



Courtesy of Klamath County Museum

*Horse Drawn Trolley - 1908*

*Section 6  
Occupational  
Safety &  
Health  
Programs*

**SECTION 6: OCCUPATIONAL SAFETY & HEALTH PROGRAMS**

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## **BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN**

The City of Klamath Falls is committed to the prevention of incidents or happenings which result in employee injury and/or illness and to comply with the Oregon OSHA bloodborne pathogens standard, Oregon Administrative Rule 437-02-1910.1030. Through this written exposure control plan we share assigned responsibility and hereby adopt this exposure control plan as an element of the City of Klamath Falls Safety and Health Program.

### **A. Purpose**

The purpose of this exposure control plan is:

1. To eliminate or minimize employee occupational exposure to blood or other body fluids.
2. To identify employees occupationally exposed to blood or other potentially infectious materials (OPIM) in the performance of their regular job duties.
3. To provide employees exposed to blood and OPIM information and training. A copy of this plan is provided to all employees, however, only employees in identified classifications (listed below) are required to attend initial and annual training. Employees in non-identified classifications may attend annual trainings with supervisor approval.
4. To comply with OR-OSHA bloodborne pathogen standard, Oregon Administrative Rule 437-02-1910.1030.

### **B. Exposure Determination**

The City of Klamath Falls has performed an exposure determination for all common job classifications that may be expected to incur occupational exposures to blood or other potentially infectious materials. This exposure determination is made without regard to use of Personal Protective Equipment (PPE). The following job classifications may be expected to incur occupational exposures to blood or other potentially infectious materials:

<u>Job Classification</u>	<u>Task or Procedure</u>
Patrol Officer	Peace Officer duties.
Police Captain	Peace Officer duties.
Police Chief	Peace Officer duties.
Police Corporal	Peace Officer duties.
Police Detective	Peace Officer duties.
Police Detective Corporal	Peace Officer duties.
Police Detective Sergeant	Peace Officer duties.
Police Lieutenant	Peace Officer duties.
Police Sergeant	Peace Officer duties.
Property Evidence Technician	Evidence collection – autopsy.
Reserve Officer	Peace Officer duties
Maintenance Worker I – (Cemetery)	Garbage removal and clean up.
Maintenance Worker I – (Parks)	Garbage removal and clean up.
Parks Foreman/City Forester	Garbage removal and clean up.
Laborer – Seasonal (Parks)	Garbage removal and clean up.
Laborer – (Wastewater)	Pump collection system cleaning and maintenance; handling of sewage.
Laborer - (Water)	Same as above.
Maintenance Worker I – II (Facility Maint.)	Same as above.
Operator in Training	Same as above
Pretreatment Coordinator	Same as above.
Process Control Specialist	Same as above.
Utility Maintenance Worker I-II	Same as above.
Wastewater Collections Operator I-IV	Same as above.
Wastewater/Geo. Superintendent	Same as above.
Wastewater/Geothermal Supervisor	Same as above.
Wastewater Treatment Operator I-IV	Same as above.
Water Distribution Operator I-IV	Same as above.
Water Foreman	Same as above.
Water Superintendent	Same as above.
Meter Service Person, Lead	Garbage removal/clean-up near meters
Meter Service Person	Garbage removal/clean-up near meters
Meter Reader	Garbage removal/clean-up near meters

## **C. Compliance Methods**

### **1. Universal Precautions**

- (a) This organization embraces “universal precautions”, which is a method of infection control that requires the employer and employee to assume that all human blood and specified human body fluids are infected with bloodborne pathogens. Where it’s difficult or impossible to identify body fluids, all are to be considered potentially infectious.

### **2. Engineering Controls and Work Practices**

The following engineering and work practice controls will be used by all employees to eliminate or minimize occupational exposures:

#### ***Engineering Controls***

- (a) Hand washing facilities (or antiseptic hand cleaners, towels or towelettes).
- (b) Containers for contaminated reusable sharps have the following characteristics and are located in the assigned vehicle or may be obtained from the employee’s immediate supervisor:
  - Puncture-resistant.
  - Color-coded or labeled with a biohazard warning label.
  - Leak-proof on the sides and bottoms.

#### ***Work Practice Controls***

- (a) Employees wash their hands immediately, or as soon as feasible, after removal of potentially contaminated gloves or other personal protective equipment.
- (b) Following any contact of body areas with blood or any other infectious materials, employees wash their hands and any other exposed skin with soap and water as soon as possible. They also flush exposed mucous membranes (e.g., eyes, nose, and mouth) with water.
- (c) Contaminated needles and other contaminated sharps are not bent, recapped or removed unless:
  1. It can be demonstrated that there is no feasible alternative.
  2. The action is required by specific medical procedure.
  3. In the two situations above, the recapping or needle removal is accomplished through the use of a medical device or a one-handed technique.
- (d) Contaminated reusable sharps are placed in appropriate containers immediately after use.
- (e) Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses is prohibited in work areas where there is potential for exposure to bloodborne

pathogens.

- (f) All procedures involving blood or other infectious materials minimize splashing, spraying or other actions generating droplets of these materials.
- (g) Equipment, which becomes contaminated, is examined prior to servicing or shipping, and decontaminated as necessary (unless it can be demonstrated that decontamination is not feasible).
  - 1. An appropriate biohazard warning label is attached to any contaminated equipment, identifying the contaminated portions.
  - 2. Information regarding the remaining contamination is conveyed to all affected employees, the equipment manufacturer and the equipment service representative prior to handling, servicing or shipping.

### **3. Personal Protective Equipment (PPE)**

The following PPE will be provided at no cost to employees:

- Latex gloves – when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membrane, non-intact skin and when handling or touching contaminated items or surfaces.
- Face shields/masks – whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.
- Safety glasses or goggles – same as above.

The employee's immediate supervisor is responsible for ensuring and issuing appropriate, readily accessible PPE, without cost to employees. Hypoallergenic gloves, or similar alternatives shall be readily accessible to employees who are allergic to the gloves normally provided.

All PPE will be removed prior to leaving the work area.

All PPE will be cleaned, laundered and disposed of by the employer at no cost to the employee.

All PPE, when removed, will be placed in the department's, designated area for storage, washing, decontamination, and disposal.

### **4. Housekeeping**

Facilities shall be cleaned and decontaminated according to departmental schedules which shall include:

- The equipment or area to be cleaned/decontaminated;
- The day and time of schedule worked;
- The cleaners and disinfectants to be used;

- The required procedures and special instructions for completing the cleaning/decontamination.

## **5. Contaminated Laundry**

Contaminated laundry shall be handled as little as possible with a minimum of agitation. The laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.

Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry shall be placed and transported in bags or containers, which prevent soak-through and or leakage of fluids to the exterior.

Contaminated laundry shall be placed and transported in bags or containers labeled or color coded pursuant to this policy.

## **6. Regulated Waste**

Regulated waste shall be placed in containers, (obtained from the employee's immediate supervisor) which are:

1. Closable;
2. Constructed to contain all contents and prevent leakage fluids during handling, storage, transport or shipping;
3. Labeled or color-coded in accordance with this policy;
4. Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.
5. If outside contamination of the regulated waste container occurs, it shall be placed in a second container and points a-d above followed.

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

1. Closable;
2. Puncture resistant;
3. Leakproof on sides and bottom; and
4. Appropriately labeled/color coded.

During use, containers for contaminated sharps shall be:

1. Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found;
2. Maintained upright throughout use;
3. Replaced routinely and not be allowed to overfill.

When moving containers of contaminated sharps from the area of use, the containers shall be:

1. Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;
2. Placed in a second container if leakage is possible which meets the requirements of point (a) of this section.

Once a container is full of contaminated sharps, the employee shall notify his/her immediate supervisor so that arrangements can be made with Sky Lakes Medical Center for disposal of the container.

## **7. Hepatitis B Vaccine and Post-Exposure Evaluation and Follow-Up**

The City will offer the hepatitis B vaccine and vaccination series at no cost to exposed employees within ten (10) working days of initial assignment. The City will offer post-exposure follow-up at no cost to employees.

The Human Resources Division is in charge of the hepatitis B vaccination program and will ensure that all medical evaluations and procedures, including the hepatitis B vaccine and vaccination series and post-exposure follow-up, including prophylaxis are made available at no charge to the employee at a reasonable place and time, and performed or supervised by a licensed health-care professional according to the recommendations of the CDC.

When an employee has an exposure incident, it will be reported to the immediate supervisor and the employee shall seek appropriate medical attention. The supervisor shall notify the Human Resources Division of the reported exposure incident.

The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained for HCV, HBV and HIV serological status. The evaluation process shall include post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service; counseling for the employee; and evaluation of any reported illnesses.

Additionally, the source individual's blood shall be tested as soon as feasible in order to determine HCV, HBV and HIV infectivity, upon receipt of informed consent. Results of the source individual's testing shall be made available to the exposed employee once informed consent has been received, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

### **Information Provided to the Health-Care Professional**

The Human Resources Division shall insure that the health-care professional responsible for the employee's hepatitis B vaccination receives the following:

- a. A copy of OAR 437-02-1910.1030;
- b. A description of the exposed employee's duties as they relate to the exposure incident;
- c. Documentation of the route(s) of exposure and circumstances under which exposure occurred;
- d. Results of the source individual's blood testing, if available;
- e. All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

### **Health-Care Professional's Written Opinion**

The Human Resources Division will obtain and provide the employee with a copy of the evaluating health-care professional's written opinion within fifteen (15) days of the completion of the evaluation.

The health-care professional's written opinion for HBV will be limited to whether the HBV is indicated for and has been received by the employee.

The health-care professional's written opinion for post exposure follow-up will be limited to the following information: that the employee has been informed of the results of the evaluation; and has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

## **8. Labels and Signs**

The appropriate supervisor shall ensure that biohazard labels are on each container of regulated waste or the appropriate red color-coded container is utilized for the following:

- Contaminated equipment.
- Containers of regulated waste.
- Refrigerators/freezers containing blood or other potentially infectious materials.
- Sharps disposal containers.
- Other containers used to store, transport or ship blood and other infectious materials.
- Laundry bags and containers.

## **8. Information and Training**

The Human Resources Division will ensure that employees are trained prior to initial assignment to tasks in which occupational exposure may occur, and that training shall be repeated within twelve (12) months. The training will be interactive and contain the following information:

- An accessible copy of OAR 437-02-1910.1030 and an explanation of its contents;
- A general explanation of the epidemiology and symptoms of bloodborne diseases;
- An explanation of the modes of transmission of bloodborne pathogens;
- An explanation of the City's "Exposure Control Plan" and a copy of the plan.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;
- An explanation of the basis for selection of personal protective equipment;
  
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available;
- Information on the post-exposure evaluation and follow-up that the City is required to provide for the employee following an exposure incident;
- An explanation of the required signs, labels and color coding;
- An opportunity for interactive questions and answers with the person conducting the training session.

