receive effective training on the following topics prior to being assigned to supervise outdoor employees:

- The training information required of the employees, as detailed below.
- Procedures the supervisor is to follow to implement the provisions of this program.
- Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.
- How to monitor weather reports and how to respond to hot weather advisories.

Employees:

Effective training shall be provided for affected employees prior to being assigned to work tasks that should reasonably be anticipated to result in exposure to the risk of heat illness to include the following:

- The environmental and personal risk factors for heat illness, as well as the added burden of head load on the body caused by exertion, clothing and personal protective equipment (PPE).
- Procedures for identifying, evaluating and controlling exposure to environmental risk factors for heat illness.
- The importance of frequent consumption of small quantities of water, up to four cups of water per hour, when environmental risk factors for heat illness are present.
- The importance of acclimatization.
- Different types of heat illness and the common signs and symptoms of heat illness (see Appendix B).
- The importance of immediately reporting symptoms or signs of heat illness, in themselves or in co-workers, to their supervisor.
- Understanding the procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by emergency medical service.
- Procedures for ensuring that, in the event of an emergency, clear and precise direction to the work site can and will be provided to emergency

responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

Program Audits:

- An audit of the Heat Illness Prevention Program shall be performed annually to ensure that heat illness prevention procedures are in place and are being properly followed.

Appendix A

Safety Training Sign-In Log

City of Lewiston's Safety Training Log

Subject: Heat Illness Prevention	**Date:**	**Instructor:**	**Location:**

The employees listed below have satisfactorily participated in and completed all requirements of the above training.

Name (Print)	**Department**	**Name (Signature)**	**Date**

Appendix B

Overview of Heat Illness Types,
Symptoms and Prevention

Overview of Heat Illness Types, Symptoms and Prevention

This describes the three major forms of heat illness, how to recognize them and what actions to take to provide first-aid before medical care is provided.

Heat Cramps:

Heat cramps are the most common type of heat-related injury. Heat cramps are muscle spasms which usually affect the arms, legs or stomach. Heat cramps are caused by heavy sweating, especially when water is not replaced quickly enough. Frequently they do not occur until after work, at night or when relaxing. Although heat cramps can be quite painful, they usually don't result in permanent damage.

Prevention/First-Aid: Drink an electrolyte solution, such as sports drink, or plenty of water during the day, and try eating more fruits to help keep your body hydrated during hot weather.

Heat Exhaustion:

Heat exhaustion is more serious than heat cramps. It occurs when the body's internal temperature regulating system is overworked, but has not completely shut down. In heat exhaustion, the surface blood vessels and capillaries, which originally enlarged to cool the blood, collapse from loss of body fluids and necessary minerals. This happens when you do not drink enough fluids to replace what you are sweating away.

Symptoms Include: Headache, heavy sweating, intense thirst, dizziness, fatigue, loss of coordination, nausea, impaired judgment, loss of appetite, hyperventilation, tingling in hands or feet, anxiety, cool moist skin, weak and rapid pulse (120-200), and low to normal blood pressure.

Prevention/First Aid: The employee suffering these symptoms should be moved to a cool location such as a shaded area or air-conditioned building. Have him or her lie down with the feet slightly elevated. Loosen their clothing, apply cool, wet cloths or fan them. Have them drink water or electrolyte drinks. Try to cool them down, and have them checked by medical personnel. Victims of heat exhaustion should avoid strenuous activity for at least a day, and they should continue to drink water to replace lost body fluids. Call 911 if the person becomes non-responsive, refuses water, vomits or loses consciousness

Heat Stroke:

Heat stroke is a life-threatening illness with a high death rate. It occurs when the body has depleted its supply of water and salt, and the victim's core body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or heat exhaustion before progressing into the heat stroke stage; however this is not always the case. It is important to note that heat stroke symptoms are similar to those of a heart attack. Therefore, it is very important to know how to recognize the signs and symptoms of heat stroke and to check for them any time an employee collapses while working in a hot environment.

Symptoms include: A high body temperature (103 degrees F); a distinct absence of sweating; hot red or flushed dry skin; rapid pulse; difficulty breathing; constricted

pupils; any/all of the signs or symptoms of heat exhaustion such as dizziness, headache, nausea, vomiting or confusion; and possibly more severe systems including bizarre behavior and high blood pressure. Advanced symptoms may be seizure or convulsions, collapse, loss of consciousness and a body temperature of over 108 degrees F.

Prevention/First Aid: It is vital to lower a heat stroke victim's body temperature. Quick actions can mean the difference between life and death. Pour water on them, fan them or apply cold packs. Call 911 to get the person medical aid as soon as possible.

Appendix C

PRECAUTIONS TO PREVENT HEAT ILLNESSES

PRECAUTIONS TO PREVENT HEAT ILLNESSES

- Condition yourself for working in hot environments. Start slowly and build up to more physical work. Allow your body to adjust over a few days (acclimatization).

- Drink plenty of liquids – hydration is a continuous process. Do not wait until you are thirsty! By then, there is a good chance that you are already on your way to being dehydrated. Electrolyte drinks, such as a sports drink, are good for replacing both water and minerals lost through sweating. Never drink alcohol, and avoid caffeinated beverages like coffee and soda, as these liquids can have the opposite effect and can actually increase the level of dehydration.

- Take frequent breaks, especially if you notice you are getting a headache or you start feeling overheated.

- Assure that adequate water and shade are available at the job site before work begins.

- Wear lightweight, light-colored clothing when working out in the sun.

- Immediately report all unsafe conditions and/or concerns to your supervisor or area manager.

- For additional information on heat illness prevention, contact your supervisor.

City of Lewiston
Housekeeping
Exposure Control Plan

Housekeeping

Effective Date:
Revision Number: 1

- Work locations, both inside and outside of vehicles, and buildings shall be kept clean and orderly at all times.
- Combustible materials such as oil-soaked rags, waste, and shavings, shall be kept in approved metal containers with metal lids. Containers shall be emptied as soon as practicable in an appropriate manner.
- Both clean rags and dirty rags shall be kept in metal or metal-lined bins having metal covers.
- Flammable liquids shall be used only for their designed purposes. Gasoline, benzene, naphtha, lacquer thinner, etc., shall not be used for cleaning purposes or for starting or kindling fires.
- Flammable liquids such as gasoline, naphtha, and lacquer thinner, shall be stored in approved containers. In quantities less than one quart, gasoline may be stored in approved plastic containers. For quantities less than five gallons, gasoline may be stored in metal or UL-approved safety containers. Combustible liquids, such as oils and hydraulic fluids, in quantities less than one gallon, may be stored in approved plastic containers. Combustible liquids in quantities less than five gallons may be stored in metal or UL-approved safety cans. All containers for flammable or combustible liquids must be properly labeled.
- Workplace floors and platforms shall be kept free of dangerous projections or obstructions and shall be maintained reasonably free from oil, grease, or water. Where the type of operation procedures create slippery conditions, mats, grates, cleats, or other methods shall be used to reduce the hazard from slipping.
- Stairways, aisles, permanent roadways, walkways, and material storage areas in yards shall be kept reasonably clear and free from obstructions, depressions, and debris.
- Materials and supplies shall be stored in an orderly manner to prevent their falling or spreading and to eliminate tripping and stumbling hazards.
- Paper and other combustible materials shall not be allowed to accumulate, and weeds or other range vegetation shall not be permitted to grow in or around or buildings or facilities
- In any building, except one provided for their storage, no more than 25 gallons of flammable or combustible liquids shall be stored in a room outside of an approved storage cabinet. No more than 60 gallons of flammable or 120 gallons of combustible liquids shall be stored in any one storage cabinet. Not more than three such cabinets may be located in a single storage area. Quantities in excess of this shall be stored in an inside storage room designed for storage of flammable and combustible liquids.
- When pouring or pumping gasoline or other flammable liquids from one container to another, metallic contact shall be maintained between the pouring and receiving containers. Transferring of flammable liquids from one container to another shall be accomplished only in properly ventilated spaces free from ignition sources.
- Flammable or combustible liquids shall not be stored in areas used for exits or stairways or areas normally used for the safe passage of people.
- Strict adherence shall be paid to "No Smoking" and "Stop Your Motor" signs at fuel dispensing locations.

City of Lewiston
Hydraulic Tools
Exposure Control Plan

Hydraulic Tools

Effective Date:
Revision Number: 1

- Manufacturer`s safe operating pressures for hydraulic tools, hoses, valves, pipes, filters, and fittings shall not be exceeded.
- Pressure shall be released before connections are broken unless quick-acting, self-closing connectors are used.
- Employees shall not use any part of their bodies to locate and attempt to stop a hydraulic leak.
- A hydraulic tool used where it may contact exposed live electric parts shall have a nonconductive hose. Care should be taken not to cross contaminate oils when using hydraulic tools for this purpose.
- All hydraulic lines elevated 35 feet or more should have check valves or provide for loss of insulating value due to partial vacuum when used where they may come into contact with exposed live parts.

City of Lewiston
Industrial Powered Equipment
Exposure Control Plan

Industrial Powered Equipment

Effective Date:
Revision Number: 1

This policy establishes how the City of Lewiston will enhance safe working conditions at their facilities through the establishment of specific guidelines for the use of Industrial Powered Equipment.

This policy applies to all City of Lewiston employees and all company contractors, visitors, or vendors.

Responsibilities:

Senior management will:

- Require the full application and integration of this policy into daily operations, as applicable, in all areas of responsibility and with all direct reports.
- Assess managers and supervisors on their ability to apply this policy in their areas of responsibility.

The Safety Administrator will administer all aspects of this policy to include:

- Maintaining and updating the written program as required.
- Coordinate necessary training for all affected employees.
- Providing necessary technical assistance to managers and supervisors.
- Periodically assessing the effectiveness of this program and its implementation in all affected areas of the community.

Managers and Supervisors will:

- Know this policy applies to those under their direct control.
- Integrate and enforce the provisions of this policy in the areas of responsibility.
- Periodically audit the effectiveness of this policy in their areas of responsibility.
- Coordinate training for all affected employees.
- Provide appropriate coaching and corrective action when necessary to ensure tis policy is fully integrated.
- Investigate and document all incidents that result in employee injury.

All affected employees will:

- Integrate the provisions of this policy into their daily activities as applicable.
- Follow all training, instructions and directives relative to this policy.
- Seek clarification whenever there are questions concerning the all application of this policy into daily operations.
- Bring to management's attention any unsafe or hazardous conditions or practices that may cause injury to themselves or other employees.
- Report any incident that causes injury to an employee, regardless of its nature.

Scope:

This plan contains safety requirements relating to fire protection, design, maintenance and use of fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial equipment powered by electric motors or internal combustion

engines. This section does not apply to compressed air or nonflammable compressed gas-operated industrial equipment, nor does it apply to farm vehicles, nor to vehicles intended primarily for earth moving or over the road hauling.

The use of forklift trucks is subject to certain hazards that cannot be completely eliminated by mechanical means, but the risks can be minimized by the exercise of intelligence, care, and common sense. It is therefore essential to have competent and careful operators, physically and mentally fit, and thoroughly trained in the safe operation of the equipment and the handling of the loads. Serious hazards are overloading, instability of the load, obstruction to the free passage of the load, collision with objects or pedestrians, poor maintenance, and use of equipment for a purpose for which it was not intended or designed.

Only trained and certified operators shall be permitted to operate a forklift or industrial truck. Methods shall be devised to train and certify operators in the safe operation of forklifts or industrial trucks.

Employees who violate safe operating rules for forklift and industrial trucks, or who drive these without authorization, or supervisors who allow unauthorized employees to drive these should be subject to disciplinary action.

Inspecting the Forklift or Powered Industrial Truck:

The equipment shall be inspected before being placed in service and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle.

- Such examination shall be made at least daily before each shift.
- Industrial trucks used on a round-the-clock basis shall be examined before each shift.
- Defects, when found, shall be immediately reported and corrected.

Unless qualified, the operator should not attempt to make any repairs. Only qualified and authorized personnel should be permitted to maintain, repair and adjust forklifts. The employer shall not perform modifications and additions that affect capacity and safe operation without the manufacturer's prior written approval. Capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly.

Any equipment in an unsafe operating condition shall be removed from service.

- All repairs shall be made by authorized personnel.
- Remove the forklift from service and tag it out of service until the defect can be repaired or the forklift can be replaced.

General Loading Practices:

Portable and powered dockboards shall be strong enough to carry the load imposed on them.
Portable dockboards shall be secured in position, either by being anchored or equipped with devices that will prevent slippage.

General Forklift Operating Rules:

The operator shall:

- maintain a safe distance (recommended 3'-5') from the edge of ramps or platforms while on any elevated dock, or platform or freight car;
- assure sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.;
- observe all traffic safety rules, including authorized facility speed limits;
- maintain a safe distance, approximately three truck lengths from the forklift ahead, and the forklift shall be kept under control at all times;
- yield the right-of-way to pedestrians;
- yield the right-of-way to ambulances, fire trucks, or other vehicles in emergency situations;
- slow down and sound the horn at cross aisles and other locations where vision is obstructed;
- look in the direction of, and keep a clear view of, the path of travel;
- travel with the load trailing if the load being carried obstructs forward view;
- cross railroad tracks diagonally wherever possible; and
- ascended or descended grades slowly.
    - When ascending or descending grades in excess of 10%, loaded trucks shall be driven with the load upgrade.
    - On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
- Operate at a speed, under all travel conditions, that will permit the forklift to be brought to a stop in a safe manner;
- slow down for wet and slippery floors;
- properly secure dock board or bridge plates before they are driven over. Dock board or bridge plates shall be driven over carefully and slowly and their rated capacity never exceeded; and
- approach elevators slowly, and then enter squarely after the elevator car is properly leveled.
    - On the elevator, the controls shall be neutralized, power shut off, and the brakes set.
    - Motorized hand trucks must enter elevator or other confined areas with load end forward.
    - Note any oil or fuel leakage from any forklift and report the deficiency to supervisors immediately.

The operator shall not:

- operate a forklift or industrial truck under the influence of prescription or over-the-counter medications that may interfere with safe operation of the equipment in any manner (i.e., drowsy, dizzy, loss of attention);
- drive forklifts or industrial trucks up to anyone standing in front of a bench or other fixed object;
- run over loose objects on the roadway surface;
- allow persons to stand or pass under the elevated portion of any forklift,

whether loaded or empty;

- park closer than eight feet from the center of railroad tracks;
- allow any person to ride on forklift or industrial truck except the operator, unless the equipment has provisions (additional seating authorized by the manufacturer) for passengers;
- place arms or legs between the uprights of the mast or outside the running lines of the forklift;
- use forklift or industrial trucks for opening or closing freight doors;
- block fire aisles, access to stairways, or fire equipment with the forklift or the load being handled;
- pass other equipment traveling in the same direction at intersections, blind spots, or other dangerous locations;
- participate in stunt driving or horseplay; or
- push or tow other forklifts or industrial trucks.

An overhead guard shall be used as protection against falling objects.

Note: *Overhead guards are intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but not to withstand the impact of a falling capacity load*

A load backrest extension shall be used whenever necessary to minimize the possibility of the load or part of it from falling to the rear.

Only approved powered industrial trucks shall be used in hazardous locations.

When lifting personnel with a forklift equipped with vertical only, or vertical and horizontal controls capable of being elevated with the lifting carriage or forks, the following additional precautions shall be taken for the protection of the personnel being elevated.

- Use of a safety platform firmly secured to the lifting carriage and/or forks.
- Personnel on the platform shall have access to the power shut off to the forklift.
- Protection from falling objects, as indicated, necessary by the operating conditions shall be provided.

Determining Load Safety:

Forklift operators should know the weight of the load prior to moving the load.
Standing on a forklift or adding counterweights to compensate for an overload will not be permitted.
Operators should never attempt to operate a forklift with an overload. Such a load is dangerous because it removes weight from the steering wheels, which affects the steering.

Correct Material Piling/Stacking:

Approach to within a foot or so of stack or tier with load held low.

- Stop forklift and raise load slowly while inching forward.

Certification: Currently the Fleet Maintenance Division is the responsible party for training and certifying forklift and industrial truck operators employed by the City.

Enforcement:

Compliance with these and all other company safety rules are considered conditions of employment at the City of Lewiston. The crew supervisor or foreman reserves the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines in this plan.

Accident Investigation:

All incidents that result in the injury to workers and near misses, regardless of their nature must be reported and investigated. All incidents will be investigated as soon as possible to identify the cause and means of prevention of future occurrences.

In the event of an incident, this Industrial Truck Plan will be reviewed to determine if additional provisions or practices, procedures or training should be implemented to prevent similar incidents in the future.

City of Lewiston

Ladders

Exposure Control Plan

Ladder Program

Effective Date:
Revision Number: 1

Purpose:

This procedure establishes minimum procedures for the selection, Installation, maintenance and use of ladders.

Scope:

This procedure applies to all of our company employees, all contractors and vendors performing work on company property, and all other Individuals who are visiting or have business with our company.

Responsibilities:

Management is responsible for the development and review of this program. Management is also responsible for appropriate employee training.
Management and supervisors are responsible for enforcement of this program.
Employees must comply with all procedures outlined In this policy.
Contractors and vendors must comply with all procedures outlined in this policy.

Definitions:

Cage: An enclosure that is fastened to the side rails of a fixed ladder or to the structure to encircle the climbing space for the safety of the climber. Often called a cage or basket guard.
Contractor: A non-company employee being paid to perform work In our facility.
Extension Ladder: A non-self-supporting portable ladder adjustable in length consisting of two or more sections traveling in guides or brackets arranged to permit length adjustment.
Fixed Ladder: A ladder that is permanently attached to a structure, building or equipment.
Ladder Safety Device: Any device, other than a cage or well, designed to eliminate or reduce the possibility of accidental falls and which may Incorporate belts, harnesses, friction brakes and sliding attachments.
Landing Platform: A platform used to break the vertical length of a fixed ladder. Landing platforms must be equipped with hand rails and toe boards.
Nonconductive Ladder: A ladder made of fiberglass, wood or other nonconductive material.
Platform Ladder: A self-supporting ladder of fixed size with a platform at the working level.
Rungs: Steps on a ladder.
Side Rails: The sides of a ladder.
Stepladder: A self-supporting ladder, nonadjustable in length having flat steps and a hinged back.
Straight Ladder: Ladders that are used in a straight manner, single section ladders and extension ladders.
Trestle Ladder: A self-supporting portable ladder, nonadjustable in length hinged at the top.
Vendor: A non-company employee being paid to perform a service in our facility.
Well: A permanent, complete enclosure around a fixed ladder, which is attached to the walls of the well.

Procedure:

Portable Ladders: ***Ladder Selection***

Our facility will not make ladders; only purchased ladders will be used. All ladders will be rated for Industrial use. Parts used for ladder repair will be manufacturer supplied or approved direct replacement parts only. All ladders that could be used for electrical maintenance and installation or around electrical wires and equipment will be nonconductive. Stepladders will be 20 feet or less in height. Straight ladders will be 30 feet or less in length. Extension ladders will be 60 feet or less in length. Wood extension ladders will be two sections only.

