SAFETY POLICY MANUAL

SAFETY PROGRAM PURPOSE

The purpose of the Josephine County Safety Program is to ensure that County employees are properly protected from workplace safety hazards, and to comply with Oregon Occupational Safety and Health Administration's (OR-OSHA) and the Occupational Safety and Health Administration's (OSHA) standards. Departmental safety policies may be developed as needed to address requirements specific to individual departments.

PROGRAM COMPONENTS:

SECTION 1: GENERAL SAFETY POLICY MANUAL

SECTION 2: BLOODBORNE PATHOGENS – EXPOSURE CONTROL PLAN

SECTION 3: FIRE PREVENTION PLAN

SECTION 4: HEARING CONSERVATION

SECTION 5: RESPIRATORY PROTECTION

SECTION 6: WORKPLACE VIOLENCE PREVENTION PROGRAM

SECTION 7: SPECIALIZED SAFETY FUNCTIONS

SECTION 1:
GENERAL SAFETY POLICY MANUAL

GENERAL SAFETY REQUIREMENTS

The purpose of this policy manual is to provide basic training to ensure that Josephine County employees are properly protected from safety hazards during their work activities, and to comply with the Occupational Safety and Health Administration's (OSHA) standards.

TABLE OF CONTENTS

ARTICLE 1 – GENERAL SAFETY

1.1 SAFETY PROGRAM AND GENERAL SAFETY REQUIREMENTS

A. General Policy. The Josephine County safety and health program is designed to designate responsibilities associated with the following: use of safeguards to protect employee safety to the maximum extent possible; conducting safety and health inspections to identify and eliminate unsafe working conditions or practices; controlling health hazards and complying with OSHA safety and health standards; identifying employee training requirements; developing and enforcing safety and health rules and requiring that employees cooperate with such rules as a condition of employment; investigating, promptly and thoroughly, every accident to identify the cause and correct the problem as appropriate. County employees and management may request assistance or loss prevention services by contacting Human Resources.

B. Program Responsibilities.

Safety Officer Responsibilities: The Safety Officer is responsible for the oversight of the County's safety programs. The Safety Officer is responsible for ensuring that all state and federal regulations are followed, ensuring the implementation of all mandatory safety related programs, and monitoring the effectiveness of safety functions. Safety Officer responsibilities include:

1. Ensuring that safety and health regulations are observed.
2. Developing and implementing the County-wide safety program.
3. Providing oversight for the County-wide safety committee.
4. Monitoring safety committee and management responses to employee safety suggestions.
5. Developing and implementing County-wide safety related policies and procedures.
6. Administering the workers' compensation program and ensuring integration between the workers' compensation program and the safety program.
7. Retaining exposure and medically related records in a confidential manner.
8. Providing for mandatory safety recordkeeping requirements per state and federal regulations.
9. Overseeing documentation and posting as required by OSHA for injury and illnesses in compliance with state and federal injury reporting requirements, including the OSHA 300 Log of Work-Related Injuries and Illnesses and the annual OSHA 300A Summary of Work-Related Injuries and Illnesses.
10. Reviewing, analyzing and distributing reports related to injury costs and trends.
11. Developing, implementing, and recommending training programs.
12. Assisting supervisors with safety performance issues as needed.

Management Responsibilities: Management and supervisory personnel are accountable for the safety of employees working under their supervision, and are expected to conduct operations in a safe manner at all times. Management has the overall responsibility for the establishment of departmentally required safety guidelines and department specific safety committees. Management has the overall responsibility to ensure that County safety guidelines are implemented and followed. Management staff responsibilities include:

1. Ensuring that safety and health regulations are observed.
2. Developing and implementing department specific safety programs.
3. Recommending safety procedures and practices.
4. Assisting in preparation and revision of safety policies and implementation of the safety rules.