## 10. Recordkeeping

The Human Resources Division is responsible for maintaining medical records which shall include:

- The name and social security number of the employee;
- A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination;
- A copy of all results of examinations, medical testing, and follow-up procedures;
- The employer's copy of the health-care professional's written opinion;
- A copy of the information provided to the health-care professional.

Additionally, the City maintains the following logs, which are confidential and contain the following:

### ***"Occupational Exposure Log"***

1. Date of exposure;
2. Employee name;
3. The department where the exposure occurred;
4. Type of exposure; and
5. Status of the medical surveillance.

### ***"Sharps Injury Log"***

1. The type and brand of device involved in the incident;
2. The department or work area where the exposure incident occurred; and
3. An explanation of how the incident occurred.

## 11. Training Records

The Human Resources Division is responsible for maintaining training records which shall include:

1. The dates of the training sessions;
2. The contents or summary of the training sessions;
3. The names and qualifications of persons conducting the training; and
4. The names and job titles of all persons attending the training sessions.

Bloodborne Pathogens Policy - Revised January 2002

City of Klamath Falls

**VACCINATION DECLINATION FORM**

**Date:** \_\_\_\_\_

**Employee Name:** \_\_\_\_\_

**Employee SS#:** \_\_\_\_\_

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

\_\_\_\_\_  
**Employee Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Facility Representative Signature**

\_\_\_\_\_  
**Date**

**City of Klamath Falls**  
**PERSONAL PROTECTIVE EQUIPMENT**

This program is adopted to further promote health and safety within City employment and to implement the use of Personal Protective Equipment within the City, pursuant to OAR 437-002-1910-132.140 (PPE).

**A. PURPOSE**

The City has adopted this Personal Protective Equipment (PPE) policy and procedures to ensure that when hazards cannot be fully controlled with engineering or process controls that employees use appropriate personal protection. This section is also to assist in ensuring compliance with OSHA standards.

This policy includes appropriate training on the use and maintenance of PPE which will be provided by or arranged for by each division/department supervisor. Employees are required to wear proper personal protective equipment as follows:

- The PPE provided shall be used as outlined by specific job procedures and maintained in a sanitary and reliable condition.
- If employees provide their own protective equipment it is still our responsibility to assure its adequacy, including proper maintenance and sanitation of the equipment.
- The selection of PPE shall be made by our management staff and it shall be designed to match the hazard and allow for employees to safely conduct their job tasks.

PPE is designed to protect the worker from injury or harm. However, it is not designed to prevent the occurrence of an incident which might cause harm or injury, as a result, it is our policy to ensure that working conditions are safe and PPE is used as a back-up for additional protection.

**B. DEFINITIONS**

**Personal Protective Equipment:** means equipment worn by the employee to prevent injury or occupational illness wherever hazards from processes or equipment cannot be contained or eliminated at their source.

**Mandatory Respirator Use** (based on Oregon OSHA standards): Respirators are required to be provided and worn when it is necessary to protect the health of an employee due to overexposure to air contaminants.

**National Institute of Occupational Safety and Health** (NIOSH) Approved Respirators: NIOSH has established specific respirator approval standards that manufacturers must meet. Employers must select only NIOSH approved respirators based on the type of contaminant hazard.

This section reviews basic requirements for personal protective equipment including:

- Head protection
- Hearing - ear protection
- Eye and Face protection

- Hand protection
- Foot protection
- Fall Protection

Assessment forms outlining work operations/jobs that require specific PPE and the types of PPE that must be selected, are provided at the end of this section.

The Respirator Protection policy is covered later in Section 6.

### **C. GENERAL RESPONSIBILITIES**

**Management:** The Safety Officer is responsible to see that employees are trained in the use of personal protective equipment and are instructed on what is required for their work duties. Supervisors are responsible to complete and/or update PPE assessments.

**All Employees:** Employees must follow all safety procedures as outlined in this chapter by OSHA rules and manufacturer's recommendations in regards to personal protective equipment. Employees are required to inspect their equipment daily prior to use and ensure that the equipment is functional. Any problems with equipment must be reported to the supervisor.

**Department/Division Safety Committee:** Each safety committee will include review of personal protective equipment in their quarterly inspection activities.

### **D. PROCEDURES**

#### ***Head Protection***

1. Hard hats are to be used to protect the head from flying objects, impact, and electrical shock, and must meet ANSI standards for the job task.
2. Hard hats shall be used in the following areas:
  - By all employees when overhead hazards are present. This includes when working under floor openings or walkways. Working in areas with low ceilings or protruding objects.
  - While working around construction or maintenance field projects or equipment.
  - Working outside and around heavy equipment
  - Working inside a confined space below ground level

#### ***Hearing Protection (See also Hearing Conservation Program)***

1. Earmuffs and earplugs are to be used to protect against hazardous noise levels when noise exposure levels cannot be adequately controlled by various engineering controls.
2. Hearing protective devices are supplied by the division supervisor.
3. Ear plugs should be worn by those required to wear safety glasses or glasses with corrective lenses.

## ***Eye & Face Protection***

1. Eye and face protection is to be worn where there is a reasonable probability of injury to the eyes and face from flying objects, glare, harmful liquids, or injurious light, such as arc welding flash.
2. Eye protection needs to meet the following criteria based on Safety Regulations:
  - Provide adequate protection against the particular hazards for which they are designed.
  - Provide reasonable comfort and shall not unduly interfere with the movements of the wearer.
  - Be durable.
  - Be capable of being cleaned easily.
  - Be kept in clean and good repair.
3. The specific type of eye and face protection needed depends on the type of hazard.
  - Particle hazards from grinding/chipping require safety glasses with side shields.
  - Liquid splash hazards require chemical splash goggles or safety glasses with a face shield.
  - Gas welding requires welding goggles.
  - Face protection is worn when liquid splashes or significant particle matter could impact the face and cause injury.
4. Safety Glasses must be worn when an eye hazard exists.

## ***Hand Protection***

1. Hand protection is worn to protect the hands from mechanical injury due to friction, heat, shearing/cutting actions, and for protection against chemicals.
2. Chemical protective gloves are selected based on the type of rubber/plastic material which affords proper protection against specific chemical used. The selection will be made by the supervisor and/or Safety Officer.
3. Chemical protective gloves will be worn when there is skin contact with the following chemicals:
  - Solvents contact
  - Skin contact with any corrosives
  - Chemical spill clean-up
4. Mechanical protective gloves will be worn when employees are exposed to wood splinters, friction, sharp metal edges, hot or cold materials, and moving heavy objects. Gloves will be available in the use areas.

## ***Foot Protection***

1. Special foot protection is necessary when there is a potential for foot injury, or slipping, or when the feet may become wet due to the work environment. Your supervisor will work with employees who may have job assignments regarding special footwear.
2. The following footwear is expected to be worn:
  - Leather work boot when working on or around equipment. Safety steel toes when there is a hazard from dropping heavy objects.
  - Rubber boots when exposed to wet conditions, or water/weather resistant steel toe boots when exposed to wet conditions and a hazard of dropping heavy objects.
3. The shoe policy will be periodically reviewed by the Safety Committee to ensure that appropriate footwear is used to prevent foot injuries.

## ***Fall Protection***

1. When it is not feasible to use physical barriers to protect employees from falls, personal protective equipment (PPE) shall be used.
2. PPE shall be chosen based on the following:
  - Distance of potential fall
  - Impact on the body from the PPE during a sudden stop
  - Intended use of PPE (stopping fall as opposed to retrieval from a confined space (see also Confined Space policy)
  - Fall arresting forces on the body
3. Type II chest harnesses shall be worn for rescue purposes only and in no case are used to stop a vertical fall.
4. When a worker(s) enters a confined space, a helper wearing the same PPE shall be stationed at the entrance to the confined space and shall monitor those inside for the duration of the project.
5. Personal retrieval systems for rescue from below-ground level tanks or confined spaces

Authorized personnel shall ensure the use of a lifeline attached to a manual or power operated winch with steel cable retracting lifeline. Alternatively, a block and tackle or ratchet winch can provide the lifting mechanism with limited human effort after the victim has been hooked up, provided a lock or over speed mechanism is incorporated. An anchorage point, such as that provided by a seven or ten-foot tripod, should be available before work is commenced.

Full body harnesses, yokes and wristlets shall be used when retrieval is through narrow openings.

## 6. Strength Requirements

- a. All components of the fall protection shall meet the strength requirements of American National Standard A10.14-1991.

**NOTE:** These strength requirements are based on one worker use. If multiple workers are tied off to a single lifeline, the strength requirement must be increased by the number of workers affected (i.e., two workers, one lifeline, minimum breaking strength must be 10,800 pounds at the center of line; three workers, one lifeline, minimum breaking strength must be 16,200 pounds, and so forth).

- b. When tied off while working on suspended scaffolding, each worker must use a separate line which is not connected to the scaffold.
  - c. Permanent lifelines must be a minimum one-half inch steel cable capable of supporting 5,400 pounds per person at the center of the line.
  - d. Hardware for body belts/harnesses and lanyards must be drop-forged, corrosion resistant with smooth edges, a minimum of 5,000 pound breaking strength without cracks or breaks.
  - e. Knots shall not be used in components of a fall protection system since a knot will reduce the strength by at least 50%.
  - f. Lanyards shall be kept as short as possible and in no case shall they exceed six feet to minimize the possibility and length of a free fall.
  - g. Wire rope or rope-covered wire lanyards shall not be used where impact loads are anticipated or where there is an electrical hazard.
  - h. Belts, lanyards or any other unit that has been subjected to impact loading shall be removed from service and destroyed or returned to the manufacturer for recertification.
  - i. Rope lanyards shall not be stored in work pouches where they may be subject to deterioration.
  - j. Where there is exposure to abrasion, spun nylon rather than filament nylon shall be used.
  - k. Only safety belts/harnesses with locking snaps shall be used to prevent "rollout" or disengagement. All hardware shall be compatible with the locking snap.
  - l. Only shock-absorbing lanyards shall be used to reduce the fall arresting impact on the wearer.
  - m. Tongue-type buckles shall be used in lieu of friction buckles since friction buckles may lose the ability to stop detachment if contaminated with grease or oil.
7. Inspection and recordkeeping
- a. The user shall inspect the fall protection prior to each use.
  - b. A trained and competent person shall inspect all components of protection device at least once each six month. The dates of this biannual inspection shall be recorded on a permanent tag attached to the harness.
8. Every five years, the fall protection system shall be returned to the manufacturer for recertification.
9. Any defective body belt/harness or lifeline shall be destroyed or returned to the manufacturer before use.