Ladders will have uniform step spacing: 12 inches or less. The minimum Width between the side rails at the

top of the ladder will be 11-12 inches. Extension ladders will have the following minimum overlap between sections:

Ladder Length Overlap Length:

Up to 36 Feet 3 Feet

Over 36 Feet to 48 feet 4 Feet

Over 48 Feet 5 Feet

Inspection and Care:

All ladders will have a permanent storage location assigned.

If ladders are stored vertically, they will be restrained by chains or other devices.
If ladders are stored horizontally, support will be provided along the entire side rail to prevent damage and distortion. Storage locations will be dry and protect the ladders from damage.
Metal and ladders will not be painted. If wood preservatives are used, they will be approved by the ladder manufacturer.

Ladders will be inspected as follows:
Monthly -Documented Inspection (see Appendix A); and
Before Use -Visual inspection performed by the ladder user prior to use.

Damaged or Defective Ladders Will Not Be Used. They Will Be Tagged As Dangerous. Do Not Use The Ladder. Take It Out Of Service.

The only ladder repair that will be made in our facility will be a replacement. Welded repairs, straightening, etc. will not be undertaken. Ladders that are deemed unsafe will be tagged and discarded.
Ladders to be discarded will be cut up to prevent improper use by someone scavenging the ladder from trash.

Ladder Use:
Conductive ladders and wet wood ladders are not to be used for electrical work or around energized electrical equipment. Maintain at least 10 feet clearance from power lines.
Ladders will not be used as stages, platforms, braces etc. or for any purpose other than a ladder. Any ladder that was dropped or exposed to fire or corrosive chemicals will be taken out of service.
Three-point contact (minimum of two feet and one hand in contact with the ladder) will be observed when climbing all ladders.
The climber will face the ladder at all times. Ladders should not be set up in front of doors unless the door is locked, blocked or guarded. Ladders should not be set up where foot or vehicle traffic could accidentally upset the ladder: adequate warning devices should be used to alert others to the presence of the ladder.

Bulky or heavy object will not be carried up the ladder, they will be hoisted. Ladders must be placed on secure footing; never on boxes, barrels or other unstable objects. Ladders should be tied-off at the top and bottom if power tools are being used or if other work is being conducted that could place undue stress on the ladder footing. When tying off the ladder, always attach rope to the side rails, not the rungs. Only one person on a ladder at one time (unless the ladder is designed for multiple persons).

Step ladder rules include:

- Do not lean the ladder against a wall or stationary object, it can only be used when fully opened;
- The spreader must be fully open and secured; and
- Never stand on the top step of a step ladder. Straight ladder rules include:
- Lean the ladder against a secure point that supports both side ralls;

- When accessing a roof or platform the ladder must extend a minimum of three rungs above the roof or platform elevation; and
- To achieve the proper work angle, set the ladder base one forth (1/4th) of the distance of the working height back from the vertical support.

Fixed Ladders:

Installation

Cages or wells will be provided for all ladders of more than 20 feet.
The maximum unbroken length of a fixed ladder is 30 feet.
Landing platforms are required for each 30 feet of ladder height or fraction thereof. If a ladder cage and/or ladder safety device is not provided, landings must be provided for each 30 feet (except on chimneys).
Landing platforms will be equipped with standard guard rails and toe boards and be a minimum of 24 inches wide by 30 inches long.

Inspection

Fixed industrial ladders, cage and platform systems will be inspected at least monthly (see Appendix BJ. Any questionable observation will result in the ladder being taken out of service until a qualified engineering professional can evaluate the equipment. Additionally, personnel who use the ladder must visually inspect it before each use.

Ladder Safety Devices

Ladder safety devices may be used. If a ladder safety device is used, no cage or landing platform protection is required.
Ladder safety devices will be inspected prior to each use and formally inspected on the schedule recommended by the manufacturer.
Personnel designated to use ladder safety devices will be trained at least annually in proper operation, inspection and emergency procedures.

Training

All personnel who work with ladders will be trained prior to use.
At a minimum, retraining will be provided whenever observations indicate that safe use rules are not being followed.

Training Outline

Ladder storage;
Inspection;
Safe transport of ladders;

Ladder set-up and importance of stable and even ladder footing;

Barricading the work area;

Electrical safety Issues; Never use metal ladders for electrical work or around electrical equipment; and

Maintain at least 10 feet of clearance from electrical lines.

Three-point contact, safe climbing;

and specific safety issues outlined above.

Appendix A
Portable Ladder Monthly Inspection

Portable Ladder Monthly Inspection

Inspector: _____ Ladder: _____ Date: _____ (Check Pass X Fail **NA** =Not Applicable)

Inspection Item Pass Fail:

- Side rails undamaged
- Rungs undamaged
- Ladder joints are tight
- Rungs and side rails free of grease and slip hazards
- Safety feet present
- Pulleys in good condition (extension ladders)
- Ropes in good condition (extension ladders)
- Ladder locks functional (extension ladders)
- Ladder stops functional (extension ladders)
- Spreaders and hinges operational (step ladders)
- Warning signs legible

- Corrective Action: _____

Remove Damaged or Defective Ladders from Service Immediately.

Appendix B
Fixed Ladder Monthly Inspection

Fixed Ladder Monthly Inspection

Inspector: _____ Ladder: _____

Date: _____

Pass X Fail **NA** = Not Applicable

Check each attachment to structure for: Rust -Loose fasteners -Anchor material deterioration -Deformity -General Deterioration-General Damage

Side rails undamaged
Rungs undamaged
Cages-tight attachment to ladder/structure
Platform rails and toeboard
Obstructions for climbers
Ladder free of grease and slip hazards
Loose or missing parts
Ladder safety device (See Manufacturer Inspection Form)

Corrective Action: _____

Remove Damaged or Defective Ladders from Service Immediately

City of Lewiston
Lifting Techniques
Exposure Control Plan

Proper Lifting Techniques

Effective Date:
Revision Number: 1

Introduction:
Preventing back injuries is a major challenge for employers. According to the Bureau of Labor Statistics (BLS), more than one million workers suffer back injuries each year. Typically, back injuries account for one out of every five workplace injuries and illnesses, and one-fourth of all compensation indemnity claims are a result of back injuries. The pain and discomfort of back injuries can have a dramatic change in employee productivity.
A BLS survey shows that four out of five back injuries were to the lower back, and that three out of four occurred while lifting. This survey shows the importance of reducing back injuries caused by lifting. Although no approach has completely eliminated such injuries, a substantial portion could be prevented by incorporating an effective control program along with an ergonomics analysis and design of work tasks.
OSHA has evaluated ways to help prevent lifting injuries. They specify two types of controls: engineering and administrative.
Engineering controls are used to redesign the workstation to minimize lifting hazards.
Administrative controls include carefully selecting and training workers, so that they can perform their jobs safely.

Suggested administrative controls include:

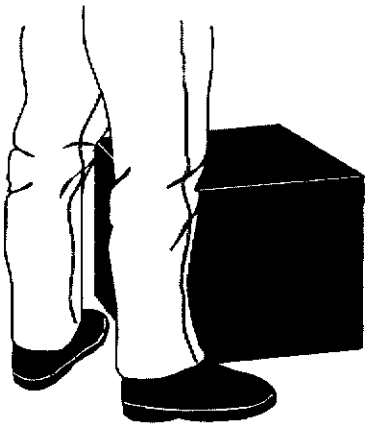
Strength testing of existing workers: Studies have shown strength testing can prevent up to one-third of all work-related injuries. Through the strength-testing process, employers can discourage employees from performing tasks that exceed their strength capacities.

Physical conditioning or stretching programs: These programs are implemented to reduce the risk of muscle strain.

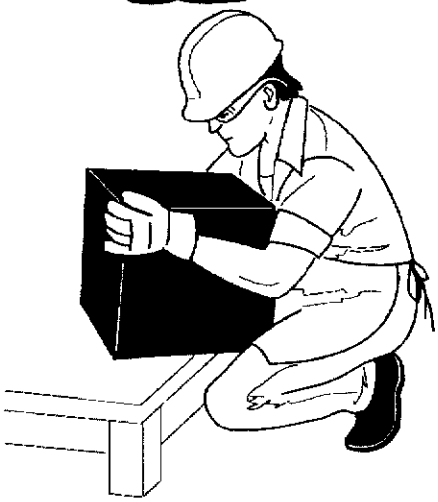
Training: Employees should be trained to utilize proper lifting techniques that place minimum stress on the lower back.

How to Lift Safely

Before lifting, take a moment to think about what you are about to do. Examine the object for sharp corners, slippery spots or other potential hazards. Know your limit and do not try to exceed it. Ask for help if needed. Or if possible, divide the load to make it lighter. Know where you are going to set the item down and make sure the destination and your path are free of obstructions.
Then follow these steps below:

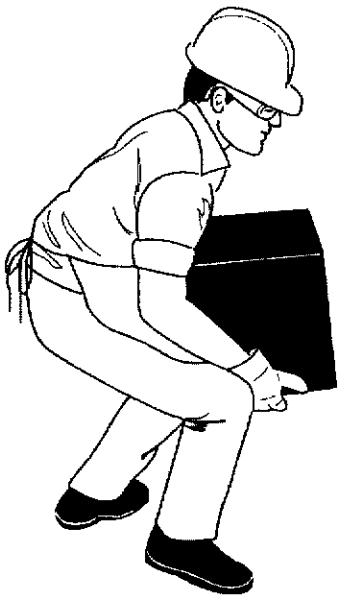


1. Stand close to the load with your feet spread shoulder width apart. One foot should be slightly in front of the other for balance.

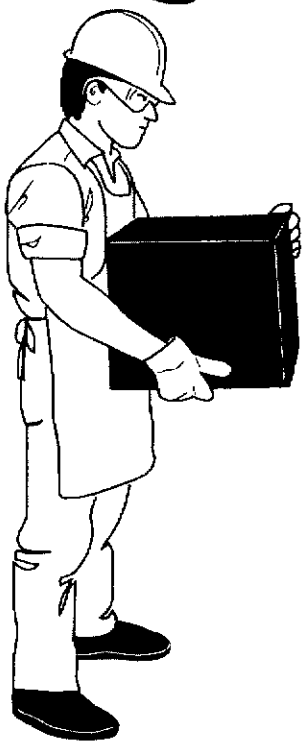


2. Squat down bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.

3. Get a firm grasp of the object before beginning the lift.



4. Slowly begin straightening your legs, lifting slowly. Never twist your body during this step.



5. Once the lift is complete, keep the object as close to the body as possible. If the load's center of gravity moves away from your body, there is a dramatic increase in stress to the lumbar region of the back.

If you must turn while carrying the load, turn using your feet, not your torso.

To place the object below the level of your waist, follow the same procedures in reverse order. Remember to keep your back as vertical as possible, and bend at the knees.

Conclusion:

Using proper lifting techniques can help prevent downtime due to avoidable back injuries. With a little practice, precautionary methods such as these can become good daily habits that could help prevent back injuries—both on and off the job.

Remember, no approach will completely eliminate back injuries. However, a substantial portion can be prevented by incorporating effective administrative and engineering controls.

To evaluate a worker's lifting habits, consider the following variables: frequency of lifting, duration of such activities and type of lifting, as well as the worker's state of health, body size, age and general physical fitness.

City of Lewiston
Lockout/Tagout
Exposure Control Plan

City of Lewiston

Control of Hazardous Energies Program
Lockout/Tagout

Prepared by:
City of Lewiston

Revision #1

Revision Date: June 25, 2012

ACCREDITED AGENCY

Annual Evaluation Report

Date(s) of Evaluation _____

Evaluation was made by _____ .
(PRINT & SIGN)

General policy has been reviewed: YES/NO (Circle one)

Comments On General Policy:

_____

_____

_____

_____

Table of Contents:

1.0 Introduction:

The City of Lewiston has implemented the rules, regulations and other mandated practices in this protocol to control operations that involve work in areas containing hazardous energy. The City of Lewiston Lockout/Tagout Program has been created to promote a safe work.

2.0 Objective:

Lockout/Tagout programs are designed to prevent accidental startup of machines or equipment, and to prevent the release of stored energy during servicing or maintenance. Through the use of specific procedures that involve applying locks and tags, equipment is isolated from energy sources and injuries to workers are prevented. While lockout and tag is the preferred method of isolating machines or equipment from energy sources, tagout is permitted when the energy isolating devices are not lockable. Tagout may not be used when the energy isolating devices are lockable. The energy switches for new equipment or equipment that has undergone major repairs, renovation, or modification after January 2, 1990 must accept a lockout device.

3.0 Applicability:

The Lockout/Tagout program consists of the following components:

- Energy control procedures
- Employee training
- Periodic inspections

The program must be strictly followed when it is necessary to work on any equipment that may release any form of hazardous energy including, but not limited to, electrical, rotational, mechanical, chemical, hydraulic, or pneumatic energy, while the equipment is shut down.

3.1 Employee Classifications:

Employees are considered to be either affected employees or authorized employees. Only authorized employees may lockout/tag or tagout equipment. Authorized employees must notify affected employees before the procedure is used and when the machine or equipment is returned to service. OSHA defines each as:

3.1.1 Affected Employees:

Affected employees operate machinery or equipment upon which lockout/tagout is required under this program or whose job requires work in an area in which such servicing or maintenance is being performed.

3.1.2 Authorized Employees:

Authorized Employees will lockout and tag or tagout (see above) machines or equipment in order to perform servicing or maintenance on that machine or equipment. It is likely for an individual to be considered authorized with regard to certain equipment in the workplace, but unauthorized (therefore affected) as to other equipment.

3.2 Program Exclusions:

The Control of Hazardous Energy Program does not apply to:

3.2.1 Cord and Plug-Connected Electrical Equipment:

Work on cord and plug-connected electric equipment if unplugging the equipment from the energy source controls exposure to the hazards of unexpected energization of the equipment and if the plug is under the exclusive control of the employee performing service or maintenance. Pneumatic tools may also fall into this category provided that they can be completely isolated from their energy source.

3.2.2 Hot Tap Operations:

Hot tap operations that involve transmission and distribution systems for gas, steam, water, or petroleum products when these activities are performed on pressurized pipelines; continuity of service is essential, and shutdown of the system is impractical; and employees are provided with an alternative type of protection that is equally effective.

3.2.3 Minor Operations:

Minor tool changes, adjustments, and other minor servicing activities that take place during normal production operations that are routine activities, repetitive, and integral to the use of the production equipment, provided the work is performed using alternative measures that provide effective protection.

4.0 Written Energy Control Procedures:

Energy control procedures must be developed, documented, and used to control potentially hazardous energy sources whenever workers perform activities covered by the standard. At a minimum the energy control procedures must include, but are not limited to, the following elements:

- A statement on how the procedure will be used
- The procedural steps needed to shut down, isolate, block, and secure machines or equipment
- The steps designating the safe placement, removal, and transfer of lockout/tagout devices and which employee has the responsibility for the lockout/tagout devices
- The specific requirements for testing machines or equipment to determine and verify the effectiveness of locks, tags, and other energy control measure.

4.1 Written Energy Control Procedure Exclusions:

Specific written procedures for a particular machine or piece of equipment are not required if **all** of the following elements exist:

1. The machine or equipment has no potential for stored or residual energy or re-accumulation of stored energy after shut down which could endanger employees.

2. The machine or equipment has a single energy source, which can be readily identified and isolated.
3. The isolation and locking out of that energy source must completely de-energize and deactivate the machine or equipment.
4. The machine or equipment is isolated from that energy source and locked out during servicing or maintenance.
5. A single lockout device must achieve a locked-out condition.
6. The lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance.
7. The servicing or maintenance does not create hazards for other employees.
8. The department, in utilizing this exception, has had no accidents involving the unexpected activation or re-energization of the machine or equipment during servicing or maintenance.

Therefore, if the equipment has other conditions, such as multiple energy sources, different connecting means, or a particular sequence that must be followed to shut down the machine or equipment, then the employer must develop separate energy control procedures to protect employees.

5.0 Lockout/Tagout Procedure:

Machines and equipment capable of receiving lockout / tagout must be properly locked out and tagged prior to servicing or maintenance. The general procedures for bringing machines and equipment to a neutral or zero energy state and subsequent lockout/tagout will be as follows:

5.1 Preparation for Shutdown:

Before an authorized or affected employee turns off a machine or piece of equipment, the authorized employee will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy. Additionally, the authorized employee will notify all affected employees that the machinery, equipment or process will be out of service and again notify all affected employees when the interruption in service has concluded.

5.2 Machine Or Equipment Shutdown:

An authorized or affected employee must turn off or shut down machine or equipment using orderly procedures established for that equipment.

5.3 Machine Or Equipment Isolation:

An authorized employee must physically locate and operate all energy-isolating devices to isolate the machine from its energy source(s).

5.4 Inspection Of Lockout / Tagout Device:

Prior to the application of any lockout/tagout device, the authorized employee will inspect each device for damage. If a device is determined to be damaged the authorized employee will obtain a new device from the supervisor. The damaged device will be surrendered to the supervisor and the supervisor will discard such device. Under

no circumstances will a device be borrowed from another employee or will a device not specified for lockout/tagout be used.

5.5 Lockout / Tagout Device Application:

An authorized employee must lock out and tag or tagout (for machines and equipment that cannot be locked out) each energy switch.

- Lockout devices must be affixed in a manner that will hold the energy isolating devices in a "safe" or "off" position
- Tagout devices must be affixed in a manner that will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited
- If the tagout device can not be affixed directly to the energy isolating device, the tagout device must be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

5.6 Stored Energy:

After the energy-isolating device has been locked out and tagged or tagged out, all potentially hazardous stored energy must be relieved, disconnected, restrained, or otherwise rendered safe.

5.7 Verification Of Isolation:

Prior to starting work on machines or equipment that have been locked and tagged or tagged out, an authorized employee must verify that isolation or de-energization of the machine or equipment has been accomplished

6.0 Removal Of Lockout / Tagout Devices:

The following procedures must be followed when removing lockout/tagout devices:

6.1 Release From Lockout Or Tagout:

Before removing lockout or tagout devices and restoring energy, authorized employees must take these steps:

1. Inspect the work area to ensure that nonessential items have been removed and that the equipment components are intact.
2. Check the work area to make sure all employees are safely away from the equipment.
3. Notify affected employees after removing lockout or tagout devices and before energizing machines or equipment.
4. Notify affected employees after lockout or tagout devices and before starting a machine.

6.2 Lockout Or Tagout Devices Removal:

The employee that applied the device must remove each lockout or tagout device from each energy-isolating device.

6.3 Exception:

When the employee that applied the lockout/tagout devices is not available and the device must be removed, the following procedure must be used:

1. A supervisor must verify that the employee has left the site.
2. The supervisor determines that the equipment or area is safe before the lockout/tagout is removed by ensuring that:
   - All tools have been removed
   - All guards have been replaced
   - All employees are free from any hazard before the lock and tag are removed and the machinery, equipment, or process, are returned to service
3. The supervisor must remove the lockout/tagout device.
4. All reasonable efforts must be made to contact and inform the employee that the lockout/tagout device has been removed.
5. The supervisor must ensure that the employee has been informed that the lockout/tagout device has been removed before the employee resumes work

7.0 Personnel Change / Shift Change:

Many servicing and maintenance operations may extend across one or more work shifts. In such cases it is crucial that energy control procedures ensure that all hazardous energy is continuously maintained in a safe, deenergized condition. To maintain continuity in the protection provided to those involved in the lockout and tag procedure, and for the orderly transfer of the lockout and tag device, the steps below are necessary when personnel or shifts change.