5. Monitoring facilities and operations for safety and health hazards.
6. Establishing or approving procedures for hazardous operations.
7. Overseeing the investigation of all accidents, reporting near-misses or hazardous conditions, and assuring that appropriate steps for corrective action are implemented in a timely manner. In the event of an accident, conducting a complete and thorough investigation in a timely manner (generally in the same work day).
8. Reviewing and receiving appropriate approval regarding the safety aspects of any facility layout, design, or alteration.
9. Establishing and maintaining regular contact with any worker who is away from work due to a work related injury or illness, and providing associated documentation to Human Resources in a timely manner.
10. Completing the department specific safety orientation of new employees and conducting ongoing training.
11. Reporting injury and illnesses in compliance with state and federal injury reporting requirements, using County required documentation and submitting to Human Resources in a timely manner.
12. Submitting exposure and medical monitoring records to Human Resources for retention.
13. Addressing safety performance issues and taking follow-up personnel actions as necessary.
14. Ensuring that any supervisor or person in charge of work are fully trained and responsible for:
    a. The safe performance of the work under their supervision.
    b. The safe conduct of employees under their supervision.
    c. The safety of all workers under their supervision.

Employees' Responsibilities: Employees' role in safety is critical. Employees are responsible to follow proper safety and health practices. It is important that everyone report unsafe conditions to their supervisor and the safety committee so that the condition can be promptly corrected. Employee responsibilities include:

1. Carrying out each task using every required and reasonable precaution to protect themselves and co-workers from injury.
2. Being familiar with and complying with rules regarding personal protective equipment, hazardous chemicals, and emergency guidelines, along with all other departmental safety program requirements.
3. Being alert to, and reporting, any unsafe conditions or practices observed to the immediate supervisor, or any member of management.
4. Immediately reporting all injuries to the immediate supervisor or other authority.
5. Being familiar with and abiding by the safety rules as a condition of employment.
6. Using the 'Safety Suggestion Form' to make recommendations or report potential hazards.

Safety Committee(s) Responsibilities: The safety committees' responsibility is to assist in correcting, or advising management, on safety related issues in the work place, and to provide leadership in protecting the safety and health of all employees. The safety committee plays an essential role in the overall safety effort and serves as the primary means of communicating and exchanging information on safety issues. Safety Committee(s) responsibilities include:

1. Recommending programs for the safety and health of employees.

2. Conducting quarterly safety inspections to identify workplace hazards and monitor compliance with OSHA and safety regulations.
3. Monitoring the programs and work procedures designed for employee safety and health.
4. Evaluating management's accountability system for employee safety and health.
5. Considering individual employee concerns and suggestions regarding safety and health, communicating with the management team regarding concerns and suggestions, and reporting back to the individual employee in a timely manner.
6. Reviewing work related illnesses, injuries, and other safety issues, and recommending appropriate corrective action in writing.
7. Promoting programs to improve the safety, health training, and education of employees.
8. Participating in the investigation of safety hazards.
9. Providing a means for employees to work together on identifying hazards and developing acceptable solutions to safety problems.
10. Meeting monthly (with the exception of inspection months) and producing safety meeting minutes for distribution and posting.
11. Developing and maintaining Safety Committee ByLaws defining the committee member roles, and committee responsibilities, in compliance with OSHA standards.

C. Reporting and Recordkeeping. The following incidents, injuries, and illnesses shall be reported on the Employee Incident/Injury Report form and forwarded to Human Resources:

1. All incidents involving a hazard that came close to causing injury to an individual, commonly referred to as 'near miss.'
2. All injuries, illnesses, and exposures that may result in medical treatment.
3. All recordable work-related incidents pursuant to OSHA guidelines. Recordable work-related injuries and illnesses are those that result in one or more of the following:
   a. Death,
   b. Days away from work,
   c. Restricted work,
   d. Transfer to another job,
   e. Medical treatment beyond first aid,
   f. Loss of consciousness, or
   g. Diagnosis of a significant injury or illness.

If medical treatment is to be provided to the employee, an 801 Form must be completed and forwarded to Human Resources within twenty-four (24) hours. Human Resources is responsible for documenting recordable injuries and illnesses using the OSHA 300 Log of Work-Related Injuries and Illnesses and produces the annual OSHA 300A Summary of Work-Related Injuries and Illnesses postings. Human Resources is also responsible for retaining exposure and medical monitoring records.