## **Road Worksite Protection**

Traffic Coning - Flagging must meet Oregon State approved specifications (ODOT). Maintaining a safe work area in street operations requires attention to coning and flagging. There are three parts to this operation that must be considered:

1. Low-level warning (red head cones)
2. High-level warning when needed for heavy traffic flow (mast barriers)
3. "Feather off" the traffic flow around work projects in temporary work zones.

Coning operation must be adjusted to fit each varied condition faced to take full advantage of traffic conditions and terrain but the following minimum guide is recommended:

- In a 20 MPH area - Red Head Cone 40 feet
- In a 30 MPH area - Red Head Cone 80 feet
- In a 40 MPH area - Red Head Cone 140 feet

**NOTE:** Slow or stopped equipment in traffic lanes must also be flagged.

Flagging (or Paddle): Effective flagging is a critical part of any construction job that involves vehicular traffic. A good flagger uses assertive motions to control traffic. Supervisors and lead persons shall assure that all members of construction crews are well versed in appropriate flagging techniques. All staff will have attended flagging school prior to the assignment.

## **E. PPE HAZARD ASSESSMENT**

The Hazard Assessment Worksheet (Appendix A) was developed to determine if hazards are present or are likely to be present in the workplace and, which necessitate the use of personal protective equipment.

After the assessment is completed, the records will assist supervisors in:

- Selecting appropriate types of PPE.
- Training employees on the use and proper fit of PPE

The assessment must be in writing and signed by the person conducting the assessment.

The City will conduct an initial hazard assessment for each work site and task, and will conduct further assessments whenever new processes or equipment are introduced to the work area. Completed PPE hazard assessment forms must be kept on file in each department/division and should be reviewed quarterly as part of the normal work site safety inspection. Copies of assessment forms must be forwarded to Human Resources for central record keeping purposes.

## **F. TRAINING**

All employees will receive training on personal protective equipment upon initial employment, whenever there is a change in job duties or work site and on an annual basis.

## **G. RECORD KEEPING**

All assessments and training records will be maintained by Human Resources. Individual training records will be maintained in employee personnel files.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)  
HAZARD ASSESSMENT WORKSHEET**

APPENDIX A

DEPT/DIVISION: \_\_\_\_\_

Risk Level

LOCATION: \_\_\_\_\_

PROBABLE

JOB TASK: \_\_\_\_\_

POSSIBLE

EVALUATOR: \_\_\_\_\_

UNLIKELY

Engineering Controls in Place:(e.g. barriers, guards, containment, ventilation, etc.)  
\_\_\_\_\_

Date: \_\_\_\_\_

BODY PART (Select <b>ALL</b> that apply)	EXPOSURE (Select <b>ALL</b> that apply)	PPE RECOMMENDED (Select <b>ALL</b> that apply)
<input type="checkbox"/> EYES  <input type="checkbox"/> FACE  <input type="checkbox"/> EARS/HEARING  <input type="checkbox"/> HEAD  <input type="checkbox"/> FOOT  <input type="checkbox"/> HANDS  <input type="checkbox"/> BODY  <input type="checkbox"/> BACK  <input type="checkbox"/> EXTREMITIES  <input type="checkbox"/> INTERNAL	<input type="checkbox"/> Equipment in Motion <input type="checkbox"/> Impact with Stationary Object <input type="checkbox"/> Temperature Extremes <input type="checkbox"/> Chemical <input type="checkbox"/> Splash/Mist/Spray <input type="checkbox"/> Vapors/Dusts <input type="checkbox"/> Radiation Type: _____ <input type="checkbox"/> Falling Objects <input type="checkbox"/> Flying Objects <input type="checkbox"/> Sharp Objects <input type="checkbox"/> Pinch Points <input type="checkbox"/> Repetitive Motion <input type="checkbox"/> Ergonomic <input type="checkbox"/> Electrical <input type="checkbox"/> Biological <input type="checkbox"/> Falls/Level <input type="checkbox"/> Noise/Sound <input type="checkbox"/> Vibration <input type="checkbox"/> Other:	<input type="checkbox"/> Safety Glasses <input type="checkbox"/> Goggles <input type="checkbox"/> Face Shield <input type="checkbox"/> Plugs/Muffs <input type="checkbox"/> Hard Hat <input type="checkbox"/> Steel Toed Shoes/Boots <input type="checkbox"/> Gloves Type: _____ <input type="checkbox"/> Coveralls <input type="checkbox"/> Chemical Suit <input type="checkbox"/> Back Brace <input type="checkbox"/> Respirator (neg. or pos.) <input type="checkbox"/> Other:

Evaluator's Signature: \_\_\_\_\_

**GUIDE:**

**BODY PART:** Check the part of the body that has the potential of becoming injured. If there are multiple exposures, check each body part affected.

**EXPOSURE:** Check each potential exposure. If there are multiple exposures, check each exposure.

**PPE:** Check each box for the necessary personal protection required.

[29 CFR 1910.132]

SEE **BACK OF FORM** FOR PPE Assessment Criteria

AREA	TYPE OF HAZARD	TYPE OF PROTECTION
<b>EYE &amp; FACE PROTECTION</b> [1910.133]	<b>Impact:</b> flying fragments, objects, chips, particles or dirt from work operations (i.e. chipping, grinding, machining, masonry work, woodworking, sawing, drilling, chiseling, powered fastening, riveting, and sanding).	Safety glasses with side protection, goggles, face shields. For severe exposure add the use of face shield.
	<b>Heat:</b> hot sparks, splash from molten material, high temperature exposure (i.e. furnace operations, pouring, casting, hot dipping, and welding)	Face shields, goggles, or safety glasses with side protection. For severe exposure add the use of face shield.
	<b>Chemicals:</b> Splash or irritating mists (i.e. acid and chemical handling - transferring, degreasing)	Chemical splash goggles, eyecup and cover types. For severe exposure add the use of face shield.
	<b>Dust:</b> Nuisance dust - irritation of the eyes (i.e. woodworking, buffing, general dusty conditions that can cause eye irritation).	Goggles, eyecup and cover types.
	<b>Light and/or Radiation</b> (optical damage) <b>Welding – Electric Arc</b>	Welding helmets or welding shields - typical shades 10-14 see ANSI standard chart in PPE Safety Manual
+	<b>Welding – Gas</b>	<b>Welding goggles or</b> welding shields - typical shades gas: 4-8; cutting: 3-6; brazing 3-4
	<b>Cutting, torch brazing, torch soldering</b>	<b>Welding glasses or welding shields typical shades 1.5 to 3</b>
	<b>Glare</b>	<b>Glasses with shaded or special-purpose lenses</b>
<b>HEAD PROTECTION</b> [1910.135]	- <b>Impact/penetration hazards</b> caused by falling objects.  - <b>Electrical shock and burn hazard</b>	<b>Class A Helmet</b> – impact & penetration resistance & electrical to 2,200 volts <b>Class B Helmet</b> – impact & penetration resistance & electrical to 20,000 volts <b>Class C Helmet</b> – impact & penetration resistance & <b>NO</b> electrical protection
<b>FOOT PROTECTION</b> [1910.136 (ANSI Z41-1991)]	<b>Impact and Compression:</b> Carrying or handling materials such as boxes, objects, parts or heavy tools, which could be dropped; and, for other activities where objects might fall onto the feet.	<b>Safety shoes or boots with impact protection</b>
	<b>Puncture protection:</b> Any activity where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal, etc. could be stepped on.	<b>Safety shoes or boots with puncture protection</b>
	<b>Electrical:</b> Any electrical hazard from live work	<b>Safety boots rated for protection against electrical hazards.</b>
<b>ELECTRICAL</b> [1910.137]	While working on or near exposed energized conductors or systems. <b>Only qualified electrical workers are permitted.</b>	Types of equipment include: insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber.
<b>HAND PROTECTION</b> [1910.138]	Possible cuts, abrasions, burns, and skin contact with chemicals that are capable of causing local or systemic effects following skin exposure.	<b>Gloves</b> Selection of the glove material and style depend on type of contact, duration of exposure, and type of material. Use glove selection charts published by glove manufacturers and technical bulletins.

## BACK OF PPE HAZARD ASSESSMENT FORM

## City of Klamath Falls HEARING CONSERVATION PROGRAM

### A. PURPOSE

The City of Klamath Falls has adopted this Hearing Conservation Program (policy and procedures) to protect our employees from hearing loss and ensure compliance with the OSHA noise regulations [OAR 437 Division 2 -1910.95]. The regulations require that each employer implement a hearing conservation program if employees' noise exposure levels exceed 85 decibels for an average of 8 hours.

Noise survey reports are on file in the Human Resources office and are used to ensure that noise exposed employees are part of the hearing conservation program. The primary affected classifications are listed in Appendix A at the end of this section.

### B. DEFINITIONS

**Standard Threshold Shift (STS):** STS with age adjusted 10 dB shift will result in recording the STS for each ear that has resulted in a total 25 dB level of hearing above audiometric zero, averaged over the frequencies at 2000 (2KHz.), 3000 (3 KHz.), and 4000 Hz. (4KHz.). In other words, there must be a Standard Threshold Shift (STS) or greater change AND hearing thresholds must meet or exceed a 25dB average as a result of the STS.

**Permissible Noise Exposure:** There are two exposure levels that if exceeded require specific compliance activities: 1) Permissible Noise Exposure: eight hour time-weighted average level of 90 decibels on the A scale or a dose of 100%; and 2) Action Level: an eight hour time-weighted average of 85 decibels on the A scale or a dose of 50%.

**Representative Noise Exposure:** Measurements of an employee's noise dose or 8 hour time-weighted average sound level that the employers deem to be representative of the exposures of other employees in the workplace.

**Noise dosimeter:** An instrument that integrates a function of sound pressure over a period of time in such a manner that it directly indicates a noise dose.

**Sound level meter:** An instrument for the measurement of sound level.

**Time-weighted average sound level:** The sound level, which if constant over an 8-hour exposure, would result in the same noise dose as is measured.

### C. GENERAL RESPONSIBILITIES

**Management:** Management is responsible to see that noise controls are implemented and maintained and that all employees at noise exposures in excess of 85 dBA time-weighted average are part of an effective hearing conservation program.

This includes auditing the on-going program and training employees in the hazards of noise and required controls.

**Human Resources/Risk Management:** Human Resources is responsible to: 1) assure that representative noise surveys are conducted, maintenance of records, employee training, and auditing the overall program; 2) oversee the program and ensure that employees are following the

OSHA standards and that employees hearing is being protected; and 3) maintain all employee medical records and all past employee training records per the OSHA standard.