7.1 Personnel Change:

The arriving authorized employee's lock and tag shall be applied before the departing authorized employee's lock and tag are removed.

7.2 Shift Change:

The lock and tag of at least one authorized employee on the arriving shift shall be applied before any locks and tags of the departing shift are removed. The departing crew will inform the arriving crew of the status of the equipment and the work in progress

8.0 Testing Or Positioning Of Machines Or Equipment:

If lockout devices and tags must be temporarily removed from energy-isolating devices in order to energize and test the equipment or to reposition any of its components, the authorized employee will:

1. Clear the equipment of tools and materials and have employees leave the equipment area.
2. Remove employees from the machine or equipment area in accordance with normal start-up procedures.
3. Remove the lockout devices and tags from the energy-isolating devices in accordance with the procedure set forth in this program.

4. Energize the equipment, and then proceed with testing the equipment or repositioning the components.

De-energize all systems and continue with service or maintenance.

9.0 Group Lockout/Tagout Procedures:

During all group lockout/tagout operations where the release of hazardous energy is possible, the following procedures must be followed:

1. A group lockout/tagout must afford each employee a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device.
2. A single authorized employee must be given primary responsibility for a set number of employees working under the protection of a group lockout or tagout device.
3. The single authorized employee must determine the exposure status of individual group members.
4. If there will be more than one crew, department, or group involved in the activity, a single authorized employee must be designated to coordinate affected workforces and to ensure continuity of protection.
5. Each authorized employee must affix a personal lockout/tagout device to the machine or equipment when work begins and remove it when work is completed.

10.0 Outside Personnel or Contractors:

Outside personnel or contractors involved in service or maintenance operations covered by this program must submit lockout/tagout procedures to City of Lewiston. The City must inform the outside personnel or contractors of the lockout/tagout program used by the City. The City will ensure that all affected City employees understand and comply with the restrictions and prohibitions of the outside personal or contractor lockout/tagout procedures.

11.0 Protective Materials and Hardware:

Departments must provide employees with the necessary protective materials and hardware to perform lockout/tagout. This may include locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware. All devices used for lockout/tagout must be properly identified and must not be used for any other purposes. Lockout/tagout devices must also meet the following requirements:

11.1 Durable:

Lockout/tagout devices must be capable of withstanding the environment to which they are exposed for the entire period of time that they are used. Tagout devices must be constructed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible. Tags must not deteriorate when used in corrosive environments, such as areas where acid and alkali chemicals are used or stored.

11.2 Standardized:

Lockout/tagout devices must be standardized within the department using at least one of the following criteria: Color, shape, or size; and, in the case of tagout devices, print and format.

11.3 Substantial:

Lockout devices must be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools. Tagout devices must be substantial enough to prevent inadvertent or accidental removal. Tagout devices must be attached with nylon cable ties that are non-reusable, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds.

11.4 Identifiable:

Lockout/tagout devices must identify the employee applying them.

11.5 Wording:

Tagout devices must warn against hazardous conditions if the machine or equipment is energized and include wording such as the following: "Do Not Start. Do Not Open. Do Not Close. Do Not Energize. Do Not Operate."

12.0 Training:

All authorized and affected employees must receive initial training, as required. Retraining must be given for employees whenever there is a change in job assignment, a change in machines. equipment, or process that presents a new hazard, or a change in this lockout/tagout program. Retraining must also be given whenever the annual inspection identifies a deficiency in the procedures. Departments must ensure that all personnel involved in lockout/tagout procedures are trained.

13.0 Retention, Availability And Revisions:

13.1 Revisions:

The lockout/tagout program will be reviewed at least annually by City of Lewiston and updated when changes are warranted.

14.0 Employees Lock and Key Assignments:

Date	Employee	Lock & Key #	Signature

15.0 Definitions:

Affected Employees: Those employees that operate machinery or equipment upon which lockout/tagout is required under this program or whose job requires work in an area in which such servicing or maintenance is being performed.

Authorized Employees: Only those employees certified to lockout/tagout equipment or machinery. For an employee to be considered authorized will depend upon various circumstances in the workplace. It is likely for an

individual to be considered "authorized" with regard to certain equipment in the workplace, but "unauthorized" as to other equipment.

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

Energized: Connected to an energy source or containing residual or stored energy.

Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following:

- A manually operated electrical circuit breaker;
- A disconnect switch;
- A manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently;
- A line valve;
- A block;
- Any similar device used to block or isolate energy.

Push buttons, selector switches and other control circuit type device are not energy isolating devices.

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

Energy Control Procedure: A written documentation that contains those items of information an authorized employee needs to know in order to safely control hazardous energy during servicing or maintenance of machines or equipment.

Energy Control Program: A program intended to prevent the unexpected energizing or the release of stored energy in machines or equipment on which servicing and maintenance is being performed by employees. The program consists of energy control procedure(s), an employee training program, and periodic inspections.

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

Lockout: The placement of a lockout device on an energy-isolating device (e.g., circuit breaker or electrical power disconnect), in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout Device: A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in a safe

position and prevent the energizing of a machine or equipment. This prevents unauthorized personnel from turning on a machine or equipment while it is being serviced.

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

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

Setting up: Any work that prepares a machine or a piece of equipment to regain its normal production operation.

Tag: The placement of a tagout device in addition to a lockout device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Tagout: Tagout alone is permitted when the energy isolating devices are not lockable. Special procedures must be developed when a device cannot be locked out. Note: The energy switches for new equipment or equipment that has undergone major repairs, renovation, or modification after January 2, 1990 must accept a lockout device.

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

16.0 APPENDIX A

Lockout / Tagout Inspection Form

17.0 APPENDIX B

Lockout / Tagout Inspection Form

18.0 APPENDIX C

Equipment Re-Energizing Checklist

Appendix A

The City of Lewiston
Lockout/Tagout Inspection Form

Inspection Date	

Inspector (Print Name)	(Signature)

Employee(s) Inspected (Print Name)	(Signature)

Machine/equipment on which the energy control procedure was being utilized:

Inspection Item	**Yes**	**No**
Does employee have or have access to adequate lockout/tagout devices?		
Has employee tested the effectiveness of his/her lockout/tagout devices?		
Has employee received lockout/tagout training in the last year?		
If this is an outside contractor, has a supervisor or project manager informed him/her of the necessity for adhering to these procedures?		
Have all procedures been followed?		
Were tagouts legible and clearly displayed?		

Comments / Observations

Appendix B

The City of Lewiston
Lockout / Tagout Checklist

When servicing or maintaining machinery or equipment, the following steps must be taken.

Notification			
I have notified all affected employees that a lockout is required and the reason(s) for the lockout.			
Date	Time	Print Name	Signature

Shutdown			
I understand the reason the equipment is to be shutdown following normal procedures.			
Date	Time	Print Name	Signature

Disconnection of Power Sources			
I have operated the switch, valve, or other energy isolating device(s) so that each energy source (electrical, mechanical, hydraulic, etc.), has been disconnected or isolated from the equipment. I have dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc. all stored energy (such as capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems and air, gas, steam or water pressure).			
Date	Time	Print Name	Signature

Lockout and Tag			
I have locked out and tagged the energy isolating devices with assigned individual locks.			
Date	Time	Print Name	Signature

Safety Check			
After ensuring that no personnel are exposed, and as a check on having disconnected all energy sources, I have operated the start button or other normal operating controls to make certain the equipment will not operate.			
Date	Time	Print Name	Signature

THE EQUIPMENT IS NOW LOCKED OUT

Appendix C

The City of Lewiston
Equipment Re-Energizing Checklist

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps must be taken.

Job Completion / Certification

I have checked the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

Date	Time	Print Name	Signature

Equipment / Personnel Check

The work area has been checked to ensure that all employees have been safely positioned or removed from the area.

Date	Time	Print Name	Signature

Neutral Controls

Verify that the controls are in neutral.

Date	Time	Print Name	Signature

Startup

The lockout and tag devices have been removed and the machine or equipment has been re-energized. Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.

Date	Time	Print Name	Signature

Notification

All affected employees have been notified that the servicing or maintenance is completed and the machine or equipment is ready for use.

Date	Time	Print Name	Signature

City of Lewiston
Machine Guarding
Exposure Control Plan

Machine Guarding Policy

Effective Date:
Revision Number: 1

Purpose:

This policy establishes general machine guarding procedures for all employees and equipment.

Requirements:

General:

Serious injury can result from coming into contact with the moving parts of a machine. This procedure outlines the requirements and describes methods to protect employees from machine hazards.
The safeguarding of any single machine depends on how and where it is used. Variables to consider include:

- Manufacturers' recommendations
- Government regulations
- Production requirements
- Accepted industry standards
- Operator training and skill
- Company practice
- Environmental factors
- Maintenance activities
- Cost of safeguarding options

Machine Safeguarding:

Machine safeguarding is the application of engineering, work practice, and administrative controls to prevent the injury of employees who operate machines or who are in the vicinity of machine operations. **The primary steps of machine safeguarding are:**

- Identify hazards
- Predict injury and the probability of occurrence
- Develop and implement a systematic safeguarding program
- Develop, implement and maintain machine guarding training and awareness
- There are four major elements that should be understood about machine safeguarding:
- Any part, function, or process that may cause injury must be safeguarded. Where possible, manufacturer-supplied means of guarding should be used.
- When safeguarding machines, utilize methods that provide protection and good production processes.
- Guards in themselves must not create a hazard.
- Guards should be attached to the machine, if possible.

Common Methods of Guarding are:

- Fixed barrier guards (preferred)
- Adjustable barrier guards

- Interlocking devices
- Remote control and placement
- Electronic safety devices
- Removal devices
- Pressure-sensing devices
- Administrative controls

Combinations of the above methods may be required for machine guarding and operational safety.

General machine guarding policies are as follows:

- A guard shall be attached to each machine, if possible, and be designed so it does not offer an accident hazard.
- A guard device shall prevent the operator from having any part of the body from contacting the moving parts of machinery or equipment during the operating cycle.
- Special hand tools provide supplemental protection for employees when placing and removing material. They permit easy handling of materials and eliminate the need for operators to place a hand in the danger zone. Such tools do not replace guarding.
- All revolving drums, barrels and containers shall be guarded by an enclosure that is interlocked with the drive mechanism.
- All revolving shafts, wheels, pulleys and other revolving parts shall be guarded to prevent an employee from coming in contact with the moving part.
- If the periphery of blades of a fan is less than seven feet above the floor or working level, the blades shall be guarded. The guard shall have openings that are no larger than ½ inch.
- Machines designed for a fixed location shall be securely anchored to prevent walking, moving, and tipping.

Machine Operation Clearance:

Machine operators and personnel performing maintenance should read and understand the applicable sections of a manufacturer's owner/operator and maintenance manuals before operating the machine. Machine operators and personnel performing maintenance shall receive training from the manufacturer of the machine with approved training before working with the machines, to include at a minimum:

- Train operators in proper operation, safety procedures, hazard recognition, and emergency shutdown procedures for each machine that they are assigned to operate.
- Train personnel performing maintenance in hazard recognition, safe maintenance work practices, and emergency shutdown procedures for each machine that they are assigned to service.
- Identify multiple energy sources and explain machine-specific lockout and tagout procedures to all personnel assigned to work with that machine.
- Identify personal protective equipment required for machine operators and maintenance personnel and give the equipment to affected personnel.
- Instruct personnel working with machines that jewelry, watches, bracelets, rings, necklaces, and neckties should not be worn and that long hair should be contained to prevent its entanglement.

- Managers shall maintain a current list of personnel authorized to operate each machine or unique piece of equipment.

Installation:

When installing a machine, the following guidelines should be used:

- Allow enough space between machines to ensure safe operation and material handling.
- Install machines according to the manufacturer's instructions. Secure machines for fixed locations to prevent them from traveling during operation or if struck by equipment or personnel.
- Locate operator controls within easy reach of the operator. Operators should be able to get to controls without reaching over hazardous areas or points of operation.
- Install a disconnect switch that can be locked in the off position.
- Install exhaust systems, when applicable, and supplementary lighting, if needed, for safe operation before machines are approved for use.
- Mount a placard on each machine that explains the safe work practices and procedures for that machine. If it is not practical to mount the placard on a machine, place the placard on the wall next to the machine in a location where the operator at the control station can easily see it.

Inspection:

Employees who are assigned to machine operations or maintenance shall inspect machines before working with them.

Maintenance:

A preventive maintenance program shall be implemented to maintain the reliability of the machines and their guards. The manufacturer should be consulted to develop the frequency and method of preventive maintenance.

Guarding Methods:

Any machine that grinds, shears, punches, presses, squeezes, draws, drills, cuts, rolls, mixes, or performs a similar action shall be guarded when possible. Safeguarding should prevent the operator and other employees from being struck, caught, burned, exposed to electric shock, or hit with chips or coolant.

If the manufacturer's recommendations for safeguarding do not meet government or industry standards, additional safeguarding should be implemented to comply with these standards.

A machine shall be operated only when all safeguards are functional and in place. No control or component of the machine's safeguarding system should be altered or bypassed, including limit switches, light curtains, interlocks, and presence-sensing devices, during normal operations.

Color Codes:

Machines should be color-coded with safety orange where there is an intermediate level of hazard. For example:

- Hazardous parts of machines that may cut, crush, or otherwise injure. Such hazards should be colored with an orange paint that shows when enclosure doors are open.

- The insides of movable guards and transmission guards for gears, pulleys, chains, and the like.
- Exposed parts (edges only) of pulleys, gears, rollers, cutting devices, power jaws, and the like.

Guards and protective covers should be color-coded with safety yellow. This designates that dangerous parts of machinery or energized electrical components are contained inside the guards and caution must be exercised. Exceptions include:

- Portions of transparent shields designed to afford a clear view of the operation should not be painted.
- Metal-mesh guards should be painted black to improve the operator's visibility. The border of the guard should be painted with safety yellow.

General Rules for Guarding:

Guarding should:

- Protect the operator and other employees in the machine area from hazards such as those created by the point of operation, ingoing nip points, rotating parts, flying chips, and sparks.
- Be attached to the machine or secured elsewhere if attachment is not possible.
- Not pose an accident hazard in itself.
- Conform to applicable government and industry standards. In the absence of such standards, it must be designed and constructed to prevent the operator and other employees from having any body part in the danger zone during the machine's operating cycle.
- Be secured by means not easily removed.
- Facilitate machine inspection as practical
- Permit maximum visibility of the point of operation

Power Transmission Apparatus:

Hazards such as belts, gears, sprockets, chains, shafts, and pulleys that are associated with power transmissions apparatus must be guarded. Cover all moving parts of power transmission apparatus that are within 7 feet from the floor or working platform. Guard all exposed parts of horizontal, vertical, and inclined shafting that are within 7 feet from the floor or working platform. Use one of the following methods:

- A stationary casing constructed of expanded, perforated, or solid-sheet metal
- A helical-wound metal strip completely enclosing the shafting
- A collapsible or telescoping guarding device unless the projection is less than one-half the diameter of the shaft and the projecting end is completely smooth.

For machines that require frequent oiling, use openings with hinged or sliding self-closing covers provided by the manufacturer.

- Provide oil lubrication points at remote or ground level mechanisms.
- Instruct regular oilers to wear tight-fitting clothing.
- Whenever possible, oil machinery when equipment is not in motion.

Protect employees from projections in revolving parts by:

- Removing the projections (preferred)

- Making the projections flush
- Guarding the projections with a metal cover

This does not apply to keys and setscrews already guarded within gear or sprocket casings.

Switches and Remote Controls:

Switches and remote controls should be safeguarded as follows:

- Clearly mark switches and operating controls in simple language to indicate their purpose.
- Keep switches, operating controls, and control buttons in good operating condition at all times. If a component is damaged or missing, immediately repair or replace it.
- Guard the sides and tops of foot-operated control pedals to prevent accidental activation.
- Never use a foot-operated control to operate a machine unless safeguarding is installed to prevent hands or other body parts from entering the point of operation.

Roles and Responsibilities

Management:

- Ensure compliance in their functional areas with the policies and requirements directed by this procedure.
- Ensure their personnel are trained and qualified to perform the task being assigned to them.
- Perform or have designee perform quarterly machine guarding inspections of all machinery.
- Identify employees who are authorized to operate each piece of fixed shop machinery.
- Ensure defective and unsafe machinery is properly tagged and taken out of service.
- Ensure that if employees wear badges around their necks while operating machinery, that only breakaway badges are used. It is best to not have anything hanging from the neck when operating machinery.

Employees:

- Comply with the machine guarding and training requirements directed by this procedure.
- Do not perform any task requiring formal training until the required training is completed, documented, and current.
- Refuse to operate any piece of equipment for which they are not familiar and/or not properly trained.

Definitions:

Belts - Belts include all power transmission belts, such as flat belts, round belts, v-belts, etc.
Belt Shifter - A belt shifter is a device for mechanically shifting belts from tight to loose pulleys or vice versa or for shifting belts on cones of speed pulleys.
Employee - Includes all permanent and temporary employees and Sub-contractor employees.
Enclosures - Guarding by fixed physical barriers that are mounted on or around a machine to prevent access to moving parts.
Exposed to Contact - An object or part is exposed to contact if it is located in such a way that a person is likely to come into contact with it and be injured.

Fixed Shop Machinery - Fixed shop machinery is defined as any piece of machinery designed to perform work on material such as a drill press, bench grinder, table saw, or lathe which is mounted or fixed to the floor or a table.

Flywheel - Flywheels include flywheels, balance wheels, and flywheel pulleys mounted and revolving on crankshaft platform used for oiling, maintenance, running adjustment, or repair work, but not as a passageway.

Guard - An engineering control that uses either fixed or adjustable barriers to prevent personnel from contacting the moving parts of machinery or equipment.

Interlocking - A type of guard that, when opened or removed, causes the machine's cycling mechanism or power to automatically shut off or disengage; the machine cannot be cycled or started until the guard is back in place.

Machine - An assemblage of parts that transmit forces, motion, and energy in a predetermined manner for performing a task.

Nip-Point Belt and Pulley Guard - A nip-point belt and pulley guard is a device that encloses the pulley and is provided with rounded or rolled edge slots through which the belt or pulley passes.

Point of Operation - The area on a machine where work is actually being performed upon the material being processed. On some machines, there may be more than one point of operation.

Power transmission equipment - Horizontal or vertical belts or shafts, pulleys, gears, sprockets, couplings, chains, clutches, connecting rods, flywheels, and other such equipment.

Prime Movers - Include steam, gas, oil, and air engines, motors, steam and hydraulic turbines, and other equipment used as a source of power.

City of Lewiston
Machine Guards
Exposure Control Plan

Machine Guards

Effective Date:
Revision Number: 1

- No guard shall be removed from any machine or piece of equipment except to perform required maintenance.

- Guards removed to perform maintenance operations shall be replaced immediately, and the machine shall not be operated while the guards are removed, except for maintenance certification.