D. Written Plans and Training Requirements. Written policies or plans shall be developed and maintained for subject areas in accordance with OSHA requirements. A primary component of the safety program is employee training. Training efforts will be directed at developing each employee's knowledge, skills, and understanding of safety in the workplace. Training will be provided through various means; however, the primary instruction will be given by the immediate supervisor. Each safety subject listed below shall have an associated policy or written plan to which employees will be trained:

Mandatory for ALL employees:

1. The following subjects require initial and annual training:
   a. Accident and Injury Reporting
   b. Personal Protective Equipment (as applicable in association with assigned duties)
2. The following subjects require initial training and additional training only when changes are made to the plan:
   a. Emergency Action Plans and/or Fire Prevention Plans
   b. Hazard Communication

Mandatory for Employees in Selected Operations:

1. The following subjects are mandatory only for selected operations and require initial and annual training:
   a. Access to Exposure & Medical Records
   b. Asbestos and Lead Awareness
   c. Bloodborne Pathogens
   d. Hearing Conservation - Effects of Noise Exposure
   e. Respiratory Protection
   f. Use of Fire Extinguishers (if authorized)
   g. Other department specific subject areas not listed
2. The following subjects are mandatory only for selected operations and require initial training and additional training only when changes are made to the plan:
   a. Confined Space Entry
   b. Hazardous Energy Control - Lockout/Tagout
   c. Hazardous Materials - Waste Handling
   d. Safety Committee Training
   e. Welding Safety
   f. Other department specific subject areas not listed

E. New Hire Training Requirements. All new employees shall participate in an orientation to safety involving a two-phase approach:

1. Human Resources will provide all new employees with a safety handbook and generalized instruction on basic safety policies and requirements at the New Hire Orientation.
2. Departmental Training and Position Specific Training will be provided by the employee's immediate supervisor or lead worker before the employee will be allowed to begin actual work, and the training will be documented.

Additional position specific training shall be provided to all employees as needed or required. Training is typically provided either by the Department Head, supervisor, or lead worker and should be documented.

F. Policy Implementation. This policy shall be distributed to all new County employees at the time of their orientation by Human Resources. It is the responsibility of Elected Officials, Department Heads, and all supervisors of the County to ensure full compliance with this policy, to enforce safety and health rules, and to require that employees cooperate with these rules as a condition of employment.

1.2 ACCIDENT REPORTING AND INVESTIGATION

A. General Policy. The objective is to identify unsafe acts or conditions which may have led to the accident, and also identify why the unsafe acts or conditions were present. Management and the applicable safety committee(s) shall thoroughly investigate all safety-related incidents and near-misses to determine the cause(s) and appropriate corrective action to be taken to prevent future recurrence. This policy is set forth to comply with the following regulatory requirements:

1. OAR 437-001-0760 Investigation of Injuries: "Each employer shall investigate or cause to be investigated every lost time injury that workers suffer in connection with their employment, to determine the means that should be taken to prevent recurrence. The employer shall promptly install any safeguard or take any corrective measure indicated or found advisable."
2. OAR 437-001-0765 Safety Committee/Accident Investigation: "The Safety Committee shall evaluate all accident and incident investigations and make recommendations for ways to prevent similar events from occurring."
3. OAR 437-001-0700 Reporting an Occupational Fatality, Catastrophe, or Accident. The County is required to notify Oregon OSHA within 8 hours of workplace fatality or catastrophe, and within 24 hours of an injury resulting in overnight or longer hospital admission.

B. Definitions.

"Accident" is an unplanned event that results in personal injury or property damage.

"Catastrophe" is an accident in which two or more employees are fatally injured, or three or more employees are admitted to a hospital or equivalent medical facility.

"First Aid" means any one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, or similar injuries, which do not ordinarily require medical care. Such one-time treatment and observation is considered first aid even though provided by a physician or registered professional personnel.