**Supervisors:** Supervisors are responsible to see that their employees wear hearing protection, have annual hearing tests and are part of the annual Hearing Conservation training.

**Employees:** Employees whose classifications have been identified (Appendix A) are responsible to wear appropriate hearing protection, take an active part in the annual training and participate in annual hearing tests.

## **D. PROCEDURES**

### ***Noise Surveys***

1. Noise surveys are required to be done on work operations that have potentially high noise levels (85 dBA and above). The resulting measurements are maintained in Human Resources/Risk Management and are recorded on employees' hearing test records.
2. Additional noise surveys are required to be taken whenever additional equipment or processes are adopted which could result in higher noise levels, and periodically to re-verify the test results.
3. Each employee exposed to noise at or above the 85 dBA average will be informed of the results. This will be done by posting the data at each work site and providing the information during new employee orientation and at annual employee noise training classes.

### ***Hearing Protection***

1. Hearing protection is required to be worn during the operation of equipment or processes that exceed 85 dBA noise levels as a time weighted average exposure.
2. Hearing protection equipment (ear muffs, ear barrier plugs, foam plugs, etc) is available in each division. Employees will be provided at least two styles of protection to choose from. The proper selection of a device, its use and availability will be discussed with each new employee during division safety orientation
3. Each employee will be responsible for the maintenance of his/her assigned hearing protective devices. Employees should follow the manufacturer's recommendations. Disposable plugs must be discarded at end of shift or when they become excessively soiled. Inserts or barriers will be checked prior to each use for any defects. If barriers are used the head band needs to be checked to ensure that it is tight and the insert is not torn, disfigured or does not properly seal. New devices will be obtained as needed.

### ***Audiometric (Hearing) Testing***

#### **Baseline Hearing Test**

1. New employees assigned to a noise area (where the time weighted exposure to noise is above 85 dBA) will be given a baseline hearing test and then will be tested annually thereafter. The hearing test will be given by contract certified audiometric technicians. Hearing tests showing a significant hearing loss are reviewed by the audiometric professional. Employees who do not want to participate in hearing testing are required to sign an "Employee Statement" (Appendix C).

2. Baseline or initial tests may be given to new employees at the time of hire if they are not working in a noise area. The baseline tests require that the employee not be in an occupational noise area for 14 hours prior to the test. This test will be the reference for further tests to determine if hearing levels change.

### Annual Hearing Test

1. Annual hearing tests can be taken any time during a work shift. These results will be compared with the baseline tests.
2. Significant threshold shift (STS) criterion: The hearing loss criterion is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 hertz (Hz) in either ear.
3. The employee may be re-tested within 30 days and consider the results of the re-test to determine if a permanent shift has occurred.
4. Employees will be informed if their tests show significant changes in their hearing levels based on Oregon OSHA standards by written letter and follow-up by the employee's supervisor once notified of that change by our contract audiologists.
5. In all cases of hearing loss the employee will be re-instructed on how to properly wear hearing protection. The supervisor and/or safety coordinator will follow-up on all hearing tests that show a reduction in the employees hearing from the baseline.
6. The contracted audiologist will determine if additional tests are needed and the status of the employee's hearing.

## **E. EMPLOYEE TRAINING**

1. Employees whose classifications have been identified in Appendix A will receive Hearing Conservation training during new employee orientation, at initial assignment to a noise area, and annually. (See Appendix B)
2. Training materials will be available to employees from the division supervisor, safety committee members and Human Resources/Risk Management.
3. A copy of the Oregon OSHA Noise & Hearing Conservation Rules should be posted on a safety bulletin at each location where employees are potentially exposed to hazardous noise levels.

## **F. ENGINEERING CONTROLS**

Where feasible, Human Resources/Risk Management (in coordination with supervisors) will determine if there are any engineering controls that could reduce noise levels to below 90 dBA as a time-weighted 8 hour average.

Engineering Control Feasibility Studies: In some cases there may be records of noise control studies done on pieces of equipment or processes. These records should be kept to show compliance with Oregon OSHA noise engineering control standard. The records should be maintained for the duration the equipment or process is in use.

## G. RECORDKEEPING

Records are maintained by Human Resources/Risk Management as follows:

Documentation	Rules/Retention Period
OSHA Standard [OAR 437 Division 2 - 1910.95]	Posted at each affected work site
City Hearing Conservation Program	Contained in Employee Handbook, Section 6 – Occupational Health & Safety
Noise Level Measurements	Posted at each work site Current plus 2 years of results on file in H.R. (Note: the current record may represent measurements taken longer than 2 years ago. This is permitted as long as the readings are reflective of noise exposure levels)
Employee Audiogram records	Duration of employment plus 5 years
Employee Training records	Duration of employment
OSHA 300 Log	Record on Log if an employee's hearing shift is permanent within 7 calendar days of the annual test.
	Record on Log within 7 calendar days, if there is a Standard Threshold Shift (STS) or greater and hearing thresholds meet or exceed a 25 dB average as a result of the STS at 2,000, 3,000, and 4,000 hertz.
	Employee must be informed in writing within 21 days of the determination of permanent hearing shift.

City of Klamath Falls  
HEARING CONSERVATION PROGRAM  
IDENTIFIED CLASSIFICATIONS

**AIRPORT**

Director  
Manager, Business Development  
Operations Specialist  
Operations Manager

**FINANCE**

Utility Billing  
Meter Reader  
Meter Service Person  
Meter Service Person, Lead

**PARKS**

Director  
Foreman  
Maintenance Worker I

**Cemetery**

Maintenance Worker I

**POLICE**

Patrol Officer/Detective  
Corporal  
Sergeant

**PUBLIC WORKS****Engineering**

Associate Engineer  
Associate Engineer - Traffic  
Construction Inspector I, II, III  
Engineering Technician I, II, III

Development Coordinator/City Surveyor  
City Engineer  
Assistant Engineer  
Engineering Design Specialist

**Facilities Maintenance**

Maintenance Worker I, II  
Supervisor  
Superintendent  
Systems Control Specialist  
Utility Instrumentation Technician  
Utility Maintenance Worker I, II

**Streets & Equipment**

Laborer  
Equipment Operator I, II, III  
Mechanic  
Shop/Services Coordinator  
Supervisor  
Superintendent

**Wastewater & Geothermal**

Laborer  
Operator-in-Training  
Treatment Operator I, II, III, IV  
Collections Operator I, II, III, IV  
Supervisor  
Superintendent

**Water**

Laborer  
Distribution Operator I, II, III  
Foreman  
Superintendent

City of Klamath Falls

HEARING CONSERVATION TRAINING RECORD

Date: \_\_\_\_\_

Employee Name: \_\_\_\_\_

Job Title: \_\_\_\_\_

Dept/Division: \_\_\_\_\_

✓ Applicable Training below

New Employee Orientation

Annual Safety Training

I have received a copy of the City’s Hearing Conservation program [OAR 437-02-1901] and received training in the following:

- The effects of noise on hearing
- The purposes of hearing protectors
- The advantages and disadvantages of various types of hearing protectors
- How to select, use and care hearing protectors
- The purpose of audiometric (hearing) testing both baseline and annual
- An explanation of the test procedure.

I understand that I am responsible to wear hearing protection in designated areas and while working with identified machinery and/or equipment.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Original: Employee Personnel File

City of Klamath Falls  
HEARING CONSERVATION PROGRAM

EMPLOYEE STATEMENT  
REFUSAL OF HEARING TEST

*Employees in identified classifications are expected to participate in baseline and annual hearing testing per OSHA regulations. However, if an employee refuses to participate in hearing testing, he/she is required to sign the statement below.*

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EMPLOYEE STATEMENT

I have been offered a hearing test in accordance with OAR 437-02-1919.95 and understand the reason for testing.

I understand that the testing is available at no cost to me.

I understand that the City will continue to offer the test each year and that I will be asked to sign a statement each time I refuse to participate in testing.

I have elected to refuse the test at this time.

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Copy to Employee  
Original to Medical File

## ***City of Klamath Falls***

### **HAZARD COMMUNICATION PROGRAM**

#### **Purpose**

The purpose of this plan is to comply with the provisions of Chapter 437, Division 155 of the Oregon Administrative Rules, adopted by the City of Klamath Falls on June 25, 1984.

The intent of these rules is to ensure that all employees will be aware of the chemicals in the work place that present potential physical or health hazards.

#### **Container Labeling**

All supervisors will verify that all containers received for use at the work place will:

1. Be clearly labeled as to the contents.
2. Note the appropriate hazard warnings.
3. List the name and address of the manufacturer.

No container will be released for use until the above data is verified. Secondary containers, not designed for immediate use, must also be clearly labeled as to the contents and note the appropriate hazard warnings. Secondary labeling need not include information about the manufacturer.

#### **Material Safety Data Sheets (MSDS)**

Material Safety Data Sheets are the backbone of the Hazard Communications Program and contain more complete safety and health hazard information than do labels. Copies of MSDS, for all hazardous chemicals to which employees may be exposed, will be maintained in each Hazard Communication Manual. MSDS will be available to all employees for review during each work shift.

#### **Purchasing**

To ensure that Material Safety Data Sheets are obtained on all new hazardous chemicals entering the work place, all personnel who buy hazardous chemicals will include on the purchase order or request from the suppliers, the appropriate MSDS with each initial shipment.

#### **Informing Contractors**

It shall be the responsibility of the department supervisor to inform the representative(s) of any contractor employed to perform work for the City of the hazardous chemicals to which they or their employees may be exposed while contracted with the City.

## **Index of Hazardous Chemicals**

The Hazard Communication Manual will contain an index of all known hazardous chemicals used by each department. Detailed information will be available on each noted chemical/product by reviewing the corresponding MSDS.

## **Monitoring and Follow-up**

Procedures shall be developed to routinely audit each component of the hazard communication program. Audit techniques will include spot checks on the accuracy of labels and MSDSs, checking new chemical introductions, and spot checks of worker knowledge of the characteristics of materials and the function of control systems.

In addition to annual training of all employees, follow-up training must be provided to relocated employees and existing employees when new chemical hazards are introduced or new hazards are identified.

## **Employee Training**

Central Safety chairperson shall give an overview of the Hazardous Communication Standard at new employee safety orientation.

Employees assigned to departments where hazardous chemicals may be involved will be given the following information and training provided by the department supervisors.

- 1) Hazardous chemicals in the work area.
- 2) Work practices and personal protective equipment to prevent adverse exposures to these chemicals.
- 3) Warning properties and types of exposures; i.e., odor, welding smoke, skin contact, ventilation.
- 4) Emergency procedures to follow if adverse exposure occurs.