- Guards shall not be rendered inoperable or by-passed in any way.

- For additional information concerning guarding requirements, refer to manufacturer's information.

City of Lewiston
Machinery, Fixed
Exposure Control Plan

Machinery, Fixed

Effective Date:
Revision Number: 1

- Machines designed for a fixed location shall be securely anchored to prevent walking or moving, or designed in such a manner that the machine will not move in normal operation.

- All belts, pulley, chains, flywheels, rotating or reciprocating parts within 10 feet of the floor or working platforms shall be effectively guarded.

- On/Off switches shall be positioned in such a way that they are located within reach of the operator

City of Lewiston
Office Safety
Exposure Control Plan

Office Safety

Effective Date:
Revision Number: 1

Office Safety:

- Employees shall report all injuries, regardless of severity, to the person in charge.
- Employees shall walk cautiously up and down stairs; the handrail shall be used whenever possible.
- Caution shall be exercised when walking around blind corners.
- Drawers of desks and file cabinets shall be kept closed when not in use.
- Only one drawer of a file cabinet shall be pulled out at a time in order to avoid overbalancing, unless the cabinet is securely fastened to the wall or to other cabinets.
- Do not sit on the edge of a chair. Do not tilt back when sitting in a straight chair.
- Boxes, chairs, etc., shall not be used in place of ladders.
- The floor shall be kept free of tripping hazards such as telephone cords, electric extension cords, and paper cartons.
- Employees mopping or waxing floors shall place warning signs to alert co-workers of the potentials for slippery floors. All liquid spills shall be immediately cleaned up.
- Material shall be stored on shelves in a manner to prevent falling; heavy objects shall be placed on lower shelves.
- Hallways and aisles shall be kept clear of all obstructions.
- All emergency exits and emergency equipment such as fire extinguishers shall be kept clear of all obstructions.
- Employees shall not use ventilation fans unless they are guarded or securely placed at least 7 feet above the floor.
- Solvents and other volatile or toxic substances shall be used only with adequate personal protection or in well-ventilated areas. Refer to Section 401, Hazardous Material.
- Employees shall not attempt to clean, oil, or adjust any machine that is running. If the machine is not equipped with a starting switch that can be locked in the "off" position, it shall be disconnected from its power source.
- Unsafe electrical cords, faulty electrical or other equipment, or any other hazardous condition shall be reported.
- Safety shall be considered in what employees wear on the job. Loose-fitting clothing, dangling bracelets, rings, and ties may cause serious injury to employees operating or working around power driven machines and shall not be worn.
- Broken glass and other sharp objects shall not be placed in wastepaper containers.
- Cigarettes, cigars, and other burning materials shall not be placed in wastepaper containers.
- Common or sharp-pointed pins shall not be used for fastening paper together. Staples, paper clips, or other approved fasteners shall be used.
- Employees shall, where ever possible, use mechanical means to move lift or reposition heavy or bulky materials.
- Employees shall request additional help as necessary to avoid injury to themselves or damage to material or equipment.

City of Lewiston

Personal Protective Equipment

Exposure Control Plan

Personal Protective Equipment Program

Effective Date:
Revision Number: 1

Purpose: This procedure establishes minimum PPE requirements to be followed when performing hazardous or potentially hazardous tasks.

Scope: This program applies to all City of Lewiston employees, contractors and vendors performing work on City of Lewiston property as well as other individuals who are visiting or have business with City of Lewiston.

Responsibilities: Management is responsible for identifying potential or actual hazards, as well as establishing requirements for PPE. Management will review this program at least annually and when equipment or facility additions/ modifications cause change in PPE requirements. Management will conduct, or instruct others to conduct, required training as outlined below. Both upper management and supervisors are responsible for enforcing this program. Employees must comply with all procedures outlined in this policy. Contractors, vendors and other visitors are also required to follow all procedures outlined in this policy and must be clearly informed of this obligation.

Definitions:

Administrative controls: Rules, procedures or standards that prevent or limit exposure to a hazard.

Contractor: A non-City employee paid to perform work on City of Lewiston property.

Engineering Controls: Equipment or process modifications, usually hardware, that provides passive protection to personnel.

PPE: Short for personal protective equipment. PPE guards personnel against hazards. PPE is the last line of protection after engineering control and administrative control.

Vendor: A non-City employee being paid to perform a service for City of Lewiston and whose work may or may not require them to enter the facility.

Procedure:

Hazard Assessment: City of Lewiston will conduct a hazard assessment to determine what dangers are present or are likely to be present that would require PPE. The assessment will consist of a walk-through survey of all work areas and a review of all employee duties to uncover hazards that may not be completely controlled by engineering or administrative approaches (See Appendix A). Employees will be able to access a summary of the assessment results from their supervisor.

Management will revise and update the assessment as necessary when there is new equipment, new processes, an accident or new PPE by identifying new equipment, evaluating new processes, reviewing accident records and assessing the suitability of previously selected PPE. Management will also actively review the hazard assessment annually to assess the suitability of previously-selected PPE.

If changes in PPE are required, management will initiate appropriate action.

PPE Selection: All identified hazards will be controlled by engineering or administrative methods. If engineering or administrative controls cannot eliminate a hazard,

management will select appropriate types of PPE, which will be the last line of defense against hazards.

City of Lewiston management will ensure that all selected PPE fits employees properly and that all employees are properly trained on correct usage. Affected employees must wear all appropriate, required PPE in designated areas when hazards are present.

Employee-Owned Equipment: Any employee who wishes to provide his or her own PPE must have it pre-approved by his or her supervisor. No employee shall wear his or her own PPE if it does not meet City of Lewiston requirements as well as the standards set forth in this program.

Defective or Damaged Equipment: Employees may never wear PPE that is defective, damaged or unsanitary. PPE must be cleaned and sanitized prior to use by another worker.

Defective or damaged equipment will be taken out of service. Employees should contact his or her immediate supervisor for replacement PPE. Employees will not perform further tasks requiring the use of PPE until the equipment has been replaced or repaired.

Training Requirements:

Each employee required to use PPE will be trained on its use upon hire. No employee will perform job functions requiring the use of PPE until properly trained.

The following topics must be covered in initial PPE training:

- Under what circumstances City of Lewiston requires PPE
- How to wear PPE properly
- The limitations of selected PPE
- Proper care and maintenance of PPE

In addition to initial PPE training, supplementary training will be required when:

- There is a change in job assignments or work practices
- There are changes in the types of PPE used
- Employees do not demonstrate full understanding or skills when using PPE

Attendance to training classes will be documented for all employees. At each training session, supervisors will collect the name of each employee trained, the date(s) of training, specific PPE training received and verification of the employee's acquired skill level as a result of training.

Management will require that employees use specified PPE appropriately to address the risks presented in the hazard assessment. Failure to conform to this program will result in discipline, up to and including termination.

PPE Elements:

Eye and Face Protection: All employees, contractors and visitors will wear eye and face protection when inside designated areas.

Safety glasses will be provided to employees when necessary. All issued safety glasses will have side shields. When employees require prescription safety glasses, City of Lewiston will either provide safety eyewear that may be worn over personal glasses or will contribute to the cost of frames and lenses.

Employees who wear contact lenses may wear nonprescription safety glasses over their contact lenses, but they should be aware that contact lenses could present additional hazards to employees in environments containing dust or chemicals. In these cases, affected employees must use additional eye protection, such as dust- or liquid tight goggles.

Respiratory Protection: Procedures regarding respiratory protection are contained in the Respiratory Protection Program

Head Protection: All affected employees will use appropriate head protection when exposed to falling objects or energized electrical equipment. Employees who are working near exposed electrical conductors will wear protective helmets designed to reduce electrical shock.

Head protection is designed to provide protection from impact and penetration hazards caused by falling objects, but it is capable of providing protection from electric shocks and burns. When selecting head protection, knowledge of potential electrical hazards is important.

Class A helmets, in addition to impact and penetration resistance, provide electrical protection from low-voltage conductors and are proof-tested to 2.200 volts. Class B helmets provide impact and penetration resistance as well as electrical protection from high-voltage conductors, and they are proof tested to 20,000 volts. Class C helmets provide impact and penetration resistance only and are usually made of aluminum, a conductor; therefore, Class C helmets should not be used around electrical hazards. Bump caps are not designated to provide impact protection, but they do protect against scalp lacerations while working in congested or low-clearance areas.

City of Lewiston will select, purchase and provide employees with required head protection when required.

Foot Protection: All employees, contractors and visitors will use appropriate foot protection where required. Foot protection is not necessary when traveling within designated aisles, but any person deviating off these aisles falls under the following regulations.

City of Lewiston will identify acceptable types of foot protection and will contribute toward the cost of foot protection for required personnel (see Safety Shoe reimbursement Policy).

Electrical Protective Equipment: All electrical protective devices purchased by the City of Lewiston will meet requirements outlined in the OSHA Electrical Protective Equipment standard (a). All equipment will be appropriately marked with proper class and type specifications.

Electrical PPE will be required where contact with energized electrical conductors or flash/arc hazards exist. City of Lewiston will provide PPE, insulating blankets and insulated tools as needed. City of Lewiston requires that all electrical protective equipment be inspected prior to use by the employee and also immediately after any incident involving possible damage. Electrical protective equipment will be stored to protect against visible light, extreme temperatures, extreme humidity, ozone chemicals and other damage. City of Lewiston will also maintain a testing program for electrical protective equipment that ensures proper performance. If the electrical equipment has been in storage, it must have been tested within the previous 12 months prior to use.

Hand Protection: Each Department Manager or supervisor will select all hand protection to ensure the greatest degree of defense against hazards. City of Lewiston requires the Department Manager or supervisor to consult manufacturers/ suppliers to select gloves that will provide the desired protection against mechanical, thermal and chemical hazards. City of Lewiston will exercise special care when evaluating the need for hand protection in areas with moving machine parts, especially rotating and revolving

equipment. City of Lewiston does not permit employees to use their own, owned hand protection unless it has been pre-authorized by the Department Manager or supervisor.
Body Protection Body protection in the form of aprons or other protective clothing will be required when employees are exposed to chemical splash or contact, sharp or jagged objects, heat, sparks or flame. The Department Manager or supervisor will consult manufacturers/ suppliers to select equipment that will provide the desired protection against mechanical, thermal and chemical hazards.
Hearing Protection Hearing conservation procedures shall be outlined in a separate "Hearing Conservation Program."

City of Lewiston
Pneumatic Tools
Exposure Control Plan

Pneumatic Tools

Effective Date:
Revision Number: 1

- Compressed air and compressed air tools shall be used with caution. Compressed air tools shall not be turned on until the tool is under the control of the operator.
- Pneumatic tools shall never be pointed at another person.
- Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.
- Safety clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.
- Compressed air shall not be used for cleaning purposes except when reduced to less than 30 psi and then only with effective chip guarding and personal protective equipment.
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.
- The use of hoses for hoisting or lowering tools shall not be permitted.
- All hoses exceeding one-half inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure or disengagement of a connection.
- Pressure shall be released before connections are broken, unless quick acting, self-closing connectors are used. Hoses may not be kinked. Pressure shall also be released if the tool is to be left unattended.
- A pneumatic tool used where it may contact exposed live electrical parts shall have a nonconductive hose and an accumulator to collect moisture.

City of Lewiston
Portable Electric Tools
Exposure Control Plan

Portable Electric Tools

Effective Date:
Revision Number: 1

- The non-current carrying metal parts of portable electric tools such as drills, saws, and grinders shall be effectively grounded when connected to a power source unless:
    - The tool is an approved double-insulated type, or
    - The tool is connected to the power supply by means of an isolating transformer or other isolated power supply, such as a 24V dc system.
- All powered tools shall be examined before use to ensure general serviceability and the presence of all applicable safety devices. The electric cord and electric components shall be given an especially thorough examination. Motor control shall be through a dead man switch. However, for tools other than electric chain saws and circular saws, a lock-on control may be used provided that turn-off can be accomplished with the same finger(s) that turn it on.
- Powered tools shall be used only within their capability and shall be operated in accordance with the instructions of the manufacturer.
- All tools shall be kept in good repair and shall be disconnected from the power source while repairs are being made.
- Electrical tools shall not be used where there is a hazard of flammable vapors, gases, or dust.
- Electric tools shall not be raised or lowered by their electric cords.
- Tools not double insulated shall be protected by a Ground Fault Interrupter (GFI) or by an "assured grounding system". Vehicle mounted equipment shall be bonded to the vehicle frame.
- Any cord and plug-connected equipment supplied by other than premises wiring shall comply with one of the following:
    - Equipped with a cord containing equipment grounding connected to the tool frame.
    - Double insulated.
    - Connected to power supply through an isolating transformer with an ungrounded secondary.

City of Lewiston

Powered Trimming Equipment

Exposure Control Plan

Powered Trimming Equipment

Effective Date:
Revision Number: 1

- Employees operating powered trimming equipment shall wear suitable eye and face protection and chaps (unless operating out of a bucket).
- Chain-saw operators shall inspect the saw before each use to assure that all handles and guards are in place and tight, that all controls function properly, and that the muffler is operational.
- Chain-saw operators shall follow manufacturer's instructions on operation and maintenance.
- Power saws weighing more than 15 pounds that are used in trees shall be supported by a separate line, unless the work is performed from an aerial lift or no supporting limbs are available.
- A chain saw shall be started on the ground or where it is otherwise firmly supported.
- The operator shall grip the chain saw with both hands during the entire cutting operation.
- Chain-saw operators shall be certain of footing and clear away brush that might interfere.
- All chainsaws shall be equipped with a control that will return to idling speed when released.
- The chain-saw engine or motor shall be stopped for the following:
    - When working on any part of the chain or cutting bar.
    - While the saw is being moved from one location to another, including being carried up into the tree.
    - While unit is unattended.
    - While refueling. ***NOTE:*** Fueling blankets shall be used if the saw is warm.
- A gasoline driven chain saw shall not be used above shoulder level or at a distance that would require the operator to relinquish a safe grip on the saw.
- Employees shall not approach chain-saw operator within the reach of the saw while the saw is in operation.
- When backpack power units are used the following precautions shall apply:
    - No one except the operator shall be within 10 feet of the cutting head of a brush saw.
    - The backpack power unit shall be equipped with a quick shut-off switch readily accessible to the operator.
    - Backpack power unit engines shall be stopped for all cleaning, refueling, adjustments and repairs to the saw or motor except when the manufacturer's service procedure requires otherwise.

City of Lewiston
Proper Lifting Techniques
Exposure Control Plan

Proper Lifting Techniques

Effective Date:
Revision Number: 1

Introduction:
Preventing back injuries is a major challenge for employers. According to the Bureau of Labor Statistics (BLS), more than one million workers suffer back injuries each year. Typically, back injuries account for one out of every five workplace injuries and illnesses, and one-fourth of all compensation indemnity claims are a result of back injuries. The pain and discomfort of back injuries can have a dramatic change in employee productivity.
A BLS survey shows that four out of five back injuries were to the lower back, and that three out of four occurred while lifting. This survey shows the importance of reducing back injuries caused by lifting. Although no approach has completely eliminated such injuries, a substantial portion could be prevented by incorporating an effective control program along with an ergonomics analysis and design of work tasks.
OSHA has evaluated ways to help prevent lifting injuries. They specify two types of controls: engineering and administrative.
Engineering controls are used to redesign the workstation to minimize lifting hazards.
Administrative controls include carefully selecting and training workers, so that they can perform their jobs safely.

Suggested administrative controls include:

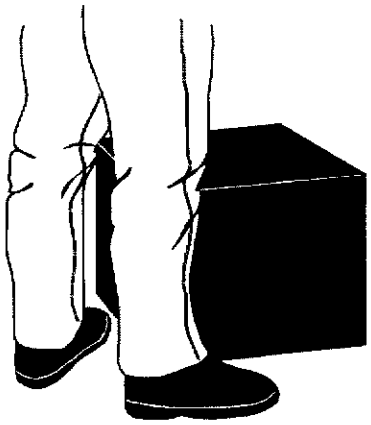
Strength testing of existing workers: Studies have shown strength testing can prevent up to one-third of all work-related injuries. Through the strength-testing process, employers can discourage employees from performing tasks that exceed their strength capacities.

Physical conditioning or stretching programs: These programs are implemented to reduce the risk of muscle strain.

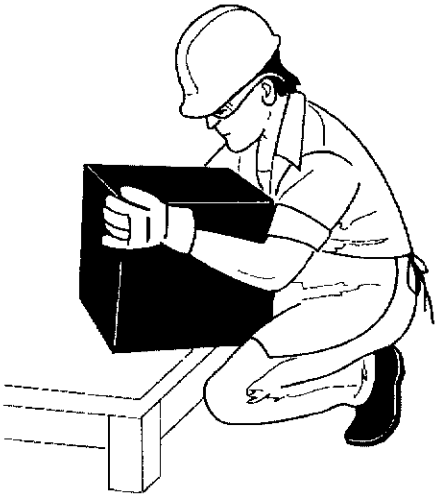
Training: Employees should be trained to utilize proper lifting techniques that place minimum stress on the lower back.

How to Lift Safely

Before lifting, take a moment to think about what you are about to do. Examine the object for sharp corners, slippery spots or other potential hazards. Know your limit and do not try to exceed it. Ask for help if needed. Or if possible, divide the load to make it lighter. Know where you are going to set the item down and make sure the destination and your path are free of obstructions.
Then follow these steps below:

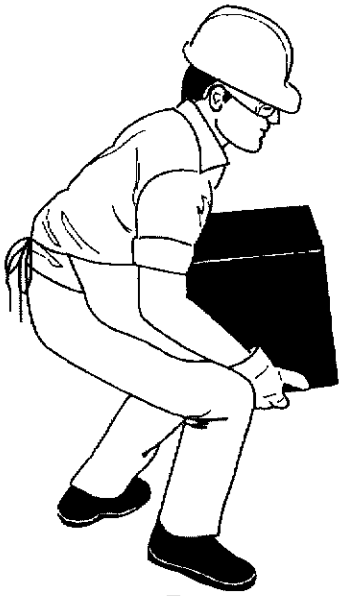


1. Stand close to the load with your feet spread shoulder width apart. One foot should be slightly in front of the other for balance.

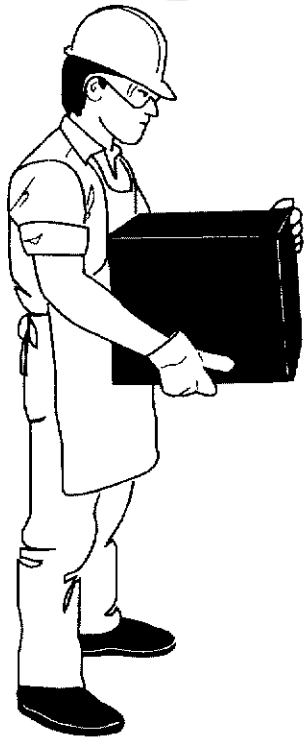


2. Squat down bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.

3. Get a firm grasp of the object before beginning the lift.



4. Slowly begin straightening your legs, lifting slowly. Never twist your body during this step.



5. Once the lift is complete, keep the object as close to the body as possible. If the load's center of gravity moves away from your body, there is a dramatic increase in stress to the lumbar region of the back.