"Lost Workday Case" means an injury which involves days away from work or days of restricted work activity, or both.

"Medical Treatment" means treatment of injuries administered by physicians or registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment (see above) even though provided by a physician or registered professional personnel.

"Near-Miss" means any unplanned event which could potentially have resulted in personal injury or property damage but based upon "good fortune" did not.

"Occupational Illness" means an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases which may be caused by inhalation, absorption, ingestion, or direct contact.

"Recordable Case" means work-related deaths, and illnesses, and those work-related injuries which result in: loss of consciousness, restriction of work motion, transfer to another job, or require medical treatment beyond first aid pursuant to OSHA guidelines.

"Reportable Case" means any incidents involving a hazard that came close to causing injury to an individual ('near miss'), all injuries that may result in medical treatment, and all Recordable Cases.

C. Responsibilities.

Management: It is the direct responsibility of Department Heads and Elected Officials to ensure that all reported injuries, illnesses and near-misses are promptly investigated as to cause, and that any necessary corrective measures are implemented to reduce the likelihood of recurrence.

Immediate Supervisor: It is the responsibility of the immediate supervisor to promptly perform the initial accident investigation for all reported injuries, illnesses, and near misses The supervisor shall provide recommendations to reduce recurrence, and take appropriate follow-up action to reduce the likelihood of recurrence. Supervisors shall also take corrective or disciplinary action to correct employee performance deficiencies when necessary.

Safety Committee: The safety committee shall review all accident reports, and associated recommendations and follow-up, and provide additional insight as to methods which might assist in reducing the incidence of recurrence.

Employees: Employees are responsible for immediately reporting to their supervisor any injury, illness, near-miss, or any accident. Employees are responsible for performing duties in a safe and responsible manner.

D. Accident and Injury Reporting. If an employee is injured, suffers an occupational illness or near-miss, the following reporting procedures shall be carried out:

1. The incident and/or condition shall be immediately reported to the worker's supervisor and the employee shall complete the Employee Incident/Injury Report, regardless of the severity of the injury. The report is to be submitted to the employee's supervisor.
2. All injuries, regardless of how insignificant they initially may appear, must be immediately reported to the supervisor.
3. The supervisor must review the report submitted by the employee and complete a supervisory review.
4. Any time that the work-related condition should necessitate the services of a medical provider, the employee is further required to complete a Workers' Compensation Claim Form 801. The form must be completed and forwarded to Human Resources within twenty-four (24) hours of the incident.
5. Human Resources is responsible for documenting recordable injuries using the OSHA 300 Log of Work-Related Injuries and Illnesses and producing the annual OSHA 300A Summary of Work-Related Injuries and Illnesses postings.
6. The Human Resources Director, or designee, shall report all work place fatalities, catastrophes, and overnight hospitalizations to OR-OSHA pursuant to OSHA regulatory requirements.

E. Accident Investigation. Upon notice of an accident, injury, illness, near-miss, or work related physical complaint, the supervisor will ensure that an accident investigation is conducted in a timely fashion using the accident investigation section of the Employee Incident/Injury Report. The supervisor shall first establish an understanding of the nature of the incident and accurately record the employee's explanation as to any off-the-job exposure, the circumstances surrounding the incident, the root cause of the incident, any unsafe work condition, use of personnel protective equipment, or other related factors, using the Supervisor Report section of the Incident/Injury Report Form. In any instance deemed appropriate, the supervisor shall encourage the involvement by at least one member of the safety committee in the initial accident investigation. This report form shall be completed prior to the conclusion of the workday and provided to management for review and submission to Human Resources. All fatalities, catastrophes, cases

of serious disabling injury, and instances with multiple injury victims shall be reported immediately to Human Resources who will become involved in the investigation process.

F. Corrective Action. The supervisor and management shall ensure that necessary corrective action is taken to reduce the likelihood of recurrence. Supervisors shall also take corrective or disciplinary action to correct employee performance deficiencies when necessary. The supervisor may request a follow-up investigation due to shortcomings associated with the original effort, complexity of the issues, recurrent nature of the problem, etc. Such a follow up investigation shall be completed by the Safety Committee.