## ***City of Klamath Falls***

### **MSDS INSTRUCTIONS** (Material Safety Data Sheets)

#### **Material Safety Data Sheets**

Each department must maintain a Hazard Communication Manual. This manual will contain an MSDS for all products found, purchased or used within the department. Any product, even if it is only being stored, is required to have an MSDS in the manual. As new products are purchased or stored, they also must be added to the manual. The policies directing the Hazard Communication Program should also be found in this manual.

#### **Container Labeling**

All containers, whether being used or stored, shall be clearly labeled as to contents, note appropriate hazard warnings and list the name and address of the manufacturer. No container should be stored or used until this data is verified.

Secondary containers that are not for immediate use must be labeled the same as the primary containers with the exception of the information about the manufacturer.

#### **Employee Training**

It shall be each department supervisor's responsibility to have training sessions for the department employees. Employees need to know what hazardous materials might be in the work place, where the MSDS manual is located and have access to the manual at all times. They also need to know what information the MSDS will give them.

It shall be each department's responsibility to have all MSDS for its hazardous material and have all labeling (primary and secondary) complete. This includes updating as new materials are purchased and stored.

A training video and manual are available to help you in your implementation of this program, also the method for setting up your index for your manual. This information is available in the Public Works Department, Water Utilities Division.

We presently have some labels, wall charts and wallet cards and will be ordering more as we need them. Let us know if we can help you with this.

U.S. DEPARTMENT OF LABOR  
Occupational Safety and Health Administration  
**MATERIAL SAFETY DATA SHEET**

Required under USDL Safety and Health Regulations for Ship Repairing,  
Shipbuilding, and Shipsteering (29 CFR 1915, 1916, 1917)

**SECTION I**

Manufacturer's Name	Emergency Telephone #
Address (Number, Street, City, State, Zip Code)	
Chemical Name & Synonyms	Trade Name & Synonyms
Chemical Family	Formula

**SECTION II - HAZARDOUS INGREDIENTS**

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS & METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)

**SECTION III - PHYSICAL DATA**

BOILING POINT (°F)	SPECIFIC GRAVITY (H <sub>2</sub> O)
VAPOR PRESSURE	PERCENT VOLATILE BY VOLUME (%)
VAPOR DENSITY	EVAPORATION RATE
SOLUBILITY IN WATER	
APPEARANCE AND ODOR	

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (Method used)	FLAMMABLE LIMITS
EXTINGUISHING MEDIA	
SPECIAL FIRE FIGHTING PROCEDURES	
UNUSUAL FIRE AND EXPLOSION HAZARDS	

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**SECTION V - HEALTH HAZARD DATA**

THRESHOLD LIMIT VALUE
EMERGENCY AND FIRST AID PROCEDURES

**SECTION VI - REACTIVITY DATA**

STABILITY	UNSTABLE	CONDITIONS TO AVOID
	STABLE	
INCOMPATIBILITY (Materials to avoid)		
HAZARDOUS DECOMPOSITION PRODUCTS		
HAZARDOUS POLYMERIZATION	MAY OCCUR	CONDITIONS TO AVOID
	WILL NOT OCCUR	

**SECTION VII - SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
WASTE DISPOSAL METHOD

**SECTION VIII - SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION (Specify type)		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES	EYE PROTECTION	
OTHER PROTECTIVE EQUIPMENT		

**SECTION IX - SPECIAL PRECAUTIONS**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
OTHER PRECAUTIONS

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**EMPLOYEE HAZARDOUS MATERIALS EXPOSURE REPORT**

Date of Report: \_\_\_\_\_

Date and Time of Exposure: \_\_\_\_\_

1. Employee(s) exposed, and Position(s):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Address and type of occupancy where exposed:

\_\_\_\_\_

3. Duration of Exposure: \_\_\_\_\_

4. Description of Exposure: (toxic fumes, smoke, chemicals, etc.)

\_\_\_\_\_

5. Symptoms, if any:

\_\_\_\_\_  
\_\_\_\_\_

6. Additional Information: \_\_\_\_\_

\_\_\_\_\_  
Employee's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor's Signature

\_\_\_\_\_  
Date

**FORWARD TO HUMAN RESOURCES DEPARTMENT IMMEDIATELY**

# IMPORTANT

It is mandatory that ALL containers be labeled per Section II and MSDSs be obtained for substances in such.

This applies to all current containers on premise, as well as any future purchases.

City of Klamath Falls

**MEDICAL SURVEILLANCE POLICY**

**Purpose**

The Medical Surveillance Program is designed for employees that are or will be exposed to hazardous materials on the job such as airborne concentrations of asbestos, arsenic, lead, benzene, cadmium, cotton dust or formaldehyde, at or above the action level and/or excursion limit as defined by OSHA standards.

The following positions have been identified as having potential exposure to the above named hazardous materials.

**LIST:**

**Physical Examinations**

Physical examinations are available to employees who are assigned to an occupation exposed to the above named materials. The exam is performed by a licensed physician at no cost to the employee.

A baseline medical examination includes, at the minimum, medical and work history, complete physical examination of all systems, a chest X-ray (if warranted) and any additional test deemed necessary by the physician.

Examinations are available to the employee in the following instances\*:

- *Preplacement* – before the employee is assigned to an occupation in which he/she is exposed to certain hazards.
- *Periodic* – at least annually in accordance with the protocol established for the particular occupational exposure.
- *Termination of employment* – for employees who were exposed to hazardous materials during the employment.

\* If adequate records show that the employee has been examined within the past year in accordance with this program, then a medical examination is not required.

**Information Provided to Physician**

The City provides the following information to the physician performing the physical examination and retains copies of all information in the employee's medical file:

- A copy of the OSHA Medical Surveillance Standard, including Appendices D and E.

- A description of the affected employee's duties (job description) as they relate to the employee's exposure.
- The employee's representative exposure or anticipated exposure level.
- A description of personal protective and respiratory equipment used or to be used.
- Information from previous medical examinations of the employee that is not otherwise available to the physician.

### **Physician's Written Opinion**

Following the medical examination, the physician provides the employer with:

- The results of the examination.
- The physician's opinion as to whether the employee has any detected medical conditions(s) that would place the employee at an increased risk of material health impairment from exposure to toxic materials.
- Any recommended limitations on the employee or upon the use of personal protective equipment.
- A statement that the employee has been informed by the physician of the results.
- A statement that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and an asbestos exposure, for example.

The employee is provided with a copy of the physician's written opinion within 30 days of its receipt.

### **Record Keeping/Retention**

Medical records are any medical exam and first-aid information pertaining to the employee. Work exposure records include any reports of industrial hygiene monitoring, material safety data sheets, and results of biological monitoring.

Medical and work exposure records are retained separately from employee personnel files for the duration of employment and for at least 30 years after termination of employment.

### **Access to Records**

Medical and exposure records may be accessed by employees, their designated representatives and OSHA compliance officers. Employees may be former, present or those who are transferring to work involving toxic chemicals.

## LOCK OUT/TAG OUT SYSTEM PROCEDURES

Updated and Adopted March, 2009

### Purpose

The Lock Out/Tag Out procedure establishes the minimum requirements for the isolation of energy form devices which require repairs or servicing. It is used to assure that the machine or equipment is isolated from all potentially hazardous energy and “locked out” before employees perform any servicing or maintenance activities on the device. This prevents the unexpected release of stored energy which could cause injury.

Most Lock Out/Tag Out injuries can be traced to one or more of five causes:

- Failure to stop equipment.
- Failure to disconnect from the power source.
- Failure to dissipate residual energy.
- Accidental restarting of equipment.
- Failure to clear work areas before reactivation of equipment.

### Responsibility

Authorized employees shall be instructed in the lockout (or tagout) procedure. Each affected employee whose work causes them to be in the area of the lockout or equipment it effects must be instructed in the purpose and use of the lockout procedure.

It is the responsibility of supervisors to assure that employees receive proper training and that inspections are performed on the equipment being used. If an employee does not demonstrate adequate knowledge of the procedure, the supervisor will authorize retraining of the employee.

### Compliance

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize or use that machine or equipment. Failure to observe this police is subject to disciplinary action up to and including termination.

### Preparation

Each work site must identify all energy isolating devices/equipment that have the potential of releasing uncontrolled hazardous energy and list them and their location. Once the devices have been identified, procedures must be in place to ensure the proper disconnection of the equipment when it requires repair or service.

## **BASIC RULES FOR USING LOCKOUT OR TAGOUT SYSTEMS**

1. Do not attempt to operate any switch, valve, or other energy isolating device when it is locked or tagged out.
2. All equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel.

## **SEQUENCE OF LOCKOUT OR TAGOUT PROCEDURE**

1. Notify all personnel that a lockout or tagout system is going to be utilized and the reason. The individual shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards it presents.
2. If the machine or equipment is operation, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
3. Operate the switch, valve, or other energy isolating devise(s) so that he equipment is isolated from its energy sources(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc. (list the types(s) of stored energy and methods used to dissipate or restrain).
4. Lockout and tagout the energy isolating devices with assigned individual lock(s) and tag(s) from lockout/tagout center and any additional safety measures, etc.
5. After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the pushbutton or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating control(s) to neutral or off position after the test.
6. The equipment is now locked out and tagged out.

NOTE: This procedure may be used when there are a limited number of types of machines and they are powered by a single power source. More complex systems with more than one power source will require more comprehensive instructions.

## **SPECIFIC MACHINE PROCEDURES**

Each Department/Division shall conduct an assessment of the workplace to determine what equipment needs to have specific documented procedures for locking out the equipment. This would be for equipment that has more then one energy source and does not meet all eight requirements of OAR4371910.147(c)(4)(i).

Upon completion of the assessments, the Department/Division shall develop and document specific procedures for locking out the identified equipment.

## **VEHICLE SHUTDOWN AND LOCKOUT PROCEDURES**

Heavy Equipment and Vehicles during servicing - the mechanic will follow a normal shut down of the equipment. The equipment is all gasoline or diesel engine powered. The mechanic shall place the vehicle key in his/her pocket or in locked tool chest drawer.

The heavy equipment will have a tagout placed on the steering wheel which indicates that someone could be injured if the equipment was started.

Depending on the type of work being performed there may be various other sources of energy such as hydraulic and gravity that could dissipate during servicing. Additional control needs would include but not be limited to:

Dump Trucks or any type of hopper or hood that could fall: the dump bed or device will have the safety bars in place prior to any work around or under a lifted bed for support against gravitational pull due to the potential loss of hydraulic pressure.

Backhoes or other hydraulic operated boom devices: If the shovel or boom is raised then the safety bar or blocking devices will be in place if the employee is working under the device. If the shovel or boom devices are on the ground in an energy neutral position additional controls would not be necessary.