If you must turn while carrying the load, turn using your feet, not your torso.

To place the object below the level of your waist, follow the same procedures in reverse order. Remember to keep your back as vertical as possible, and bend at the knees.

Conclusion:

Using proper lifting techniques can help prevent downtime due to avoidable back injuries. With a little practice, precautionary methods such as these can become good daily habits that could help prevent back injuries—both on and off the job.

Remember, no approach will completely eliminate back injuries. However, a substantial portion can be prevented by incorporating effective administrative and engineering controls.

To evaluate a worker's lifting habits, consider the following variables: frequency of lifting, duration of such activities and type of lifting, as well as the worker's state of health, body size, age and general physical fitness.

City of Lewiston
Respiratory Protection
Exposure Control Plan

Respiratory Protection Program

Effective Date:
Revision Number: 1

Purpose:

This procedure establishes minimum procedures for determining safe use considerations for respiratory protection.

Scope:

This procedure applies to all of our employees, all contractors and vendors performing work on City property, and all other individuals who are visiting or have business with the City.

Responsibilities:

Management is responsible for development and review of this program. Management is also responsible for appropriate employee training.
Management and supervisors are responsible for enforcement of this program.
Employees shall comply with all procedures outlined in this policy.
Contractors and vendors shall comply with all procedures outlined in this policy.

Definitions:

Contractor: A non-City employee being paid to perform work in our facility.

Fit factor means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit Test: A procedure that can be used to help determine the effectiveness of a respirator's fit to the individual face. There are two types of fit tests:

-Qualitative: a pass/fail test that relies on the individual's response to a test agent

-Quantitative: a numerical measure of respirator leakage

IDLH: Immediately Dangerous to Life or Health—An atmosphere that possesses: an immediate threat to life, an irreversible adverse health effect, or would impair the ability to escape from the atmosphere.

Respirator: Any disposable or reusable, device that covers the breathing zone of an individual for the purpose of removing airborne contaminants.

SCBA: Self Contained Breathing Apparatus.

Vendor: A non-City employee being paid to perform a service in our facility.

Procedure:

Respirator Use
Respirators will only be used to control airborne contaminants when engineering and/or administrative controls are not feasible.

Respiratory Protection Program
Our facility has established a Respiratory Protection Program for individuals who are required to wear respirators. This program includes the following:

-Procedures for selecting respirators

-Medical evaluation for respirator users

-Fit test procedures for tight fitting respirators

-Procedures for proper use of respirators

-Procedures for maintaining and storing respirators

Respirator Selection
Our facility will do the following for all respirators:

1. Evaluate all potential respiratory hazards and provide an estimate of the exposure (see Appendix A for a list of these locations).
2. Where it is not possible to quantify employee exposure an area will be classified as an IDLH atmosphere and protection will be predicated on that level of protection.
3. Use only NIOSH certified respirators within their use limitations.
4. Select respirators from a sufficient number of models and sizes to ensure proper fit and acceptance on the part of the respirator user.

IDLH Atmospheres
Respirators used in IDLH atmospheres will be either full face piece pressure demand SCBA with a rated service life of 30 minutes or full face piece pressure demand supplied air with an auxiliary self contained air supply. Escape only units will be NIOSH certified for the contaminant in the IDLH area.

Non-IDLH Atmospheres

1. Respirators will be appropriate for the contaminants in the area.
2. Respirators will be either atmosphere supplying or air purifying equipped with an end of service life indicator or we will establish an appropriate cartridge/canister change schedule taking into account the respirator and the contaminant exposure.

Particulates
Use respirators such as High Efficiency Particulate Air (HEPA) or a particulate filter certified by NIOSH. See Appendix E for Particulate Respirator Selection.

Medical Evaluation:

1. Our City has a designated licensed health care provider.

2. The health care provider will perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire. (see Appendix C)
3. This evaluation will be administered confidentially, at no cost to the employee, during the employee's normal working hours. The employee will have an opportunity to discuss the questionnaire and examination results with the health care provider.
4. The manager will provide the health care provider with the following supplemental information:

   (a) The type and weight of the respirator to be used by the employee;

   (b) The duration and frequency of respirator use (including use for rescue and escape);

   (c) The expected physical work effort;

   (d) Additional protective clothing and equipment to be worn;

   (e) Temperature and humidity extremes that may be encountered;

   (f) A copy of this written respirator protection program;

   (g) A copy of the respiratory protection standard
5. Additional medical evaluations may be necessary as determined by the health care provider.
6. A decision about when the next medical re-evaluation will occur will be made by the health care provider.
7. The health care provider will provide the program administrator with a written opinion on the employee's ability to use the respirator. This opinion will be kept on file.
8. These medical records will be kept for thirty (30) years after the last day of employment.
9. See Appendix D for information required for employees using particulate filtering facepiece respirators not required under the standard.

Fit Testing:

1. The manager is responsible for fit testing employees. (see Appendix F for a fit test record)
2. Prior to initial use, and **annually** thereafter all employees assigned respirators will be fit tested using one of the methods described in the section on fit testing appropriate for the type of respirator used.
3. Quantitative fit testing procedure must be used for all tight fitting facepieces requiring fit factors greater than 100. Qualitative fit testing procedures (using either irritant smoke, isoamyl acetate, saccharine or Bitrex) can be used for fit testing tight fitting facepieces with fit factors of 100 or less.
4. The record of the most recent fit test will be maintained in the employees respirator program file and will contain:

   - The name of the employee tested

- The type of fit test performed
- The specific make, model, style and size of respirator tested
- The date of the test
- The pass/fail results for qualitative fit tests (or the fit factor and strip chart recording or other recording of the test results for quantitative fit testing).

5. Additional fit testing will be conducted whenever visual observations of changes in the employee's physical condition, which could affect respirator fit, are indicated. This could include facial scarring, dental changes, cosmetic surgery or an obvious change in body weight, and could be reported by either:
   - The employee
   - The health care provider (PLHCP)
   - The supervisor or
   - The program administrator

Use of Respirators:

1. The manager will develop specific written operating procedures for the use of respirators.
2. Standard requirements for respirator users are:
   - Any employee having any condition that interferes with the face to facepiece seal, including any facial hair that comes between the sealing surface of the facepiece and the face is prohibited from wearing a respirator.
   - Any employee having any condition that interferes with valve function, including facial hair, is prohibited from wearing a respirator.
   - All personal protective equipment including corrective glasses or goggles must be worn in a manner that does not interfere with the seal of the facepiece to the face of the employee.
   - Employees shall perform a user seal check each time they put on a tight fitting respirator. (see Appendix B-1)
   - Supervisors shall monitor all employees using respirators for the degree of employee exposure and stress. Whenever there is a change in working conditions which will affect respirator effectiveness, the use of respirators will be re-evaluated.
   - In order to prevent eye or skin irritation associated with respirator use, employees shall leave the work area to wash their faces and respirator facepieces.
   - If employees detect vapor or gas breakthrough, or changes in breathing resistance, they shall leave the work area to replace the filters or cartridges.
   - If employee detects leakage of the facepiece, they shall leave the work area and only re-enter it with a properly working respirator.

- If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, the respirator must be repaired or replaced before the employee can return to the work area.
- If the respirator end of service life indicator (ESLI) indicates the need to change the filter or cartridge, employees will leave the work area to replace it.

Maintenance and Care:

1. The manager is responsible for ensuring that respirators are cleaned, disinfected, stored, inspected and repaired.
2. Employees with defective respirators should take them to the manager for inspection and repair, or for issuing a new respirator.
3. Employees will be provided with respirators that are clean, sanitary and in good working order.
4. Respirators issued to individual employees will be cleaned and disinfected as often as necessary to remain in a sanitary condition. This will be according to the procedure described by the manufacturer or in Appendix B-2.
5. Respirators used in fit testing, and respirators used by more than one employee, will be cleaned and disinfected before being worn by different people. This will be according to the procedure described by the manufacturer or the procedure in Appendix B-2 section on respirator cleaning.
6. Respirators will be stored to protect them from damage, contamination, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.
7. Respirators will be packed or stored to prevent deformation of the facepiece and exhalation valve.
8. Employees will inspect their respirators before each use and during cleaning. If any defect is found the respirator will be immediately removed from service and either discarded or repaired prior to use. Inspections will include:
   - A check of respirator function
   - A test of the tightness of connections
   - A visual inspection of the conditions of various parts including the facepiece, head straps, valves, connecting tube and cartridges, canisters or filters, and any other part that may affect the performance of the respirator.
   - A check of elastomeric parts for pliability and signs of deterioration.
   - A check that the label and color coding indicating NIOSH approval is not removed and remains legible on all filters, cartridges and canisters.
9. Repairs or adjustments to respirators will be made only by people appropriately trained to perform such operations.

10. Repairs or adjustments will only use the respirator manufacturer's NIOSH approved parts designed for the respirator.

11. Repairs to respirators will be made only according to the manufacturer's recommendations and specifications for the type and extent of repairs to be made.

12. Reducing and admission valves, regulators and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

Program Evaluation:

1. The manager will evaluate this program as necessary to ensure that the program is being properly implemented and to consult with employees to ensure that they are using respirators properly. This evaluation will be performed at least annually.

2. Employees who use respirators will be consulted to determine their views on program effectiveness and any problems with the program.

3. The respiratory protection program administrator will ensure that all problems identified during this assessment are corrected

4. Initial factors to be assessed during each evaluation include:

   (a) Respirator fit, including the ability to use the respirator without interfering with effective workplace performance.

   (b) Appropriate respirator selection for the hazards to which the employee is exposed.

   (c) Proper respirator use under the workplace conditions the employee encounters; and

   (d) Proper respirator maintenance.

   (e) Any other aspect of this program.

Training:

1. The manager will train employees as indicated in this section.

2. Employees who are expected to use respirators will be trained:

   (a) Prior to initial use

   (b) Annually

   (c) When changes in the workplace or the type of respirator require additional training.

   (d) When the employee has not retained the required understanding or skill as indicated by inadequacies in the employee's knowledge or use of the respirator.

   (e) Whenever any other situation arises, which indicates that additional training is necessary, to ensure the safe use of respirators.

3. The training will be understandable to the employee, provided at no cost to the employee, and be comprehensive.

4. Training on the hazards of chemicals will be done according to the chemical hazard communication program.

5. Employees will be trained on the proper use of respirators, including putting them on and removing them, any limitations on their use and maintenance, and any other knowledge required for them to complete their tasks as assigned in this program.

6. Employees will be trained until they can demonstrate their knowledge of all of the following:

   (a) Why the respirator is necessary.

   (b) How improper fit, usage, or maintenance can compromise the protective effect of the respirator.

   (c) The limitations and capabilities of the respirator.

   (d) How to use the respirator effectively in emergency situations including situations in which the respirator malfunctions.

   (e) How to inspect, put on and remove, use and check the seals of the respirator.

   (f) The procedures for maintenance and storage of the respirator.

   (g) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

   (h) The general requirements of this program and the OSHA respiratory protection standard

Appendix A
Respirator Use Area

Respirator Use Area

AREA	CONTAMINANT	RESPIRATOR

Appendix B-1
User Seal Check Procedure

User Seal Check Procedure

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix, or the respirator manufacturers recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

1) Facepiece Positive and/or Negative Pressure Checks

a) Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

b) Negative pressure check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

2) Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

Appendix B-2
Respirator Cleaning Procedure

Respirator Cleaning Procedure

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix B-2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in Appendix B-2, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

Procedures for Cleaning Respirators

1) Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
2) Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
3) Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
4) When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
   a) Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
   b) Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
   c) Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
5) Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
6) Components should be hand-dried with a clean lint-free cloth or air-dried.
7) Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
8) Test the respirator to ensure that all components work properly.

Appendix C

Medical Questionnaire

Medical Questionnaire

To the employer:
Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:
Can you read (circle one): Yes/No
Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: _____
2. Your name: _____
3. Your age (to nearest year) :_____
4. Sex (circle one): Male/Female
5. Your height: _____ ft. _____ in.
6. Your weight: _____ lbs.
7. Your job title: _____
8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):_____
9. The best time to phone you at this number: _____
10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No
11. Check the type of respirator you will use (you can check more than one category):
    a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
    b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
12. Have you worn a respirator (circle one)? Yes/No

    If "yes," what type(s):_____

    _____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1) Do you *currently* smoke tobacco, or have you smoked tobacco in the last month? Yes/No
2) Have you *ever had* any of the following conditions?
    a) Seizures (fits): Yes/No

b) Diabetes (sugar disease): Yes/No

c) Allergic reactions that interfere with your breathing: Yes/No

d) Claustrophobia (fear of closed-in places): Yes/No

e) Trouble smelling odors: Yes/No

3) Have you *ever had* any of the following pulmonary or lung problems?

a) Asbestosis: Yes/No

b) Asthma: Yes/No

c) Chronic bronchitis: Yes/No

d) Emphysema: Yes/No

e) Pneumonia: Yes/No

f) Tuberculosis: Yes/No

g) Silicosis: Yes/No

h) Pneumothorax (collapsed lung): Yes/No

i) Lung cancer: Yes/No

j) Broken ribs: Yes/No

k) Any chest injuries or surgeries: Yes/No

l) Any other lung problem that you've been told about: Yes/No

4) Do you *currently* have any of the following symptoms of pulmonary or lung illness?

a. Shortness of breath: Yes/No

b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No

c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No

d. Have to stop for breath when walking at your own pace on level ground: Yes/No

e. Shortness of breath when washing or dressing yourself: Yes/No

f. Shortness of breath that interferes with your job: Yes/No

g. Coughing that produces phlegm (thick sputum): Yes/No

h. Coughing that wakes you early in the morning: Yes/No

i. Coughing that occurs mostly when you are lying down: Yes/No

j. Coughing up blood in the last month: Yes/No

k. Wheezing: Yes/No

l. Wheezing that interferes with your job: Yes/No

m. Chest pain when you breathe deeply: Yes/No

n. Any other symptoms that you think may be related to lung problems: Yes/No

5) Have you *ever had* any of the following cardiovascular or heart problems?

a) Heart attack: Yes/No

b) Stroke: Yes/No

c) Angina: Yes/No

d) Heart failure: Yes/No

e) Swelling in your legs or feet (not caused by walking): Yes/No

f) Heart arrhythmia (heart beating irregularly): Yes/No

g) High blood pressure: Yes/No

h) Any other heart problem that you've been told about: Yes/No

6) Have you *ever had* any of the following cardiovascular or heart symptoms?

a) Frequent pain or tightness in your chest: Yes/No

b) Pain or tightness in your chest during physical activity: Yes/No

c) Pain or tightness in your chest that interferes with your job: Yes/No

d) In the past two years, have you noticed your heart skipping or missing a beat: Yes/No

e) Heartburn or indigestion that is not related to eating: Yes/ No

f) Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7) Do you *currently* take medication for any of the following problems?

a) Breathing or lung problems: Yes/No

b) Heart trouble: Yes/No

c) Blood pressure: Yes/No

d) Seizures (fits): Yes/No

8) If you've used a respirator, have you *ever had* any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

a) Eye irritation: Yes/No

b) Skin allergies or rashes: Yes/No

c) Anxiety: Yes/No

d) General weakness or fatigue: Yes/No

e) Any other problem that interferes with your use of a respirator: Yes/No

9) Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10) Have you *ever lost* vision in either eye (temporarily or permanently): Yes/No

11) Do you *currently* have any of the following vision problems?

a) Wear contact lenses: Yes/No

b) Wear glasses: Yes/No

c) Color blind: Yes/No

d) Any other eye or vision problem: Yes/No

12) Have you *ever had* an injury to your ears, including a broken eardrum? Yes/No

13) Do you *currently* have any of the following hearing problems?

a) Difficulty hearing: Yes/No

b) Wear a hearing aid: Yes/No

c) Any other hearing or ear problem: Yes/No

14) Have you *ever had* a back injury? Yes/No

15) Do you *currently* have any of the following musculoskeletal problems?

a) Weakness in any of your arms, hands, legs, or feet: Yes/No

b) Back pain: Yes/No

c) Difficulty fully moving your arms and legs: Yes/No

d) Pain or stiffness when you lean forward or backward at the waist: Yes/No

e) Difficulty fully moving your head up or down: Yes/No

f) Difficulty fully moving your head side to side: Yes/No

g) Difficulty bending at your knees: Yes/No

h) Difficulty squatting to the ground: Yes/No

i) Climbing a flight of stairs or a ladder carrying more than 25 lbs.: Yes/No

j) Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B. Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1) In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen? Yes/No
If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest or other symptoms when you're working under these conditions? Yes/No

2) At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No
If "yes," name the chemicals if you know them: _____
_____

3) Have you ever worked with any of the materials, or under any of the conditions, listed below?

a) Asbestos: Yes/No

b) Silica (*e.g.*, in sandblasting): Yes/No

c) Tungsten/cobalt (e.g., grinding or welding this material): Yes/No

d) Beryllium: Yes/No

e) Aluminum: Yes/No

f) Coal (for example, mining): Yes/No

g) Iron: Yes/No

h) Tin: Yes/No

i) Dusty environments: Yes/No

j) Any other hazardous exposures: Yes/No
If "yes," describe these exposures:

_____

_____

4) List any second jobs or side businesses you have: _____

_____

5) List your previous occupations: _____

_____

6) List your current and previous hobbies: _____

_____

7) Have you been in the military services? Yes/No
If "yes," were you exposed to biological or chemical agents (either in training or combat)? Yes/No

8) Have you ever worked on a HAZMAT team? Yes/No

8) Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications)? Yes/No
If "yes," name the medications if you know them: _____

10) Will you be using any of the following items with your respirator(s)?

a) HEPA Filters: Yes/No

b) Canisters (for example, gas masks): Yes/No

c) Cartridges: Yes/No

11) How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?

a) Escape only (no rescue): Yes/No

b) Emergency rescue only: Yes/No

c) Less than 5 hours *per week:* Yes/No

d) Less than 2 hours *per day:* Yes/No

e) 2 to 4 hours per day: Yes/No

f) Over 4 hours per day: Yes/No

12) During the period you are using the respirator(s), is your work effort:

a) *Light* (less than 200 kcal per hour): Yes/No
If "yes," how long does this period last during the average shift: _____hrs._____mins.
Examples of a light work effort are *sitting* while writing, typing, drafting, or performing light assembly work; or *standing* while operating a drill press (1-3 lbs.) or controlling machines.

b) *Moderate* (200 to 350 kcal per hour): Yes/No
If "yes," how long does this period last during the average shift:_____hrs._____mins.
Examples of moderate work effort are *sitting* while nailing or filing; *driving* a truck or bus in urban traffic; *standing* while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; *walking* on a level surface about 2 mph or down a 5-degree grade about 3 mph; or *pushing* a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c) *Heavy* (above 350 kcal per hour): Yes/No
If "yes," how long does this period last during the average shift: _____hrs._____mins.
Examples of heavy work are *lifting* a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; *shoveling; standing* while bricklaying or chipping castings; *walking* up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13) Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator? Yes/No
If "yes," describe this protective clothing and/or equipment:_____

_____

14) Will you be working under hot conditions (temperature exceeding 77 degrees F)? Yes/No

15) Will you be working under humid conditions? Yes/No

16) Describe the work you'll be doing while you're using your respirator(s):

_____

_____

17) Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):

_____

_____

18) Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of the first toxic substance:_____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the second toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift:_____

Name of the third toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

The name of any other toxic substances that you'll be exposed to while using your respirator:

_____

_____

19) Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):

_____

_____

Appendix D

Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you 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 heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, (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 against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

I have read the instructional statement above, understand the content and have had the opportunity to have my questions answered.