G. Safety Committee Review. Departmental or County Safety Committee(s) shall review all accident and injury reports for appropriate investigation and corrective action. Safety Committee(s) may recommend additional appropriate corrective actions, and shall provide recommendations to departmental management. Such recommendations and corrective actions will be monitored and reviewed by the Safety Officer.

H. Training. Supervisors and Safety Committee members shall receive training in conducting accident investigations. Training shall be coordinated by department management for supervisors, and by the Safety Officer for Safety Committee members.

1.3 EMERGENCY ACTION AND FIRE PREVENTION PLANS

A. General Policy. This policy is established to meet the following Oregon OSHA standards beginning at (OAR 437-002-0005) that apply to emergency and fire prevention plans and actions:

1. Emergency Action & Fire Prevention Plans
2. Means of Egress - Exiting
3. Fire Protection and Portable Fire Extinguishers
4. Hazardous Materials Emergency Response
5. First Aid & Emergency Medical Response

B. Definitions.

"Emergency Action Plan" means a plan for a workplace describing what procedures the employer and employees must take to ensure employee safety from fire or other emergencies.

"Emergency Escape Route" means the route that employees are directed to follow in the event they are required to evacuate the workplace or seek a designated refuge area.

"Exit Access" is a means of egress which leads to an entrance or exit.

"Exit" is that portion of means of egress which is separated from all other spaces of the building or structure by construction or equipment as required to provide a protected way of travel to the exit.

"Fire Protection System" includes fire extinguishers and automatic fire sprinkler systems.

"Incipient Stage Fire" is a fire which is in the initial or beginning stage, and can be controlled or extinguished by portable fire extinguishers without the need for protective clothing or breathing apparatus.

"Fire Inspection" means a visual check of fire protection systems and equipment to ensure that they are in place, charged, and ready for use in the event of fire.

"Maintenance" is the performance of services on fire protection equipment and systems to ensure that they will perform as expected in the event of a fire. Maintenance differs from inspection in that maintenance requires the checking of internal fittings, and devices.

C. Policy Guidelines/Procedures. The following are the main types of potential emergencies at County facilities:

Fire
Chemical Spills or Releases
Medical Emergency due to an accident or illness
Bomb Threat
Violence
Terrorism that would be covered by Homeland Security requirements
Environmental Emergency: Wind storm, Flood, Earthquake, Tsunami

D. Responsibilities.

Management Responsibilities are assigned to Department Heads and Elected Official, or their designee(s). Management responsibilities include developing Emergency Action Plans for specific worksite locations and ensuring that all employees are trained and informed about the Emergency Action Plan for their work site. Management shall update employees when the plan changes. Management and the Facilities Department must ensure that the proper safeguards and fire protection systems are maintained.

Emergency Response Coordinator Responsibilities are assigned by Department Heads or Elected Officials to an employee at the worksite and is designated in the Emergency Action Plan. A secondary responsible party shall also be noted in the plan. The Emergency Response Coordinator's responsibilities include:

1. Assessing the situation and determining if the Emergency Action Plan should be activated in the event of an emergency.
2. Directing the evacuation of employees.
3. Making sure that Management has been notified to ensure that appropriate outside emergency services have been notified.
4. Directing the shutdown of operations when necessary.
5. Accounting for employees involved in the incident, including outside contractors and visitors to the facilities.

Fire Protection System Maintenance Responsibilities are assigned to the Facilities Department. Such responsibilities involve ensuring that all the fire protection systems are maintained and tested as required by OSHA regulations and as outlined by the Insurance representatives.

Safety Officer Responsibilities involve ensuring that all appropriate outside responders are notified. The Safety Officer will implement the call outs for emergency notification and to outside responders if employees have not already made the 911 call.

Employee Responsibilities involve following this policy and the plan for preventing emergencies. All employees shall comply with the worksite evacuation and emergency notification as outlined in the worksite Emergency Action Plan. All employees are encouraged to bring up any questions or suggestion on how to improve the plan with their supervisor.