## **REMOVAL BY SOMEONE OTHER THAN THE PERSON THAT APPLIED THE LOCK**

Removal of a safety lockout or tagout device by any other person than the authorized employee who applied it, may only be done by the employees' supervisor, under the following procedure.

1. The supervisor will verify that the authorized employee who applied the device is not at the facility.
2. The supervisor will call the authorized employee at home if possible to inform him that his lockout and/or tagout device needs to be removed. If the employee cannot return to remove the lock then the supervisor will inform the person that the lock is being removed. The supervisor or lead person may then use a master key or second key that is kept in a locked, inaccessible location known only to the supervisor or lead person and remove the lockout device.
3. The supervisor must follow all the correct protocols for removal of a lockout or tagout as outlined and safely place the equipment back in service and then notify affected employees.
4. If all reasonable efforts have been made to contact the authorized employee, but the person was not reachable, the supervisor will ensure that the authorized employee upon return to work will know that his/her lock was removed and that routine operation of the equipment is now occurring.

## **PROCEDURE INVOLVING MORE THAN ONE PERSON**

If more than one employee is required to lockout or tagout equipment, each shall place his/her own personal lockout device or tagout device on the energy isolating device(s). When an energy

isolation device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) is to be used. All employees who have locked out the equipment shall be present to unlock and make sure the equipment is operational.

## **SHIFT OR PERSONNEL CHANGES**

During shift or personnel changes the hazardous energy control responsibility will be transferred in a manner that maintains uninterrupted protection for the employees involved.

1. All employees in the immediate affected work area shall be informed of the transfer of lockout/tagout devices between the off-going and on-coming employees.
2. On-coming shift employees must verify the equipment has been de-energized and proper procedures have been followed.
3. The on-coming authorized employee shall apply his/her own lockout/tagout device to the energy control source prior to the removal of the lockout/tagout device by the off-going employee.
4. The on-coming authorized employee shall ensure that no personnel are exposed, and as a check that all energy sources are disconnected, operate the push button or other normal operating controls to make certain the equipment will not operate. Return operating control(s) to the “**off**” position after the test.

## **RESTORING MACHINES OR EQUIPMENT TO NORMAL OPERATION**

1. Be sure all tools are removed.
2. Insure all guards have been reinstalled.
3. Verify that all personnel are clear of the equipment.
4. Insure that normal operating controls are in the off/neutral position.
5. Notify personnel that energy controls are being removed.
6. Remove lock/tags.
7. Restore power to the equipment.
8. Make sure repairs and servicing has been completed and notify appropriate personnel.

## **CONTRACTORS**

1. When outside contractors come into our facility to work on our machines and equipment, their activities may create hazards which normally are not present to our regular employees.
2. A copy of our procedures will be given to that contractor and a mutually agreed upon

procedure established concerning the lockout/tagout devices that will be used to protect our employees and the contractor's workers. This coordination will help to ensure that all of our employees know what kind of work is to be performed, where and when it is to be performed, and how they are being protected.

3. The Contract project manager will identify the energy isolating devices for the contractor. The contractor's employees will be responsible to lockout all devices capable of locking or place an energy control tag on or as near the device as possible.

## **PERIODIC INSPECTION**

Periodic inspection is intended to assure that the energy control procedures continue to be implemented properly, and that the employees involved are familiar with their responsibilities. OSHA requires that an inspection type audit of lockout procedure must be done AT LEAST ANNUALLY.

1. The CSC member of each department/division or someone they assign will conduct periodic inspections of the Lockout/Tagout Program procedures at their location at least annually to ensure that this procedure and the requirements of Oregon OSHA rules are being followed.
2. The periodic inspection will be performed by an authorized employee not involved in the energy control procedure being inspected. The inspector must determine three issues:
  - a. Whether the steps in the energy control procedure are being followed
  - b. Whether the employees involved know their responsibilities under the procedure, and
  - c. Whether the procedure is adequate to provide necessary protection and what changes, if any, are needed.
3. The inspector will observe and talk with the employees in order to make these determinations. These inspections are intended to provide immediate feedback and action to correct any inadequacies observed.
4. Written records shall be made of these inspections and the findings of these inspections will be kept by the CSC member or division supervisor.
5. A review will take place of the lockout procedures for particular machine(s) or pieces of equipment with all authorized personnel who are involved in locking out that particular piece of equipment.

**The following form is to be completed by the Safety Officer or Safety Committee at least annually**

**PERIODIC LOCK-OUT INSPECTION**

**Inspector**

**Date of Inspection**

**Inspection Location – Machine or Equipment:**

**Authorized employee (name):**

**Adequate Notification given:** Yes \_\_\_\_\_ No \_\_\_\_\_

**Locks/Tags: Describe the type used and adequacy:**

**Isolation of Hazardous Energy Sources**

**Testing of Equipment after lock out**

**Locks Removed:** Yes No

**Re-start Notification** Yes No

**Comments**

## **N. EMPLOYEE TRAINING**

1. Retraining will be conducted whenever a periodic inspection reveals, or whenever there is reason to believe, that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures. The retraining will re-establish employee proficiency and introduce new or revised control methods and procedures as necessary.
2. Annual training review of this program by all affected and authorized employees is recommended.

## **O. DOCUMENTATION OF TRAINING**

1. Each division's CSC member and/or supervisor will document that employee training has been accomplished and is being kept up-to-date.
2. The certificate shall include each employee's name, job title, signature line for the employee, training date, and signature line for the supervisor or qualified person conducting the training, their job position and date.
3. This documentation shall be filed in the employee's training file.

## LOCKOUT/TAGOUT PROCEDURES & CHECKLIST

Date \_\_\_\_\_

1. Name/Location of machine/equipment \_\_\_\_\_

2. Energy Source \_\_\_\_\_

Stored Energy? \_\_\_\_ Yes \_\_\_\_ No

Type of Stored Energy:

Elevated parts/pieces	_____	Springs	_____
Hydraulic Pressure	_____	Rotating Wheels	_____
Stray Voltage/Static	_____	Air Pressure	_____
Gas Pressure	_____	Steam Pressure	_____
Water Pressure	_____		

3. Describe hazard involved/severity \_\_\_\_\_

4. Name(s) of Person(s) doing lockout/tagout \_\_\_\_\_

5. Isolating device location/description \_\_\_\_\_

6. Other isolating devices? \_\_\_\_ Yes \_\_\_\_ No

7. Method(s) used to protect (lockout/tagout/other) \_\_\_\_\_

8. Method used to dissipate/restrain stored energy \_\_\_\_\_

9. Check to ensure that equipment will operate: \_\_\_\_ Yes \_\_\_\_ No

10. Notify "other" personnel of lockout/tagout: \_\_\_\_ Yes \_\_\_\_ No

11. Transfer of lockout/tagout: From: \_\_\_\_\_

Signature

Controls (if applicable): To: \_\_\_\_\_

Signature

### RESTORING TO NORMAL OPERATIONS

- |  |           |          |
|--|-----------|----------|
| 1. Check area! No one exposed:               | _____ Yes | _____ No |
| 2. All tools removed/guards reinstalled:     | _____ Yes | _____ No |
| 3. Remove lockout/tagout device(s):          | _____ Yes | _____ No |
| 4. Operate isolating devices:                | _____ Yes | _____ No |
| 5. Notify "other" personnel:                 | _____ Yes | _____ No |
| 6. Return completed checklist to supervisor: | _____ Yes | _____ No |

Signature(s) \_\_\_\_\_

*City of Klamath Falls*  
**CONFINED SPACE PROGRAM**

### **1. Purpose**

This program defines confined space at the job site and the systems in place to reduce the risk of employee exposure to hazardous materials and possible injury.

### **2. Definition**

A confined space has the following characteristics:

- Its size and shape allow a person to enter it.
- It has limited openings for workers to enter and exit.
- It is not designed for continuous occupancy.

### **3. Permit-Required Confined Spaces**

A confined space which requires a permit prior to the employee's entrance has one or more of the following characteristics:

- Contains or has potential to contain a hazardous atmosphere.
- Contains a material that has the potential for engulfing an entrant.
- Has an internal configuration such that the entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazard.

Examples of permit-required confined spaces are tanks, silos, sewers, boilers, and pipelines.

### **4. Hazard Control Measures**

Potential hazards of permit spaces are reduced through the following measures:

- Identify all permit spaces in the work place.
- Reduce employee risk around permit spaces by posting warning signs.
- Provide training to employees who enter permit spaces to reduce risk.
- Prevent unauthorized employee entry into permit spaces.
- Re-evaluate spaces when conditions change.
- Make special arrangements with contractors who may enter permit spaces.
- Provide safety and personal protective equipment.

A complete list of hazard control measures (e.g., work procedures, personal protective equipment, atmospheric testing procedures, isolation procedures) is located in the Supervisor Risk management manual for each applicable department.

## 5. Entry Permit

A permit, signed by the entry supervisor, must be posted at the entrance to a confined space, or otherwise made available to entrants before they enter the space. The permit verifies that pre-entry preparations have been made and that the space is safe to enter.

Entry permits are valid for 8 hours and are cancelled at the completion of work. Cancelled entry permits are retained and assessed periodically for program effectiveness.

## 6. Pre-entry Planning

Most dangers can be avoided through pre-entry planning and safety measures. Prior to entrance to a permit-required confined space the following steps should be taken:

- Check for completion of the permit.
- Erect barriers around the space.
- Cap, blind or disconnect all input lines.
- Clear and ventilate the space of harmful vapors and residue.
- Make sure all participants understand emergency procedures.
- Verify air quality. (see Risk Management manual for testing levels).

Pre-entry checklists are maintained in the Supervisor Risk Management manual and are available for employee review.

## 7. Teamwork

The confined space entry team consists of entrants (employees entering the space to perform work), attendants or "safety stand-by" persons, and supervisors. Entrants and attendants can be any employee who has successfully completed confined space training. Entry supervisors are employees with sufficient authority to order any corrective measures needed to ensure the safety of the entrants.

### Entrant Responsibilities:

- Know the hazards of the space and the signs of exposure (e.g., lack of oxygen can cause breathing difficulty, mental confusion, etc.).
- Use the designated personal protective equipment carefully.
- Maintain contact with the attendant of the space and leave the space if ordered to evacuate.
- Recognize potential danger, leave the space, and contact the attendant.

### Attendant or Safety Stand-by Responsibilities:

The attendant stays at his/her post to observe conditions and support the entrant.

- Know the hazards of the space and the signs of exposure.

- Keep a current count of entrants in the space and be able to identify them.
- Be sure only authorized people enter the space or the area surrounding the space.