Employee Signature: _____

Date: _____

Appendix E

Particulate Respirator Selection

The filter packaging of Part 84 particulate respirators contain certification numbers of the form TC-84A-XXXX. Users can identify three types of filters with three efficiencies each, as follows:

- Respirators with N100, N99, and N95 filters (99.97%, 99%, and 95% efficient filters) may be used for any solid or non-oil containing particulate contaminant.
- Respirators with R100, R99, and R95 filters (99.97%, 99%, and 95% efficient filters) may be used for any particulate contaminant. If used for an oil containing particulate, a one-shift use limit applies.
- Respirators with P100, P99, and P95 filters (99.97%, 99%, and 95% efficient filters) may be used for any particulate contaminant. If oil particles are present and the filter is to be used for more than one shift, use only P-series.

No particle size limits apply to respirators with Part 84 filters. Protection for the user is based on the efficiency of the filter and the PEL of the contaminant, usually determined by an industrial hygienist

To select the correct respirator for protection against particulates, the following conditions must be known:

- The identity and concentration of the particulates in the workplace air
- The OSHA or MSHA permissible exposure limit (PEL), the NIOSH recommended exposure limit (REL), or other occupational exposure limit for the contaminant
- The hazard ratio (HR) (i.e., the airborne particulate concentration divided by the exposure limit)
- The Assigned Protection Factor (APF) for the class of respirator (the APF should be greater than the (HR)
- The immediately dangerous to life or health (IDLH) concentration, including oxygen deficiency [NIOSH 1994]
- Any service life information available for combination cartridges or canisters

Multiplying the occupational exposure limit by the APF for a respirator gives the maximum workplace concentration in which that respirator can be used. For example, if the commonly accepted APF for a half-mask respirator is 10 and the PEL is $5mg/m^3$, then 50 milligrams/cubic meter is the highest workplace concentration in which a half-mask respirator can be used against that contaminant. If the workplace concentration is greater that $50mg/m^3$, a more protective respirator (with a higher APF) should be used. In no case should an air-purifying respirator be used in IDLH concentrations, or in areas that are oxygen deficient.

Appendix F

Employee Fit Test Record

Employee Name: _____

Date of Fit Test: _____ **Conducted By:** _____

Respirator: **Make:** _____

Model: _____

Style: _____

Size: _____

Type of Test:

Qualitative (QLFT)

- ❑ Isoamyl Acetate
- ❑ Saccharin
- ❑ Bitrex
- ❑ Irritant Smoke
- ❑ Other: _____

- ❑ Passed
- ❑ Failed

Quantitative (QNFT)

- ❑

Comments:

_____

_____

_____

_____

I agree with this assessment: _____ _____

Employee Signature Date

Important Things For You to Remember ...

RESPIRATORY PROTECTION

- ✓ **Wear respiratory protection when and where it is required at work**
- ✓ **Follow all instructions for use**

USE AN AIR PURIFYING RESPIRATOR (APR):

- ✓ With known chemicals
- ✓ With known concentrations

NEVER USE APRs:

- ✓ When fighting a fire
- ✓ In an oxygen deficient atmosphere
- ✓ In areas containing unknown contaminants or concentrations

APR MAINTENANCE

Follow the replacement schedule for cartridges and filters, or when:

- ✓ You smell or taste the chemical you are using
- ✓ Breathing is difficult
- ✓ The ESLI (end of service life indicator) shows time for a change

City of Lewiston

Safe Excavation and Trenching

Exposure Control Plan

Safe Excavation and Trenching Policy

Effective Date:
Revision Number: 1

Purpose:
This policy establishes the responsibilities of City of Lewiston, its managers/supervisors and its employees in maintaining a safe and productive working environment. It is in place to ensure that all parties closely follow safety guidelines and to reduce the number of preventable on-the-job injuries.

Scope:
Safety while excavating or trenching is everyone's responsibility. Therefore, this policy applies to all employees whether they are on the work site daily or occasionally in the capacity of worker, supervisor or safety manager.

Applicability:
This policy applies whenever any excavations are made. This Includes: a trench, or a narrow excavation made below the surface of the ground where the depth is greater than the width, but where the width does not exceed 15 feet or a general excavation, which is any man-made cut, cavity, trench or depression in the earth's surface formed by earth removal, including anything from cellars to highways.

Responsibilities:
The following responsibilities apply to various levels within the company.

- **Senior management will:** require the full application and integration of this policy into daily operations, as applicable, in all areas of responsibility and with all direct reports to assist managers and supervisors in their ability to apply this policy
- **The designated safety administrator will:** administer all aspects of this policy, coordinate training for affected employees, provide necessary technical assistance to managers and supervisors, maintain and update the written program as required and periodically assess the effectiveness of this program and its on-site implementation.
- **Managers and supervisors will:** know how this policy applies to those employees under their direct control, integrate and enforce this policy's provisions in their areas of responsibility, help coordinate training for affected employees and provide coaching and corrective action when employees' actions violate this policy.
- **All affected employees will:** do their best to integrate the safety practices presented in this policy in their daily activity on site, follow all training, instructions and directives relative to this policy and seek clarification whenever there are questions concerning the application of this policy in daily operations.

Site Inspection:
The fatality rate for excavation and trenching work is 112 percent higher than the rate for general construction. Therefore, it is crucial that the work site be inspected for safety not only before digging for the first time, but also before work begins on the site every day, as needed throughout the course of the workday, following rainstorms or following any other hazard-increasing event. The designated inspector at the City will be a competent person who demonstrates:

- Training, experience and knowledge of soil analysis

- use of protective systems
- the ability to detect conditions that could result in cave-ins
- failures of protective systems and hazardous atmospheres
- the authority to take prompt corrective measures to eliminate existing and predictable hazards
- the authority and ability to stop work when required.

Pre-Job Inspection:
Before preparing a bid, carefully evaluate:

- Area traffic flow
- the water table
- soil conditions
- surface and groundwater conditions
- proximity of structures and their condition
- location of overhead and underground utilities, including sewer, telephone, fuel, electric, water, etc.

Pre-Work Inspection:
Before excavation begins:

- remove, protect, clearly mark and properly support exposed utility installations
- provide properly marked, highly visible vests to any employees exposed to vehicle traffic
- remove, neutralize or properly mark potentially hazardous surface obstacles
- ensure all employees are properly trained on the equipment they will be using on-site
- debrief employees on the emergency response system in place in the event of an accident.

On-the-Job Inspection:
Before work each day, periodically during the day and after a heavy rain or other potentially hazardous conditions:

- evaluate all soil conditions
- inspect excavations and adjacent areas for possible cave-ins, failures of protective systems/equipment and hazardous atmospheres
- remove any employees from the area if you detect a hazardous situation
- and make sure everyone on the site is wearing the proper personal protective equipment (PPE)

General Site Safety: Check the site for any other safety issues other than excavation and trenching.
Supervisor/Manager Duties:
Those in the management, supervisor or designated safety person responsibilities will be depended upon to:

- provide safe access into and out of the excavation site
- ensure adequate ventilation or respiratory protection is available in the event of hazardous fumes
- ensure appropriate protections are available if water accumulation is a problem or becomes a problem on the site during the course of the workday
- keep excavation site open the minimum amount of time needed to complete operations ensure all materials and equipment are free from damage or defect
- make sure employees are using materials and equipment in the way the manufacturer intended

- maintain at least one copy of the design at the jobsite during construction of the protective system
- attend lifelines at all times when employees enter bell-bottom pier holes, deep confined spaces or other hazardous conditions.

Employee Duties:
Employees will be depended upon to:

- wear all PPE correctly
- use all equipment and materials only in the way intended by the manufacturer
- do not work in excavations where there is accumulated water unless you feel your supervisor has taken adequate steps to protect you from the dangers posed by water accumulation
- if you are in doubt of the air quality have it tested and wear the proper PPE
- use guardrails when crossing walkways or bridges over the excavation site
- do not enter a confined space unless you are trained to do so.

Spoil Safety:
The weight of the spoils at your site can cause a cave-in or can roll back on top of workers, especially if placed in an unsafe area. To avoid hazards:

- set spoils and equipment at least 2 feet back from the excavation
- use a trench box or other retaining device to prevent equipment and spoils from falling back into the site
- if the site does not allow a 2-foot setback, arrange for spoils to be temporarily hauled to another location.

Entry/Exit Safety:
In some cases, your survival in an accident may depend on how fast you can exit the site. Supervisors and managers are responsible for the following items, but employees also have the responsibility to immediately notify management if the access conditions are unsafe.

- Stairways, ladders or ramps should exist in all trenches that are 4 feet deep or more. Workers should always be within 25 lateral feet of a means of exit.
- Two or more components of a ramp or runway must be connected to prevent displacement and must be of uniform thickness. Components of a ramp or runway must be connected by cleats that are attached in a way that does not cause tripping. Structural ramps must have a non-slip surface, and employees should have proper footwear to prevent slipping on ramps. Earthen ramps may only be used as an exit if a worker can walk on them in an upright position and if they have been evaluated by a competent person.

Protective Support Safety:

- All deep excavations must be protected by a system designed by a registered, professional engineer before any sloping, benching or support system is selected.
- The soil will be evaluated and classified by a professional shoring, bracing or underpinning will be used to ensure the stability of nearby structures, like buildings, walls, sidewalks or pavement.
- There will be no excavating below the level of the base of any foundation or retaining wall unless there is an adequate support system.
- Excavating under sidewalk and pavement is prohibited unless there is an appropriate support system present. For the protection of employees, support system members will be

securely connected, safely and properly installed and never overloaded with excess weight.

- After work is complete, the excavation must be backfilled as the protective system is dismantled.
- After the excavation has been cleared, workers will remove the protective system from the bottom up.

Material and Equipment Safety:

- Keep all materials/equipment that might fall or roll into the site at least two feet from the edge, use retaining devices, or do both.
- Know the warning system for alerting equipment operators of the edge of an excavation. Always load buckets or hoppers down grade to increase the speed of operation, lessen the wear and reduce the need for a push tractor.
- Never use an elevating part of a vehicle or machine as a man-lift unless it is specifically designed for that purpose.
- If materials or equipment become damaged during operation, alert a supervisor or manager immediately.
- Only use equipment in a way that the manufacturer intended and that reduces or eliminates hazards.
- Stand as far away as you can from equipment being loaded or unloaded.
- Do not carry extra passengers in vehicles or equipment that is not designed to carry more than one person.
- Check all vehicles at the beginning of each shift and ensure proper order of the service brakes, parking system, brakes, tires, horn, steering mechanism, coupling devices, seat belts, operating controls and all safety devices.
- Use the three-point climbing system when mounting or dismounting equipment.
- Only operate vehicles and equipment near excavations when the ground conditions are safe and stable.
- You may not stand or pass under the elevated portion of any equipment, regardless of whether it is loaded or empty.
- Do not drive equipment up to a person standing in front of an excavation or a fixed object.
- When not in use, equipment and vehicles must be fully lowered, neutralized, shut off and wheels must be blocked.
- Do not handle unstable or unsafely arranged loads.
- Do not handle loads greater than the equipment's capacity.
- Before moving, secure the load as best as possible within the bucket or hopper.
- Do not move the machine, vehicle or equipment you are using unless you are aware of all ground workers' positions around you.

Fall Safety:

- Use scaling to remove loose rock/soil, and make sure protective barricades are present to protect you from falling rock, soil or other materials.
- The City prohibits employees from working on faces of sloped or benched excavations at levels above other employees unless the lower-level employees are properly protected from falling, rolling or sliding material and from all other equipment hazards.
- Do not work under loads handled by lifting or digging equipment - you could get struck or buried by material.

- Always be aware that a trench can fail - look out for tension cracks, sliding, toppling or bulging.
- Do not cross a trench unless there is a safe pedestrian walkway/bridge or designated vehicle crossing area under the supervision of a safety manager.

City of Lewiston Safe Excavation and Trenching Policy:
At the City of Lewiston, the safety of our employees is our greatest concern. We want you to feel confident in your security while you are on the job site, which is why we established this Safe Excavation and Trenching Policy.
All employees are expected to understand and actively participate in these safety procedures, guidelines and requirements. The City encourages its employees to take a proactive approach in identifying potential problems or violations by promptly reporting them to their supervisor. Prior to working on any Job Site, each employee is expected to have read the entire Safe Excavation and Trenching Policy, which includes: Site Inspection, General Site Safety, Spoil Pile Safety, Entry/Exit Safety, Protective Support Safety, Material and Equipment Safety and Fall Safety.

If you have any uncertainty or questions regarding the content of these policies, you are required to consult with your supervisor. This should be done prior to signing and agreeing to the City of Lewiston Safe Excavation and Trenching Policy.

I have read and understand City of Lewiston's Safe Excavation and Trenching Policy, and I understand the requirements and expectations of me as an employee. I will do everything within my power to keep me and my co-workers away from hazards while excavating and trenching because I know site safety is everyone's responsibility.

Employee Signature: _____

Date: _____

City of Lewiston
Scaffolding Safety
Exposure Control Plan

Scaffolding Safety Guidelines

Effective Date:
Revision Number: 1

Scaffolds shall be furnished and erected in accordance with this standard for persons engaged in work that cannot be done safely from the ground or from solid construction.

The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks.

Scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.

Scaffolds and other devices mentioned or described in this section shall be maintained in safe condition.
Scaffolds shall not be altered or moved horizontally while they are in use or occupied.

Any scaffold damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.

Scaffolds shall not be loaded in excess of the working load for which they are intended.

All load-carrying timber members of scaffold framing shall be a minimum of 1,500 f. (Stress Grade) construction grade lumbers. All dimensions are nominal sizes as provided in the American Lumber Standards, except that where rough sizes are noted, only rough and undressed lumber or the size specified will satisfy minimum requirements. (Note: Where nominal sizes of lumber are used in place of rough sizes, the nominal size lumber shall be such as to provide equivalent strength.

All planking shall be Scaffold Grade as recognized by grading rules for the species of wood used. The maximum permissible spans for 2- X 9-inch or wider planks are shown in the following table:

	Material			
	Full thickness Undressed lumber	Nominal thickness lumber		
Working load (p.s.f.)	25	50	75	25	50
Permissible span (ft.)	10	8	6	8	9

The maximum permissible span for 1 1/4 x 9-inch or wider plank of full thickness is 4 feet with medium loading of 50 p.s.f.

- Nails or bolts used in the construction of scaffolds shall be of adequate size and in sufficient numbers at each connection to develop the designed strength of the scaffold. Nails shall not be subjected to a straight pull and shall be driven full length.
- All planking or platforms shall be overlapped (minimum 12 inches) or secured from movement.
- An access ladder or equivalent safe access shall be provided.
- Scaffold planks shall extend over their end supports not less than 6 inches nor more than 18 inches.
- The poles, legs, or uprights of scaffolds shall be plumb, and securely and rigidly braced to prevent swaying and displacement.
- Materials being hoisted onto a scaffold shall have a tag line.
- Overhead protection shall be provided for men on a scaffold exposed to overhead hazards.
- Scaffolds shall be provided with a screen between the toe board and the guardrail, extending along the entire opening, consisting of No. 18 gauge U.S. Standard Wire one-half-inch mesh or the equivalent, where persons are required to work or pass under the scaffolds.
- Employees shall not work on scaffolds during storms or high winds.
- Employees shall not work on scaffolds which are covered with ice or snow, unless all ice or snow is removed and planking sanded to prevent slipping.
- Tools, materials, and debris shall not be allowed to accumulate in quantities to cause a hazard.
- Only treated or protected fiber rope shall be used for or near any work involving the use of corrosive substances or chemicals.
- Wire or fiber rope used for scaffold suspension shall be capable of supporting at least six times the intended load.

- When acid solutions are used for cleaning buildings over 50 feet in height, wire rope supported scaffolds shall be used.

The use of shore scaffolds or lean-to scaffolds is prohibited.

Lumber sizes, when used in this section; refer to nominal sizes except where otherwise stated.
Scaffolds shall be secured to permanent structures, through use of anchor bolts, reveal bolts, or other equivalent means. Window cleaners' anchor bolts shall not be used.
Special precautions shall be taken to protect scaffold members, including any wire or fiber ropes, when using a heat-producing process.

General requirements for wood pole scaffolds:

- Scaffold poles shall bear on a foundation of sufficient size and strength to spread the load from the poles over a sufficient area to prevent settlement. All poles shall be set plumb.
- Where wood poles are spliced, the ends shall be squared and the upper section shall rest squarely on the lower section. Wood splice plates shall be provided on at least two adjacent sides and shall not be less than 4 feet 0 inches in length, overlapping the abutted ends equally, and have the same width and not less than the cross-sectional area of the pole. Splice plates of other materials of equivalent strength may be used.
- Independent pole scaffolds shall be set as near to the wall of the building as practicable.
- All pole scaffolds shall be securely guyed or tied to the building or structure. Where the height or length exceeds 25 feet, the scaffold shall be secured at intervals not greater than 25 feet vertically and horizontally.
- Putlogs or bearers shall be set with their greater dimensions vertical, long enough to project over the ledgers of the inner and outer rows of poles at least 3 inches for proper support.
- Every wooden putlog on single pole scaffolds shall be reinforced with a 3/16 x 2-inch steel strip or equivalent secured to its lower edge throughout its entire length.
- Ledgers shall be long enough to extend over two pole spaces. Ledgers shall not be spliced between the poles. Ledgers shall be reinforced by bearing blocks securely nailed to the side of the pole to form a support for the ledger.
- Diagonal bracing shall be provided to prevent the poles from moving in a direction parallel with the wall of the building, or from buckling.
- Cross bracing shall be provided between the inner and outer sets of poles in independent pole scaffolds. The free ends of pole scaffolds shall be cross braced.
- Full diagonal face bracing shall be erected across the entire face of pole scaffolds in both directions. The braces shall be spliced at the poles.
- Platform planks shall be laid with their edges close together so the platform will be tight with no spaces through which tools or fragments of material can fall.
- Where planking is lapped, each plank shall lap its end supports at least 12 inches. Where the ends of planks abut each other to form a flush floor, the butt joint shall be at the centerline of a pole. The abutted ends shall rest on separate bearers. Intermediate beams shall be provided where necessary to prevent dislodgment of planks due to deflection, and the ends shall be nailed or cleated to prevent their dislodgment.

- When a scaffold turns a corner, the platform planks shall be laid to prevent tipping. The planks that meet the corner putlog at an angle shall be laid first, extending over the diagonally placed putlog far enough to have a good safe bearing, but not far enough to involve any danger from tipping. The planking running in the opposite direction at right angles shall be laid so as to extend over and rest on the first layer of planking.
- When moving platforms to the next level, the old platform shall be left undisturbed until the new putlogs or bearers have been set in place, ready to receive the platform planks.
- Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1 x 4-inch lumber or equivalent, and toe boards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toe boards shall be a minimum of 4 inches in height. Wire mesh shall be installed in accordance with paragraph (a) (17) of this section.
- All wood pole scaffolds 60 feet or less in height shall be constructed and erected in accordance with tables D-7 through D-12 of this section. If they are over 60 feet in height they shall be designed by a registered professional engineer and constructed and erected in accordance with such design. A copy of the typical drawings and specifications shall be made available to the employer and for inspection purposes.