E. Emergency Action Plans. Emergency Action Plans describing what procedures employees must follow to ensure safety from fire or other emergencies should include the following components:

1. Emergency procedures and emergency escape route assignments.
2. Procedures to be followed by employees who remain to perform critical operations before they evacuate.
3. Procedures to account for all employees after emergency evacuation
4. The preferred means and designated contact persons for reporting fires and other emergencies

5. Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.
6. Alarm system and specifications for specific locations as applicable.

F. Fire Protection Plan. A Fire Protection Plan shall be established and maintained addressing additional procedural issues that relate directly to fire protection and fire response actions. The overall Fire Protection Plan is managed by the Safety Officer. Only trained and authorized employees are approved to use fire extinguishers. Selected employees shall receive fire extinguisher training and the training will be updated once a year. The overall fire protection system is managed by Building Maintenance to oversee the fire extinguisher selection, accessibility, and maintenance. All fire exits shall be visibly marked with signs and kept accessible at all times. All employees are responsible for conducting tasks involving the risk of fire in a safe manner and for ensuring that all combustibles in the area are removed or protected.

G. First Aid for Medical Emergencies. First-aid supplies shall be in close proximity to all employees. The supplies shall be located in labeled safety supply/first-aid cabinets or kits at each facility. The specific first-aid items that are required as a minimum to be available in each first-aid kit include:

8 gauze pads at least 3" x 3"
2 large gauze pads which can be folded to a size of 8" x 10"
1 box of adhesive bandages
2 triangular bandages
1 package roller bandage at least 2" wide
Wound cleaning agent
Scissors
1 blanket or equivalent
Latex gloves and CPR face piece for infection control
Disinfectant hand cleaner
Disinfectant soap
Any additional requirement for specialized operations, such as Forestry requirements under OSHA - Div 7.

The first-aid supplies must be monitored for sanitation and content by the department supervisors on a monthly basis. Employees must follow Bloodborne Pathogen and Exposure policies when providing first-aid.

H. Training. Employees shall be trained in this policy and the Emergency Action Plan associated with their worksite upon hire and when changes are made to the policy or plan. Employees who are assigned to use fire extinguishers shall be trained upon hire and every year thereafter. Additional training shall occur as needed whenever an employee's responsibilities change. Evacuation and/or emergency drills and refresher trainings shall be conducted by departments on an annual basis.

1.4 ERGONOMIC PROGRAM

A. General Policy. This policy has been designed with the goal of strengthening commitment to occupational injury prevention by providing an Ergonomic Program. The Ergonomic Program attempts to eliminate or reduce worker exposure to hazards or work conditions which lead to musculoskeletal disorders which are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs.

B. Definitions

"Ergonomics" is defined as the science that addresses human performance and well-being in relation to job, tools, equipment, and environment. Two additional terms that are commonly used in conjunction with ergonomics are:

"Biomechanics" is the study of movement of body segments (fingers, hands, arms, back) to describe the abilities and limitations of the human body.

"Anthropometry" is the analysis of dimensions and proportions of the human body in relation to workstation design, equipment, furniture and tools.

"Musculoskeletal Disorder (MSD)" are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs. They do not include injuries resulting from slips, trips, falls, or similar accidents. Examples of MSDs include carpal tunnel syndrome, tendonitis, sciatica, herniated disc and low back pain.

"Job Hazard Analysis" is a tool or process to make a job safe before hazards become accidents through the identification of hazards associated with a specific job and planned actions to control or eliminate the hazards. It provides a formal systematic method that, when used consistently, can provide the basic framework of a pro-active safety program.

"Hazard" is a potential danger which can result in injury or illness.

"Materially Reduce MSD Hazard" means to reduce the duration, frequency and/or magnitude of exposure to one or more ergonomic risk factors in a way that is reasonably anticipated to significantly reduce the likelihood that covered MSDs will occur.