#### Attendant or Safety Stand-by Responsibilities, cont.:

- Order all workers out of the space if:
  - ~ you observe a condition not allowed by the entry permit.
  - ~ you notice signs of exposure in any entrant.
  - ~ you see something outside the permit space that could be a danger inside.
  - ~ you are required to participate in the rescue of entrants at another permit space.
- Never leave the observation post for any reason.
- Call the rescue team right away if entrants need to evacuate the space.
- In an emergency, **do not enter the permit space** unless you are trained in confined space rescue, have proper emergency equipment and another attendant is there to replace you.

#### Entry Supervisor Responsibilities:

- Review the entry permit before anyone enters the space.
- Assure that proper hazard controls are in place.
- Assure that any unauthorized people are removed from the space.
- Sign the permit.
- Re-evaluate the conditions of the space at intervals, or when a replacement supervisor takes over.
- Cancel the permit after the work is finished and conclude operations.

Employees who will serve as Entry Supervisors are listed in each division.

## **8. Training**

All employees and contract employees will be informed of the existence of the permit spaces and will be prevented from inadvertent entry by one of the following means:

- Posted warning signs that prohibit entry.
- Locking or sealing the entrance to the space.
- Information in safety meetings of the location(s) of all permit spaces, hazards that may be found in these spaces and the strict prohibition against entry.

Entrants and attendants are trained by a qualified instructor; using approved training materials. All students must pass a post-test, which will be kept on file. Entry supervisors must complete both entrant/attendant and entry supervisor training. Entry supervisor training must include identification and analysis of hazards commonly present in the space.

All participants in the permit program must be retrained before there is a change in assigned

duties or whenever a hazard or condition arises that the students have not been trained to control.

## 9. Emergencies

Rescue service personnel are designated by the supervisor and must:

- Receive authorized entrant training.
- Receive training in the proper use of personal protective equipment, including respirator.
- Be trained to perform assigned rescue duties.
- Be trained in first aid and CPR, and at a minimum, one rescue team member *certified* in first aid and CPR.
- Participate in practice rescue exercises, annually.

Emergency services must be notified well in advance of the time, date and place of entrance.

## 10. Record Keeping

*Permit space records* include a list of applicable locations, assessment forms, cancelled permits, entry procedures (if applicable), and any other information needed to identify and control hazards. These records are maintained by each department.

Any changes made to the permit program are recorded in minutes or summaries of meetings held by the City's Central Safety Committee, which also assesses the effectiveness of the permit program based on inspections of cancelled permits and other relevant records.

*Training records* for Public Works divisions are kept by the Human Resources Department. Records include the name and signature of the instructor, names of the students, completed tests, and training date(s). Copies of certificates of completion for each employee are maintained in Human Resources.

All records pertaining to the Permit-Required Confined Space program are available for inspection by employees and their authorized representatives.

***City of Klamath Falls***  
**OR-OSHA INSPECTIONS**

**A. Purpose**

It is the City's policy to cooperate with OR-OSHA inspectors in the interests of promoting safe working conditions for City employees. To facilitate communication and assure that OR-OSHA inspectors receive full and complete information regarding City facilities and operations, it is the City's policy that management personnel be present during inspections to the maximum extent practical.

**B. Limited Vehicle or Work Site Inspection**

1. If approached by an OR-OSHA inspector at a work site or in a City vehicle on the roadways, the inspector's observations at the work site or vehicle exterior should not be interfered with. If a request is made to inspect the interiors or to answer questions, the employee in charge should first contact a member of management and request their assistance. The inspector should politely be asked to wait for the arrival of the management supervisor.
2. The member of management is then authorized to consent to the interior inspection and to respond to questions of the inspector.
3. Following the inspection, the member of management should prepare a brief written memo of the incident with copies to the Department Head, the Safety Committee and the City Attorney.

**C. General Facility Inspection**

1. If approached by an OR-OSHA inspector requesting consent to inspect a City building or facility, the employee in charge should first ask the inspector to have a seat, and then contact the Department Head.
2. The Department Head or their designee will respond to the building or facility and may then consent to the inspection. The Department Head or designee shall conduct the opening conference with the inspector and shall accompany the inspector on the inspection.
3. Following the inspection, the Department Head or designee shall prepare a written memo of the inspection with copies to the Safety Committee, the City Manager and the City Attorney.

**D. Employee Participation**

An employee representative (union steward or Safety Committee member) has the right to participate in the inspection and this right shall not be interfered with.

**City of Klamath Falls**  
**RESPIRATORY PROTECTION**

**A. Purpose**

This program defines specific workplace hazards that require an employee to use a respirator and the procedures in place to reduce the risk of employee exposure to hazardous materials and possible injury. The Program Administrator shall be responsible for assuring that all aspects of the program are in accordance with OSHA Standards.

This policy is located in the Employee Handbook, Section 6. A more comprehensive version including OSHA standards and respirator information is located in each applicable department and on file in Human Resources.

**B. Assessment of Workplace Conditions & User Factors**

An assessment of workplace conditions determines the type of respirator to be used. The following factors are considered:

- Nature of the contaminate
- Is it gas, particle or fiber?
- Where is it present and in what concentrations?

Other relevant factors include workplace physical characteristics such as size, physical hazards and confined spaces. Ambient temperature of the workplace, amount of physical labor required by the employee and other personal protective equipment must also be considered during the assessment. (See Assessment of Respirator Use form on next page).

All completed "Assessment of Respirator Use" forms are on file in each applicable department/division and in Human Resources.

# City of Klamath Falls

## ASSESSMENT OF RESPIRATOR USE

<b>Job/Task:</b> (Describe job being performed)	<b>WHO?</b> (Job Title & name of person(s) performing the job)
<b>WHERE?</b> (Describe location: Confined Space, Enclosed Room, Open Area, Outdoors, etc.)	<b>Possible Hazards/Contaminants</b> (Gas, Particle, Fiber, etc. In what concentrations?)  Determine if oxygen level is deficient:
	<b>IDLH?</b> (Is there an immediate danger to life or health?)
<b>Expected Physical Labor</b> (Heavy, Moderate, Minimal, etc.)	<b>Other PPE required for the job</b> (Clothing, mask/goggles, earplugs, gloves, etc.)
<b>Expected Temperature Range of the work area</b>	<b>Expected duration &amp; frequency of respirator use by employee</b> (# of hours in a day, # of days in a week/month)
<b>Type of Usage:</b> (Routine, Emergency, Emergency Escape Only, SCBA, Air & Oxygen Cylinders, Regulatory & Alarm)	<b>Type of Respirator Needed:</b> (Full mask, half mask, SCBA for IDLH, APR, PAPR, include weight of mask, etc.)
<b>NOTES:</b>	

### C. Departments/Positions Identified\*

The following have been identified as potential respirator users:

Department/Division	Positions
Wastewater Treatment Plant	Laborer Operator-in-Training Treatment & Collections Operators I,II,III and IV
Kingsley Field Wastewater Treatment Plant	Treatment Operator IV
Water Division	Laborer Distribution Operator I, II, III, and IV
Facility Maintenance	Maintenance Worker II
Streets & Equipment	Laborer Equipment Operators I, II, III
Police	Arson Investigator Narcotics Detectives Detective Supervisor

\*A list of employee names, classifications and specific duties is on file in each applicable department/division and in Human Resources.

#### *User Factors*

The selected respirator should not place the employee at risk. The type of respirator that is appropriate for one employee in a given situation may not be appropriate for another employee in the same circumstance. Additionally, an employee's physical dimensions and conditioning (medical status) are always carefully considered before respirator use.

### D. Selection of Respirators

There are generally three types of respirators to select from: Self-contained breathing apparatus (SCBA), Air-purifying Respirator (APR), Powered Air-purifying Respirator (PAPR)

All respirators used to satisfy OSHA standard requirements must be NIOSH-certified.

Atmospheres are characterized as either "poses immediate danger to life or health" (IDLH) or non-IDLH atmosphere

Self-contained breathing apparatus (SCBA) shall be used **only** for emergency situations. If other situations arise in which an SCBA is required, the City shall obtain assistance from the local fire department. The only exception to this is the investigation of arson and drug crime scenes by the Police Department.

## E. Medical Evaluation

Each employee must be evaluated by a Physician or Licensed Health Care Professional (PLHCP) to determine the employee's ability to use a respirator and prior to fit testing for the proper respirator.

The City of Klamath Falls has designated the Center for Occupational Health, Basin Immediate Care, to perform all medical evaluations of employees identified for respirator use.

### City Responsibility

The Program Administrator shall provide the PLHCP with the following information:

- The type and weight of the respirator proposed for use by the employee
- The duration and frequency of respirator use (including use for rescue and escape)
- The expected physical work effort
- Additional protective clothing and equipment to be worn
- Temperature and humidity extremes that may be encountered
- A copy of the written respiratory protection program **and** a copy of the OSHA Standard, 29CFR1910.134. (One time only)

Any supplemental information previously provided to Basin Immediate Care regarding an employee, need not be provided for a subsequent medical evaluation if the information and the Physician remain the same.

### Physician Responsibility

The medical evaluation of the employee must include a Medical Questionnaire, at a minimum, which contains the specific questions listed in OSHA Standard Appendix C of this document.

The PLHCP shall provide the City Human Resources Division with a written recommendation of whether the employee can use a respirator. The City Human Resources Director will make the final decision based on the PLHCP's recommendation. Medical questionnaires and information is confidential and shall be retained in the employee's individual medical file.

The recommendation from the PLHCP shall provide **only** the following information:

- Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;
- The need, if any, for follow-up medical evaluations; and
- A statement that the PLHCP has provided the employee with a copy of the physician's recommendation.

If the respirator is a negative pressure respirator, and the physician finds a medical condition that may place the employee's health at increased risk, if the respirator is used, the City shall provide a PAPR if the physician's evaluation finds that the employee can use such a respirator.

If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the City is no longer required to provide a PAPR. In these cases, the City may re-assign work in order to not place the employee in situations that require a respirator.

### **Additional Medical Evaluations**

After the initial medical evaluation, the employee will not have to be re-evaluated unless one of the four circumstances stated below occurs. At a minimum, the City shall provide additional medical evaluations that comply with the requirements of the respiratory standard if:

1. An employee reports medical signs or symptoms that he/she feels are related to ability to use the respirator;
2. A PLHCP, supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;
3. Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee re-evaluation; or
4. A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

### **F. Fit Testing**

Any employee using a tight-fitting face piece respirator must be fit tested:

- prior to initial use of the respirator;
- whenever a different respirator facepiece (size, style, model or make) is used;
- whenever the employee reports, or the City, PLHCP, supervisor, or program administrator makes visual observations of, changes in the employee's physical condition (facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight);
- if an employee notifies the program administrator, supervisor, or physician that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator facepiece and to be re-tested; **and**
- at least annually.