Wood-pole scaffolds shall not be erected beyond the reach of effective firefighting apparatus.

TABLE D-7 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF SINGLE POLE SCAFFOLDS - LIGHT DUTY

	Maximum height of scaffold	
	20 feet	60 feet
Uniformly distributed load	Not to exceed 25 pounds per square foot.	
Poles or uprights	2 by 4 in.	4 by 4 in.
Pole spacing (longitudinal)	6 ft. 0 in.	10 ft. 0 in.
Maximum width of scaffold	5 ft. 0 in.	5 ft. 0 in.
Bearers or putlogs to 3 ft. 0 in. Width	2 by 4 in.	2 by 4 in.
Bearers or putlogs to 5 ft. 0 in. Width	2 by 6 in. or 3 by 4 in.	2 by 6 in. or 3 by 4 in. (rough).
Ledgers	1 by 4 in.	1 1/4 by 9 in.
Planking	1 1/4 by 9 in. (rough)	2 by 9 in.
Vertical spacing of horizontal members	7 ft. 0 in.	7 ft. 0 in.
Bracing, horizontal and diagonal.	1 by 4 in.	1 by 4 in.

Tie-ins	1 by 4 in	1 by 4 in.
Toe boards	4 in. high (minimum)	4 in. high (minimum)

Guardrail	2 by 4 in.	2 by 4 in.

All members except planking are used on edge.

TABLE D-8 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF SINGLE POLE SCAFFOLDS - MEDIUM DUTY

Uniformly distributed load	Not to exceed 50 pounds per square foot.
Maximum height of scaffold	60 ft.
Poles or uprights	4 by 4 in.
Pole spacing (longitudinal)	8 ft. 0 in.
Maximum width of scaffold	5 ft. 0 in.
Bearers or putlogs	2 by 9 in. or 3 by 4 in.
Spacing of bearers or putlogs	8 ft. 0 in.
Ledgers	2 by 9 in.
Vertical spacing of horizontal members.	9 ft. 0 in.
Bracing, horizontal	1 by 6 in. or 1 1/4 by 4 in.
Bracing, diagonal	1 by 4 in.
Tie-ins	1 by 4 in.
Planking	2 by 9 in.
Toeboards	4 in. high (minimum).
Guardrail	2 by 4 in.

All members except planking are used on edge.

TABLE D-9 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF SINGLE POLE SCAFFOLDS - HEAVY DUTY

Uniformly distributed load	Not to exceed 75 pounds per square foot.
Maximum height of scaffold	60 ft.
Poles or uprights	4 by 4 in.
Pole spacing (longitudinal)	6 ft. 0 in.
Maximum width of scaffold	5 ft. 0 in.
Bearers or putlogs	2 by 9 in. or 3 by 5 in.(rough)
Spacing of bearers or putlogs	6 ft. 0 in.
Ledgers	2 by 9 in.
Vertical spacing of horizontal members.	6 ft. 6 in.

Bracing, horizontal and diagonal	2 by 4 in.
Tie-ins	1 by 4 in.
Planking	2 by 9 in.
Toeboards	4 in. high (minimum).
Guardrail	2 by 4 in.

All members except planking are used on edge.

TABLE D-10 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF INDEPENDENT POLE SCAFFOLDS - LIGHT DUTY

	Maximum height of scaffold	
	20 feet	60 feet
Uniformly distributed load	Not to exceed 25 pounds per square foot.	
Poles or uprights	2 by 4 in.	4 by 4 in.
Pole spacing (longitudinal)	6 ft. 0 in.	10 ft. 0 in.
Pole spacing (transverse)	6 ft. 0 in.	10 ft. 0 in.
Ledgers	1 1/4 by 4 in.	1 1/4 by 9 in.
Bearers to 3 ft. 0 in. span	2 by 4 in.	2 by 4 in.
Bearers to 10 ft. 0 in. span	2 by 6 in. or 3 by 4 in.	2 by 9 in. (rough) or 3 by 8 in.
Planking	1 1/4 by 9 in.	2 by 9 in.
Vertical spacing of horizontal members	7 ft. 0 in.	7 ft. 0 in.
Bracing, horizontal and diagonal.	1 by 4 in.	1 by 4 in.
Tie-ins	1 by 4 in.	1 by 4 in.
Toe boards	4 in. high	4 in. high (minimum)
Guardrail	2 by 4 in.	2 by 4 in.

All members except planking are used on edge.

TABLE D-11 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF INDEPENDENT POLE SCAFFOLDS - MEDIUM DUTY

Uniformly distributed load	Not to exceed 50 pounds per square foot.
Maximum height of scaffold	60 ft.
Poles or uprights	4 by 4 in.
Pole spacing (longitudinal)	8 ft. 0 in.
Pole spacing (transverse)	8 ft. 0 in.
Ledgers	2 by 9 in.
Vertical spacing of horizontal members	6 ft. 0 in.
Spacing of bearers	8 ft. 0 in.
Bearers	2 by 9 in. (rough) or 2 by 10 in.
Bracing, horizontal	1 by 6 in. or 1 1/4 by 4 in.
Bracing, diagonal	1 by 4 in.
Tie-ins	1 by 4 in.
Planking	2 by 9 in.
Toeboards	4 in. high (minimum).
Guardrail	2 by 4 in.

All members except planking are used on edge.

TABLE D-12 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF INDEPENDENT POLE SCAFFOLDS - HEAVY DUTY

Uniformly distributed load	Not to exceed 75 pounds per square foot.
Maximum height of scaffold	60 ft.
Poles or uprights	4 by 4 in.
Pole spacing (longitudinal)	6 ft. 0 in.
Pole spacing (transverse)	8 ft. 0 in.
Ledgers	2 by 9 in.
Vertical spacing of horizontal members.	4 ft. 6 in.
Bearers	2 by 9 in. (rough)
Bracing, horizontal and diagonal	2 by 4 in.
Tie-ins	1 by 4 in.
Planking	2 by 9 in.
Toeboards	4 in. high (minimum).
Guardrail	2 by 4 in.

All members except planking are used on edge.

TABLE D-13 - TUBE AND COUPLER SCAFFOLDS - LIGHT DUTY

Uniformly distributed load	Not to exceed 25 p.s.f.
Post spacing (longitudinal)	10 ft. 0 in.
Post spacing (transverse)	6 ft. 0 in.

Working levels	Additional planked levels	Maximum height
1	8	125 ft.
2	4	125 ft.
3	0	91 ft. 0 in.

TABLE D-14 - TUBE AND COUPLER SCAFFOLDS - MEDIUM DUTY

Uniformly distributed load	Not to exceed 50 p.s.f.
Post spacing (longitudinal)	8 ft. 0 in.
Post spacing (transverse)	6 ft. 0 in.

Working levels	Additional planked levels	Maximum height
1	6	125 ft.
2	0	78 ft. 0 in.

TABLE D-15 - TUBE AND COUPLER SCAFFOLDS - HEAVY DUTY

Uniformly distributed load	Not to exceed 75 p.s.f.

Post spacing (longitudinal).....| 6 ft. 6 in.
Post spacing (transverse).....| 6 ft. 0 in.

Working levels	Additional planked levels	Maximum height
1	6	125 ft.

1910.28(c)
"Tube and coupler scaffolds."
A light-duty tube and coupler scaffold shall have all posts, bearers, runners, and bracing of nominal 2-inch O.D. steel tubing. The posts shall be spaced no more than 6 feet apart by 10 feet along the length of the scaffold. Other structural metals when used must be designed to carry an equivalent load.
A medium-duty tube and coupler scaffold shall have all posts, runners, and bracing of nominal 2-inch O.D. steel tubing. Posts spaced not more than 6 feet apart by 8 feet along the length of the scaffold shall have bearers of nominal 2 1/2-inch O.D. steel tubing. Posts spaced not more than 5 feet apart by 8 feet along the length of the scaffold shall have bearers of nominal 2-inch O.D. steel tubing. Other structural metals when used must be designed to carry an equivalent load.
A heavy-duty tube and coupler scaffold shall have all posts, runners, and bracing of nominal 2-inch O.D steel tubing, with the posts spaced not more than 6 feet apart by 6 feet 6 inches along the length of the scaffold. Other structural metals when used must be designed to carry an equivalent load.
Tube and coupler scaffolds shall be limited in heights and working levels to those permitted in tables D-13, 14, and 15, of this section. Drawings and specification of all tube and coupler scaffolds above the limitations in tables D-13, 14, and 15 of this section shall be designed by a registered professional engineer and copies made available to the employer and for inspection purposes.
All tube and coupler scaffolds shall be constructed and erected to support four times the maximum intended loads as set forth in tables D-13, 14, and 15 of this section, or as set forth in the specifications by a registered professional engineer, copies which shall be made available to the employer and for inspection purposes.
All tube and coupler scaffolds shall be erected by competent and experienced personnel.
Posts shall be accurately spaced, erected on suitable bases, and maintained plumb.
Runners shall be erected along the length of the scaffold located on both the inside and the outside posts at even height. Runners shall be interlocked to form continuous lengths and coupled to each post. The bottom runners shall be located as close to the base as possible. Runners shall be placed not more than 6 feet 6 inches on centers.
Bearers shall be installed transversely between posts and shall be securely coupled to the posts bearing on the runner coupler. When coupled directly to the runners, the coupler must be kept as close to the posts as possible.

Bearers shall be at least 4 inches but not more than 12 inches longer than the post spacing or runner spacing. Bearers may be cantilevered for use as brackets to carry not more than two planks.
Cross bracing shall be installed across the width of the scaffold at least every third set of posts horizontally and every fourth runner vertically. Such bracing shall extend diagonally from the inner and outer runners upward to the next outer and inner runners.
Longitudinal diagonal bracing shall be installed at approximately a 45-degree angle from near the base of the first outer post upward to the extreme top of the scaffold. Where the longitudinal length of the scaffold permits, such bracing shall be duplicated beginning at every fifth post. In a similar manner longitudinal diagonal bracing shall also be installed from the last post extending back and upward toward the first post. Where conditions preclude the attachment of this bracing to the posts, it may be attached to the runners.
The entire scaffold shall be tied to and securely braced against the building at intervals not to exceed 30 feet horizontally and 26 feet vertically.
Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1 x 4-inch lumber or equivalent, and toe boards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toe boards shall be a minimum of 4 inches in height. Wire mesh shall be installed in accordance with paragraph (a) (17) of this section.
"Tubular welded frame scaffolds."
Metal tubular frame scaffolds, including accessories such as braces, brackets, trusses, screw legs, ladders, etc., shall be designed and proved to safely support four times the maximum intended load.
Spacing of panels or frames shall be consistent with the loads imposed.
Scaffolds shall be properly braced by cross bracing or diagonal braces, or both, for securing vertical members together laterally, and the cross braces shall be of such length as will automatically square and aline vertical members so that the erected scaffold is always plumb, square, and rigid. All brace connections shall be made secure.
Scaffold legs shall be set on adjustable bases or plain bases placed on mud sills or other foundations adequate to support the maximum intended load.
The frames shall be placed one on top of the other with coupling or stacking pins to provide proper vertical alignment of the legs.
Where uplift may occur, panels shall be locked together vertically by pins or other equivalent suitable means.
Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1- x 4-inch lumber or equivalent, and toe boards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toe boards shall be a minimum of 4 inches in height. Wire mesh shall be installed in accordance with paragraph (a)(17) of this section.
All tubular metal scaffolds shall be constructed and erected to support four times the maximum intended loads.
To prevent movement, the scaffold shall be secured to the building or structure at intervals not to exceed 30 feet horizontally and 26 feet vertically.
Maximum permissible spans of planking shall be in conformity with paragraph (a)(9) of this section.

Drawings and specifications for all frame scaffolds over 125 feet in height above the base plates shall be designed by a registered professional engineer and copies made available to the employer and for inspection purposes.
All tubular welded frame scaffolds shall be erected by competent and experienced personnel.
Frames and accessories for scaffolds shall be maintained in good repair and every defect, unsafe condition, or noncompliance with this section shall be immediately corrected before further use of the scaffold. Any broken, bent, excessively rusted, altered, or otherwise structurally damaged frames or accessories shall not be used.
Periodic inspections shall be made of all welded frames and accessories, and any maintenance, including painting, or minor corrections authorized by the manufacturer, shall be made before further use.
"Outrigger scaffold."
Outrigger beams shall extend not more than 6 feet beyond the face of the building. The inboard end of outrigger beams, measured from the fulcrum point to the extreme point of support, shall be not less than one and one-half times the outboard end in length. The beams shall rest on edge, the sides shall be plumb, and the edges shall be horizontal. The fulcrum point of the beam shall rest on a secure bearing at least 6 inches in each horizontal dimension. The beam shall be secured in place against movement and shall be securely braced at the fulcrum point against tipping.
The inboard ends of outrigger beams shall be securely supported either by means of struts bearing against sills in contact with the overhead beams or ceiling, or by means of tension members secured to the floor joists underfoot, or by both if necessary. The inboard ends of outrigger beams shall be secured against tipping and the entire supporting structure shall be securely braced in both directions to prevent any horizontal movement.
Unless outrigger scaffolds are designed by a licensed professional engineer, they shall be constructed and erected in accordance with table D-16. Outrigger scaffolds designed by a registered professional engineer shall be constructed and erected in accordance with such design. A copy of the detailed drawings and specifications showing the sizes and spacing of members shall be kept on the job.
Planking shall be laid tight and shall extend to within 3 inches of the building wall. Planking shall be nailed or bolted to outriggers.
Where there is danger of material falling from the scaffold, a wire mesh or other enclosure shall be provided between the guardrail and the toe board.
Where additional working levels are required to be supported by the outrigger method, the plans and specifications of the outrigger and scaffolding structure shall be designed by a registered professional engineer.
"Masons' adjustable multiple-point suspension scaffolds."
The scaffold shall be capable of sustaining a working load of 50 pounds per square foot and shall not be loaded in excess of that figure.
The scaffold shall be provided with hoisting machines that meet the requirements of a nationally recognized testing laboratory. Refer to 1910.7 for definition of nationally recognized testing laboratory.
TABLE D-16 - MINIMUM NOMINAL SIZE AND MAXIMUM SPACING OF MEMBERS OF OUTRIGGER SCAFFOLDS

	Light duty	Medium duty
Maximum scaffold load	25 p.s.f.	50 p.s.f.
Outrigger size	2 x 10 in.	3 x 10 in.
Maximum outrigger spacing	10 ft. 0 in.	6 ft. 0 in.
Planking	2 x 9 in.	2 x 9 in.
Guardrail	2 x 4 in.	2 x 4 in.
Guardrail uprights	2 x 4 in.	2 x 4 in.
Toe boards (minimum)	4 in.	4 in.

The platform shall be supported by wire ropes in conformity with paragraph (a) (22) of this section, suspended from overhead outrigger beams.

The scaffold outrigger beams shall consist of structural metal securely fastened or anchored to the frame or floor system of the building or structure.

Each outrigger beam shall be equivalent in strength to at least a standard 7-inch, 15.3-pound steel I-beam, be at least 15 feet long, and shall not project more than 6 feet 6 inches beyond the bearing point.

Where the overhang exceeds 6 feet 6 inches, outrigger beams shall be composed of stronger beams or multiple beams and be installed in accordance with approved designs and instructions.

If channel iron outrigger beams are used in place of I-beams, they shall be securely fastened together with the flanges turned out.

All outrigger beams shall be set and maintained with their webs into vertical position.

A stop bolt shall be placed at each end of every outrigger beam.

The outrigger beam shall rest on suitable wood-bearing blocks.

All parts of the scaffold such as bolts, nuts, fittings, clamps, wire rope, and outrigger beams and their fastenings, shall be maintained in sound and good working condition and shall be inspected before each installation and periodically thereafter.

The free end of the suspension wire ropes shall be equipped with proper size thimbles and be secured by splicing or other equivalent means. The running ends shall be securely attached to the hoisting drum and at least four turns of rope shall at all times remain on the drum.

Where a single outrigger beam is used, the steel shackles or clevises with which the wire ropes are attached to the outrigger beams shall be placed directly over the hoisting drums.

The scaffold platform shall be equivalent in strength to at least 2-inch planking. (For maximum planking spans see paragraph (a) (9) of this section.

Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1 x 4-inch lumber or equivalent, and toe boards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toe boards shall be a minimum of 4 inches in height. Wire mesh shall be installed in accordance with paragraph (a)(17) of this section.

Overhead protection shall be provided on the scaffold, not more than 9 feet above the platform, consisting of 2-inch planking or material of equivalent strength laid tight, when men are at work on the scaffold and an overhead hazard exists.
Each scaffold shall be installed or relocated in accordance with designs and instructions, of a registered professional engineer, and supervised by a competent, designated person.
"Two-point suspension scaffolds (swinging scaffolds)."
Two-point suspension scaffold platforms shall be not less than 20 inches no more than 36 inches wide overall. The platform shall be securely fastened to the hangers by U-bolts or by other equivalent means.
The hangers of two-point suspension scaffolds shall be made of wrought iron, mild steel, or other equivalent material having a cross-sectional area capable of sustaining four times the maximum intended load, and shall be designed with a support for guardrail, intermediate rail, and toe board.
When hoisting machines are used on two-point suspension scaffolds, such machines shall be of a design tested and approved by a nationally recognized testing laboratory. Refer to 1910.7 for definition of nationally recognized testing laboratory.
The roof irons or hooks shall be of wrought iron, mild steel, or other equivalent material of proper size and design, securely installed and anchored. Tie-backs of three-fourth inch manila rope or the equivalent shall serve as a secondary means of anchorage, installed at right angles to the face of the building whenever possible and secured to a structurally sound portion of the building.
Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1- x 4-inch lumber or equivalent, and toe boards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toe boards shall be a minimum of 4 inches in height. Wire mesh shall be installed in accordance with paragraph (a) (17) of this section.
Two-point suspension scaffolds shall be suspended by wire or fiber ropes. Wire and fiber ropes shall conform to paragraph (a) (22) of this section.
The blocks for fiber ropes shall be of standard 6-inch size, consisting of at least one double and one single block. The sheaves of all blocks shall fit the size of rope used.
All wire ropes, fiber ropes, slings, hangers, platforms, and other supporting parts shall be inspected before every installation. Periodic inspections shall be made while the scaffold is in use.
On suspension scaffolds designed for a working load of 500 pounds no more than two men shall be permitted to work at one time. On suspension scaffolds with a working load of 750 pounds, no more than three men shall be permitted to work at one time. Each workman shall be protected by a safety lifebelt attached to a lifeline. The lifeline shall be securely attached to substantial members of the structure (not scaffold), or to securely rigged lines, which will safely suspend the workman in case of a fall.
Where acid solutions are used, fiber ropes are not permitted unless acid-proof.
Two-point suspension scaffolds shall be securely lashed to the building or structure to prevent them from swaying. Window cleaners' anchors shall not be used for this purpose.
The platform of every two-point suspension scaffold shall be one of the following types:
The side stringer of ladder-type platforms shall be clear straight-grained spruce or materials of equivalent strength and durability. The rungs shall be of straight-grained oak, ash, or hickory, at least 1 1/8 inch in diameter, with seven-eighth inch tenons mortised

into the side stringers at least seven-eighth inch. The stringers shall be tied together with the tie rods not less than one-quarter inch in diameter, passing through the stringers and riveted up tight against washers on both ends. The flooring strips shall be spaced not more than five-eighth inch apart except at the side rails where the space may be 1 inch. Ladder-type platforms shall be constructed in accordance with table D-17.

Plank-type platforms shall be composed of not less than nominal 2 x 8-inch unspliced planks, properly cleated together on the underside starting 6 inches from each end; intervals in between shall not exceed 4 feet. The plank-type platform shall not extend beyond the hangers more than 18 inches. A bar or other effective means shall be securely fastened to the platform at each end to prevent its slipping off the hanger. The span between hangers for plank-type platforms shall not exceed 10 feet.

Beam platforms shall have side stringers of lumber not less than 2 x 6 inches set on edge. The span between hangers shall not exceed 12 feet when beam platforms are used. The flooring shall be supported on 2- and 6-inch crossbeams, laid flat and set into the upper edge of the stringers with a snug fit, at intervals of not more than 4 feet, securely nailed in place. The flooring shall be of 1-x 6-inch material properly nailed. Floorboards shall not be spaced more than one-half inch apart.

City of Lewiston
Slings and Lifting Devices
Exposure Control Plan

Slings and Lifting Devices

Effective Date:
Revision Number: 1

Purpose:

This procedure establishes minimum criteria for the use and maintenance of slings and lifting devices.

Scope:

This procedure applies to all of our company employees, all contractors and vendors performing work on company property, and all other individuals who are visiting or have business with our company.

This section applies to slings used in conjunction with other material handling equipment for the movement of material by hoisting, in employments covered by this part. The types of slings covered are those made from alloy steel chain, wire rope, metal mesh, natural or synthetic fiber rope (conventional three strand construction), and synthetic web (nylon, polyester, and polypropylene).

Responsibilities:

Management is responsible for development, review and enforcement of this program. Management is also responsible for appropriate employee training.

- Employees, Contractors and vendors must comply with all procedures outlined in this policy.

Definitions:

Bird Caging: Damage to wire rope that is seen in individual strands of rope being pulled permanently out of the wire rope strand.
Contractor: A non-company employee being paid to perform work in our facility.
Lifting Device: A device, other than a sling, that connects the load to the material handling device.
Sling: An assembly which connects the load to the material handling equipment.
Vendor: A non-company employee being paid to perform a service in our facility.

Procedure:
General:

- Only personnel who are properly trained and authorized are allowed to rig and sling loads in our facility.
- Only slings and lifting devices supplied by our facility will be used by our personnel. No slings from common carriers, contractors or others will be used at any time.
- Our facility will not construct, modify or repair slings or lifting devices.
- All slings and lifting devices will have a permanent mark or tag listing the maximum lifting capacity.
- No sling or lifting device will ever be loaded in excess of the rated capacity or specified working temperature.

- Any damaged or defective sling or lifting device will be taken out of service immediately and replaced.

Safe Use:

- Employees must only follow the procedures approved by our facility when rigging or slinging.
- Any questions regarding proper rigging and slinging procedures should be addressed to the supervisor or manager.
- Before using the sling, employees must verify the weight of the load and be sure that it is equal to or less than the maximum load rating of the sling or lifting device.
- Never modify slings or lifting devices.
- Slings and lifting devices must be securely attached to the load.
- The load must always be balanced.
- Prior to lifting, pad sharp edges and protrusions that could cut or damage slings and lifting devices.
- Do not kink slings.
- Never place fingers, hands or other body parts between the sling and the load.
- Never shock load a sling or lifting device.
- Do not pull slings from under loads while the load is resting on the sling.
- Suspended loads must be kept clear of all objects.
- All employees must be kept clear of elevated loads. Employees in the vicinity of the load must be alerted that a lift is in progress.
- Do not leave a load suspended above the working surface.

Inspection:

Prior to each use all slings and lifting devices will be visually inspected for the following:

All Slings and Lifting Devices:

- Missing parts;
- Missing or unreadable tags and labels;
- Heat or corrosive chemical damage;
- Hooks that are twisted, opened more than 15% of the narrowest throat opening thinned, or otherwise damaged; and
- Hooks twisted more than 10 degrees from the plane of the unbent hook.

Synthetic Web Sling:

- Snags, punctures, tears or cuts;
- Broken or worn stitching;
- Distortion of fittings;
- Melting or charring of any of the surface;
- Visible wear markings; and
- Other signs of damage.

Natural and Synthetic Fiber Rope Slings:

- Visible wear markings;
- Knots will not be used in place of splices;
- Powdered fiber between strands;
- Variation in the size or roundness of strands;
- Broken fibers, cuts, frays;
- Discoloration or rotting;
- Abnormal wear;

- Distortion of hardware; and
- Other signs of damage.

Wire Rope Slings:

- Cuts, gouges or stretching of the rope;
- 10 randomly distributed broken wires in one rope lay;
- Five broken wires in one strand of one rope lay;
- Wear or scraping of 1/3rd the original diameter;
- Kinking, cutting or bird caging resulting in a distortion of the rope structure; and
- Other signs of damage.

Metal Mesh Slings:

- Bent, twisted or crushed mesh;
- Reduction of wire diameter of 25% or more from abrasion or 15% or more from corrosion;
- Loss of flexibility due to distortion of the mesh;
- Damaged handles; and
- Other signs of damage

Alloy Steel Chain Slings:

- Damage to chain links;
- Thinning of links beyond manufacturer recommendations;
- Cracked or deformed master links, couplings, or other components;
- Hooks that are twisted, opened more than 15% of the narrowest throat opening; thinned or otherwise damaged;
- Hooks twisted more than 10 degrees from the plane of the unbent hook;
- Any parts that have a rated capacity less than the sling; and
- Other signs of damage.

Any Sling Or Lifting Device That Does Not Pass Inspection Will Be Taken Out Of Service Immediately And Discarded Or Re-Evaluated By A Certified Vendor.

- Annual Inspections (or more often depending upon need) of all slings and lifting devices will be conducted by a certified vender or by an employee who is qualified by training and experience. During the process:
    - Written inspection records will be maintained; and
    - Damaged or defective slings and lifting devices found during this inspection will be removed from service immediately and replaced.

Storage:

- Slings and lifting device will be stored in designated locations when not in use.
- Storage locations will be separate from high heat areas, chemical contamination and areas where damage could occur.

Training:

- All personnel who require the use of slings and lifting devices will receive training covering inspection, use, care and safety prior to assignment.
- Retraining will be conducted whenever observation or inspection indicates the need.
- Additional training will be conducted whenever job assignments or equipment change.

Subject: Slings and Lifting Devices	Date:	Instructor:	Location:

The employees listed below have satisfactorily participated in and completed all requirements of the above training.

Name (Print)	Department	Name (Signature)	Date

Name (Print)	Department	Name (Signature)	Date

City of Lewiston

Traffic Control/Working in the Right-of-Way

Exposure Control Plan

Traffic Control/Working in the Right-of-Way

Effective Date:
Revision Number: 1

General Traffic Control:

- All state and local traffic codes shall be followed when providing work area protection.
- During night operations or in periods of reduced visibility, special precautions shall be taken. Adequate warning equipment, which may include flashing lights, flares, or area illuminations, shall be used.
- Warning devices and equipment shall be removed as soon as the hazard is eliminated.
- Only those signs, standards, barricades, flags, and cones that conform to state or local codes shall be used.
- Flaggers or other appropriate traffic controls shall be used to supplement protection provided by signs, signals, and barricades whenever necessary.
- Workers exposed to traffic and limited lighting shall wear high visibility vests to increase public awareness during exposure
- See Manual on Uniform Traffic Control Devices. For additional information concerning work area protection.

Working In A Public Right-Of-Way:

- Except in an Emergency, City streets should not be closed without proper notice given to the Police and Fire Departments.
- If an open excavation is left in a traffic lane when work is stopped or suspended for any reason, signs and lighted barricades shall not be sufficient. An excavation must be sufficiently guarded or covered.
- Appropriate signs shall be placed in advance of the work in both directions during operations involving city streets or proximity
- Work should be done on one-half of the roadway at a time when the job allows
- Flaggers shall be used where the amount or speed of traffic warrants.
- **Flaggers shall:**
  - Wear appropriate high visibility clothing, PPE etc as required by current regulations.
  - Stand near enough to the workers being protected so that there is no doubt as to his/her purpose.
  - Stay not less than 100 feet from the work crew, unless conditions make this impossible.
  - Stand on the shoulder to the right of approaching traffic.
  - Shall be in contact with supervisor or crew during traffic control.

Traffic Control/Working in the Right-of-Way

Effective Date:
Revision Number: 1

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City of Lewiston

Welding, Cutting and Brazing Safety

Exposure Control Plan

Welding, Cutting and Brazing Safety (Hot Work)

Effective Date:
Revision Number: 1

Purpose:

This plan establishes how the city will enhance safe working conditions at its facilities to protect employees from potential health, safety, and property hazards resulting from the fumes, gases, sparks, hot metal and radiant energy produced during hot work.

Scope:

This plan applies to city employees, all contractors and vendors performing work on city property or all other individuals who have business with the city.

Responsibilities:

- Management is responsible for development and review of the plan.
- Management is responsible for appropriate employee training.
- Management and supervisors are responsible for enforcement of this plan.
- Employees shall comply with all procedures specified in this plan.
- Employees performing hot work and firewatchers are responsible for ensuring that safe conditions are maintained during the hot work activity.
- Supervisors are responsible for maintain cutting or welding equipment in safe operating condition
- Contractors and vendors shall comply with all procedures specified in this plan.

Definitions:

Braze: Form, fix, or join by soldering with an alloy of copper and zinc at high temperatures.
Contractor: A non-city employee being paid to perform work at a city facility.
Cut: Make an opening in something with a sharp-edged tool or object.
Hot Work: Roll, press, forge, or shape (metal) while hot.
Hot Work Permit: See attached.
Vendor: A non-city employee being paid to perform a service at a city facility.
Weld: Join together (metal pieces or parts) by heating the surfaces to the point of melting using a blowtorch or other means, and uniting them by pressing, hammering, etc.

Procedures:

Welding and cutting shall be performed by qualified persons. Before welding or cutting is started, the area shall be inspected for fire hazards.

When welding or cutting in elevated positions, precautions shall be taken to prevent sparks or hot metal from falling onto people or flammable materials below.

Properly rated fire extinguishing equipment shall be immediately available at all locations where welding and cutting equipment is used.
A fire watch shall be maintained wherever welding or cutting is performed in locations where combustible materials present a fire hazard. A fire check shall be made of the area one half hour after completion of the welding.

To protect eyes, face and body during welding and cutting, the operator shall wear an approved helmet or goggles, proper protective gloves, and clothing. Safety glasses or goggles shall be worn under the welding helmet or goggles to guard against flying particles. Helpers or attendants shall wear proper eye protection. Other employees shall no observe welding operations unless they use approved eye protection...

Machinery, tanks, equipment, shafts, or pipes that could contain explosive or highly flammable material shall be thoroughly cleaned and decontaminated prior to the application of heat.

In dusty or gaseous spaces where there is a possibility of an explosion, welding or cutting equipment shall not be used until the space is adequately ventilated.

Where the work permits, the welder should be enclosed in an individual booth or shall be enclosed with noncombustible screens. The welder is responsible to ensure that workers or other persons adjacent to the welding area are protected from rays by shields or shall be required to wear appropriate eye and face protection.

Potentially hazardous materials in fluxes, coatings, coverings, and filler metals are released to the atmosphere during welding or cutting operations. While welding or cutting, adequate ventilation or approved respiratory protection shall be used. Special precautions shall be taken when using materials that contain cadmium, fluorides, mercury, chlorinated hydrocarbons, stainless steel, zinc, galvanized materials, beryllium, and lead.

When the electrode holders are to be left unattended, the electrodes shall be removed and the holders shall be placed or protected so that electrical contact cannot be made with employees or conducting objects.

All arc welding and cutting cables shall be completely insulated. There shall be no repairs or splices within ten feet of the electrode holder except where splices are equal to the cable. Defective cable shall be repaired or replaced.

Fuel, gas and oxygen hoses shall be easily distinguishable and shall not be interchangeable. Hoses shall be inspected at the beginning of each shift and shall be repaired or replaced if defective.

Training:

All city employees performing hot work or acting as the firewatcher must be trained in order to conduct hot work activities. The training should contain at a minimum the following:

- What starts hot work fires and explosions?
- How fires can be prevented and what makes hot work fires more severe.
- Explain the city's hot work plan, procedures, and responsibilities.

Contractors are required to provide training to their employees that will be involved in performing hot work. Any job where the contractor fails to follow hot work procedures will be shut down until the infraction has been corrected.

City of Lewiston
Worker's Compensation
Exposure Control Plan

Worker's Compensation Exposure Control Plan

Effective Date:
Revision Number: 1

Worker's compensation coverage is provided for City of Lewiston employees who may suffer from a work-related injury or illness. Benefits under worker's compensation are set by the State of Idaho and governed by the Idaho Industrial Commission. Providing the best care to injured employees is our highest priority.

Frequently Asked Questions

What do I do first if I sustain an injury at work?: Immediately report your injury to your supervisor or person in charge.

Do I need to fill out an accident form even if I don't require medical attention?: Yes. This covers the employee if they should experience issues related to the accident at a later date. Please forward your claim to City Clerk Kari Ravencroft as soon as practical following the accident.

Where do I go for medical care?: The city's designated Occupational Health Care Provider is Valley Medical Express Care. Express Care is open Monday through Friday from 8:00 a.m. to 7:00 p.m., Saturday from 9:00 a.m. to 5:00 p.m. and from 12:00 Noon until 5:00 p.m. on Sunday. If the accident occurs at a time services are not available, please report to St. Joseph Regional Medical Center's Emergency Department.

Who handles worker's compensation claims for the city?: City Clerk Kari Ravencroft is the city's representative for worker's compensation claims. Please feel free to contact her at anytime with questions related to your claim. She can be reached at 208-746-3671, ext. 203, or kravencroft@cityoflewiston.org.

Who will adjust my claim?: Intermountain Claims is the City of Lewiston's third party administrator that processes worker's compensation claims on the city's behalf. If you should have any questions related to your claim, please feel free to contact Wanda Roberson at 800-349-0373, ext. 244, or wander@intermountainclaims.com – or – Courtney Burke at 800-349-0373, ext. 230, or courtneyb@intermountainclaims.com.

Will I receive benefits for every day I am off work?: Under Idaho Code, you must use vacation/sick/compensatory time during the first five-day waiting period, unless the injury requires overnight hospitalization or the time loss exceeds 14 days. There is no waiting period for medical benefits.

The above list of questions is provided only as a general information guide and does not address all questions or every situation. Please contact Kari Ravencroft at City Hall if you should have any questions related to worker's compensation procedures or have any concerns regarding your specific claim.

CITY OF LEWISTON
EMPLOYEE WORKPLACE ACCIDENT FORM
UPDATED 12/12/12

Name of Injured Employee: _____ Birth Date: _____

Home Address: _____ Telephone Number: _____

Marital Status: _____ Gender: _____ Occupation: _____

Time Employee Begins Work: _____ # of Days Worked Per Week: _____ Hours Worked Per Day: _____

Date of accident/exposure: _____ Time: _____ Date/time employer notified:_____

Disability beyond date of accident?: YES NO

If yes, give date last worked: _____ and date returned to work: _____

Place of accident/exposure: _____

What was employee doing when accident occurred?: (Describe briefly, such as loading truck, shoveling dirt, walking down stairs, etc.?) _____

_____

How did the accident happen? (Describe fully, stating whether the injured person fell, was struck, etc.; give all factors contributing to the accident. Use other side for additional space, if needed.)

_____

_____

What machine, tool or substance or object was most closely connected with the accident? (Name the specific tool, machine, appliance, gas, liquid, etc., involved.) _____

If mechanical apparatus or vehicle, what part of it? (Gears, pulley, blade, motor, etc.) _____

Were mechanical guards or other safeguards provided? YES NO Was injured using them? YES NO

Describe injury or illness in detail and indicate the part of the body affected. (For example: Fracture of ribs, amputation of right index finger at second point, etc.) _____

Did it require medical attention? YES NO If yes, complete below:

Name & Address of Physician: _____

Name & Address of Hospital: _____

Has this body part been injured before? YES NO If yes, when? _____

Please provide name and phone number of any witnesses: _____

_____ _____

Signature of Injured Employee Date Signature of Supervisor Date

_____ _____

Signature of Division Head Date Signature of Department Head Date

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FOR CITY CLERK DATE REPORT SUBMITTED TO INTERMOUNTAIN CLAIMS: _____

BY: _____

CITY OF LEWISTON
ACCIDENT INVESTIGATION REPORT

Instructions are appended to this report. This form is to be completed by the supervisor upon knowledge of any work-related incident or accident that caused or could cause property damage, injury or illness. This form shall be reviewed and signed by the supervisor of the involved employee, and his/her department manager, and then transmitted to the city clerk.

Employee Name: _____ Position: _____

Department: _____ Date & Time of Injury/Accident: _____

Nature of Injury/Accident: _____

Was Medical Treatment Required? Describe: _____

_____

Lost Time: _____ Light Duty Restriction: _____ Est. Date of Return: _____

Describe clearly what the employee was doing and how incident occurred: _____

_____

_____

What acts, job tasks, management practices or conditions contributed most directly to the incident?:

_____

_____

How could this incident be avoided?: _____

_____

What corrective actions are to be taken to prevent a similar incident from reoccurring?: _____

_____

Who is responsible for insuring that appropriate corrective actions are completed? (name and title):

_____

Accident investigations are intended to identify accident root causes and to determine any action necessary to prevent recurrence. Effective action is normally dependent on a thorough investigation. The following investigation procedure is suggested:

1. Approach the investigation with an attitude of determining facts, not blame.
2. Be objective. Do not jump to conclusions. The apparent cause may not be the actual cause.
3. Investigate immediately. Elapsed time may alter conditions and recollections.
4. Go to the scene and inspect all physical evidence.
5. Talk to all involved persons and witnesses.
6. Ask questions. Do not assume anything.

The following questions may help determine why incident occurred:

1. Was the proper procedure being used?
2. Were there extenuating circumstances?
3. What is the employee's attitude on the job?
4. Does the employee normally follow proper procedures and good safety practices?
5. Is the employee new to the job?
6. What on-the-job training did the employee receive?
7. Was the training appropriate?
8. Was the employee informed of all the hazards associated with the job?
9. Are there department safety rules that are applicable to the employee's job?
10. Does the employee know what those safety rules are?

Signature of Employee Date

Signature of Supervisor Date

Signature of Division Head Date

Signature of Dept. Manager Date