The City shall ensure that employees using a tight-fitting facepiece respirator pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT), depending upon the type or respirator being used (See Chart A for Description). OSHA accepted Fit-Testing Procedures are described in Standard 29 CFR 1910.134, Appendix A).

#### *QLFT Testing Limits (APRs)*

QLFT may only be used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less.

### *QNFT Minimum Fit Factors*

If the fit factor, as determined through an OSHA-accepted QNFT protocol, is equal to or greater than 100 for tight-fitting half facepieces, or equal to or greater than 500 for tight-fitting full facepieces, the QNFT has been passed with that respirator.

### *Testing positive pressure respirators*

Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators shall be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode, regardless of the mode of operation that is used for respiratory protection.

## **G. Use of Respirators**

The City prohibits any conditions that may interfere with the proper seal of the face piece including, facial hair, missing dentures, jewelry or use of headgear that projects under the face piece seal.

If an employee wears corrective glasses or goggles or other personal protective equipment, such equipment will be worn in a manner that does not interfere with the seal of the face piece.

*If an employee wears corrective glasses or goggles or other personal protective equipment, such equipment will be work in a manner that does not interfere with the seal of the face piece.*

### Seal Check

All employees using respirators are required to perform a seal check each time they put on the respirator using the procedures in Appendix B-1 of the OSHA Standard.

### Continuing Effectiveness

Supervisors are responsible for appropriate surveillance of the work area conditions and employee exposure or stress. Where there are changes in the work area conditions or degree of employee exposure, a re-evaluation will be conducted.

It is the responsibility of employees to leave the respirator use area:

- To wash their faces and respirator face pieces as necessary to prevent eye or skin irritation;
- If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece; or
- To replace the respirator or the filter, cartridge, or canister elements.

## **H. Maintenance & Care of Respirators**

The City will provide each respirator user with a respirator that is clean, sanitary, and in good working order. Cleaning and disinfection procedures will be in accordance with OSHA Standard

## Appendix B-2.

### *Cleaning and disinfecting*

<b>Usage</b>	<b>Frequency of Cleaning</b>
Single Exclusive User	Clean & disinfect as often as necessary to be maintained in a sanitary condition
Multiple Users	Clean & disinfect before each new user
Emergency Use	Clean & disinfect after each use
Fit Testing & Training	Clean & disinfect after each use

### **Storage**

All respirators will be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and shall be packed or stored to prevent deformation of the face piece and exhalation valve. Respirators must be accessible to the work area, stored in compartments or in covers that are clearly marked as containing emergency respirators, and stored in accordance with any applicable manufacturer's instructions.

### **Inspections**

<b>Equipment</b>	<b>Frequency of Inspection</b>
Routine Use Respirator	<ul style="list-style-type: none"><li>▪ Inspected <i>before</i> each use</li></ul> <p><b><u>And</u></b></p> <ul style="list-style-type: none"><li>▪ Inspected during cleaning &amp; disinfecting</li></ul>
Emergency Use Respirator	<ul style="list-style-type: none"><li>▪ Inspected <i>at least monthly</i> in accordance with manufacturers recommendations</li></ul> <p><b><u>And</u></b></p> <ul style="list-style-type: none"><li>▪ Inspected before &amp; after each use</li></ul>
Emergency Escape-only Respirators	Inspected before being carried into the work place for use
SCBA	<ul style="list-style-type: none"><li>▪ Inspected monthly</li></ul>
Air & Oxygen Cylinders above 90% of recommended level	<ul style="list-style-type: none"><li>▪ Maintained in a fully charged state and re-charged when the pressure falls below 90% of the manufacturer's recommended pressure level</li></ul>
Regulator & Alarm	<ul style="list-style-type: none"><li>▪ Tested</li></ul>

Inspections must include:

- A check of the function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
- A check of elastomeric parts for pliability and signs of deterioration.

### **Emergency Use Respirators**

Each emergency use respirator must be certified by documenting the date of inspection, the name of person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator. The information must be provided on a tag or

label attached to the storage compartment for the respirator, or included in inspection reports stored as paper or electronic files.

## **Respirator Repair**

Any respirator that fails inspection or is found to be defective must be removed from service and either discarded or repaired, or adjusted in accordance with the following procedures:

### Simple Repairs

Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

### All Repairs Made to Manufacturer's Specification

Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed.

### Complex Repairs & Adjustments

Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

## **I. Breathing Air Quality – Compressed Air Requirements**

Compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration must meet the specifications indicated in OSHA Standard 29CFR1910.134 (i).

## **J. Employee Training & Information**

Training of employees must be comprehensive and understandable, and must occur:

- before respirator use;
- when there are changes in the workplace or type of respirator;
- when there are inadequacies in the employee's knowledge or use of the respirator that indicate that the employee has not retained the requisite understanding or skill;
- any other situation arises in which retraining appears necessary to ensure safe respirator use; and
- annually.

The trainer must be someone who is fully knowledgeable of respiratory use and can provide hands-on training and practice.

The City must ensure that each employee comprehends and can demonstrate knowledge of at least the following:

- **Why** the respirator is necessary and how improper fit, usage, or maintenance can

- compromise the protective effect of the respirator.
- **What** the limitations and capabilities of the respirator are.
- **How** to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions
- **How** to inspect, put on and remove, use, and check the seals of the respirator
- **What** the procedures are for maintenance and storage of the respirator
- **How** to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
- The general requirements of this section.

If a new employee can provide proof of training within the last 12 months that addresses the elements listed above, and can demonstrate such knowledge, then he/she is not required to repeat training at the time of employment. However, training must be provided to the new employee no later than 12 months from the date of the previous training.

#### Minimum basic information to voluntary users

The basic advisory information on respirators, as presented in Non-Mandatory Appendix D of the respirator protection standard, shall be provided by the employer in any written or oral format, to employees who wear respirators when such use is not required by this section or by the employer.

### **K. Program Evaluation**

The Program Administrator and/or Safety Committee Member shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

The Program Administrator and/or Safety Committee Member shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified will be corrected.

The Program Evaluation factors to be assessed include, but are not limited to:

- Respirator Fit
- Appropriate respirator selection for the hazards present
- Proper use under the workplace conditions
- Proper respirator maintenance

### **L. Record Keeping**

#### **III. Human Resources**

Human Resources shall maintain:

- Copy of the written program & OSHA Standards
- Medical evaluation records

- Fit testing records
- Training records

#### IV. Departments/Divisions Using Respirators

The Department/Division Using Respirators shall maintain:

- Copy of the written program & OSHA Standards
- All workplace hazard assessments
- Respirator inventory
- Cleaning & disinfecting records
- Respirator inspection records
- Maintenance and repair records

#### CHART A

##### Acceptable Fit-Testing Methods (OSHA Directive CPL 2-0.120)

	<i>QLFT</i>	<i>QNFT</i>
Half-Face, Negative Pressure, APR (<100 fit factor)	Yes	Yes
Full-Face, Negative Pressure, APR (<100 fit factor) used in atmospheres up to 10 times the PEL	Yes	Yes
Full-Face, Negative Pressure, APR (>100 fit factor)	No	Yes
PAPR	Yes	Yes
Supplied-Air Respirators (SAR), or SCBA used in Negative Pressure (Demand Mode) (>100 fit factor)	No	Yes
Supplied-Air Respirators (SAR), or SCBA Used in Positive Pressure (Pressure Demand Mode)	Yes	Yes
SCBA – Structural Fire Fighting, Positive Pressure	Yes	Yes
SCBA/SAR – IDLH, Positive Pressure	Yes	Yes
Mouthbit Respirators, Loose-fitting Respirators (e.g., hood, helmets)	Fit-testing not required	

City of Klamath Falls  
OSHA Respirator Medical Evaluation

**QUESTIONNAIRE**

***To employee:***

- The City of Klamath Falls allows you to answer this questionnaire during normal working hours, or at a time and place that is convenient for you.
- To maintain confidentiality, the City will **not** look at or review your answers.
- Please seal your questionnaire in the envelope provided and return the sealed envelope to Human Resources. We will send it directly to Basin Immediate Care.
- Your Questionnaire will be reviewed by a licensed health care professional to determine if you require a physical examination and your capabilities for wearing/using a respirator.
- Please be honest about your answers as it may affect your overall capability to use a respirator without endangering yourself.

**PART 1**

The following information must be provided by every employee who has been selected to use any type of respirator. Please answer all questions below.

Please print:

1. Today's date: \_\_\_\_\_

2. Your name: \_\_\_\_\_

3. Your age (to nearest year): \_\_\_\_\_

4. Sex:        Male        Female

5. Your height: \_\_\_\_\_ft. \_\_\_\_\_in.

6. Your weight: \_\_\_\_\_lbs.

7. Your job title: \_\_\_\_\_

8. Phone number where you can be reached by the health care professional who reviews this questionnaire (include area code): \_\_\_\_\_

9. The best time to reach you at the above number: \_\_\_\_\_

10. Has your employer told you how to contact the health care professional who will be reviewing this questionnaire?                      Yes                      No

11. Check the type of respirator(s) you will be using:

- \_\_\_\_\_ N, R, or P disposable respirator (filter-mask, non-cartridge type only)
- \_\_\_\_\_ Other type (for example, half- or full-face piece type, power-air purifying, supplied air, self-contained breathing apparatus)

12. Have you worn a respirator (circle one):                      Yes                      No

If "yes" what type(s): \_\_\_\_\_

---

## PART 2

Questions 1 through 9 of Part 2 must be answered by every employee who has been selected to use any type of respirator.

Please circle yes or no for each question.

- |  |     |    |
|--|-----|----|
| 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 here \_\_\_\_ 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 through 15 must be answered by every employee who has been selected to use either a full-face piece or a self-contained breathing apparatus (SCBA).

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 ear drum? 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 |

**City of Klamath Falls**

**EMPLOYEE ACKNOWLEDGMENT**

I \_\_\_\_\_ hereby state that:  
(Print name)

**Initial**

- 1) I have received a copy of the **Respirator Protection Policy**. \_\_\_\_\_  
AND  
I have received a *confidential* **Health Questionnaire**.  
I agree to answer the questions on the Health Questionnaire to the best of my ability and understand that I may be required to undergo a physical examination, as determined by the Healthcare Professional.
- 2) I understand that **Fit Testing** is required before \_\_\_\_\_  
I can use respirators on the job and I have received  
Fit Testing for the respirator that I will be using.
- 3) I have participated in specific **Training** on the procedures \_\_\_\_\_  
for using a respirator.

My signature below verifies that I have participated in all phases of the **Respirator Protection Policy and Procedures**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

cc: Personnel File