"Incremental Abatement Process" includes implementing one or more controls that materially reduce the MSD hazard. If continued exposure to MSD hazards in the job prevents the injured employee's condition from improving or another MSD occurs in that job, additional feasible controls will be implemented until the injured employee's condition improves and no additional MSD occurs in the job.

C. Responsibilities. Department Heads and Elected Officials are responsible for ensuring ergonomic evaluations take place as necessary and for implementing workplace changes to reduce risk of cumulative trauma injuries. Supervisors are responsible for responding promptly to employees who report of MSD signs and symptoms. The Safety Officer is responsible for assisting with the development, implementation, and evaluation of ergonomic corrections. Employees are responsible for reporting MSD signs and symptoms to their supervisor or manager. Employees are also responsible to participate in the Job Hazard Analysis process as outlined in this policy when applicable.

D. Hazard Information and Reporting. Employees are to report MSD signs and symptoms to their supervisor. Once an employee reports MSD signs and/or symptoms to their supervisor, the supervisor must see that an evaluation is done. An MSD evaluation should occur if the report meets all of these criteria:

1. The MSD is reported;
2. The MSD is an incident or injury requiring associated documentation;
3. The physical work activities and conditions in the job are reasonably likely to cause or contribute to the type of MSD reported; and
4. These activities and conditions are a core element of the job and/or make up a significant amount of the employee's work time.

Employees will periodically be provided information that explains how to identify and report MSD signs and symptoms.

E. Job Hazard Analysis and Control.

1. Job Hazard Analysis:
   a. A Job Hazard Analysis tool shall be used by the Safety Officer or designee in the identification of ergonomic issues and solutions.
   b. The Job Hazard Analysis will identify the "ergonomic risk factors" that may result in MSD hazards and recommendations on how to eliminate or reduce the hazards.
2. Use of Controls:
   a. Controls shall be implemented that either attempt to eliminate or reduce the MSD hazards, or materially reduce the MSD hazards using an Incremental Abatement Process.
   b. Incremental Abatement Processes include implementing one or more controls that materially reduce the MSD hazard.
   c. Additional Controls may be implemented if continued exposure to MSD hazards in the job prevents the injured employee's condition from improving or another MSD occurs in that job. Additional feasible controls will be implemented until the injured employee's condition improves and no additional MSD occurs in the job. Controls will be implemented to the extent feasible. If controls become more feasible at a later time, those controls will be implemented promptly if necessary.
   d. Other Controls such as a combination of engineering, administrative and/or work practice controls may be used to eliminate or materially reduce MSD hazards.
   e. Personal protective equipment may be used to supplement engineering, work practice and administrative controls, but may only be used alone where other controls are not feasible.

F. Training. Persons involved in conducting ergonomic assessments, including Safety Committee members, shall be trained in recognizing MSD hazards and identifying measures for eliminating or materially reducing the hazards. When specific job tasks pose known risks, or when a hazard is identified, training for employees and supervisors shall be provided covering the following elements:

1. How to recognize MSD signs and symptoms
2. How to report MSD signs and symptoms, and the importance of early reporting
3. MSD hazards present in the job, and the measures to be followed to protect employees
4. Job-specific controls

1.5 PERSONAL PROTECTIVE EQUIPMENT

A. General Policy. Provision of personal protective equipment and all associated training and maintenance shall be in compliance with OAR 437-002-0120(1) 'Personal Protective Equipment'. Use of respirators is covered under the County 'Respiratory Protection Plan'. Use of ear protection is covered under the County 'Hearing Conservation Plan'. Employees exposed to Bloodborne Pathogens must follow the Personal Protective Equipment (PPE) requirement set forth in County Policy G-2 – 'Bloodborne Pathogens - Exposure Control Plan'. Appropriate training on the use and maintenance of personal protective equipment shall be provided to employees when the employee's position requires that they wear proper personal protective equipment (PPE) when performing job duties. The PPE provided shall be used as required by specific job requirements and maintained in a sanitary and reliable condition. If

employees provide their own protective equipment, it shall still be the supervisor's responsibility to assure its adequacy, including proper maintenance and sanitation of the equipment. The selection of PPE shall be made by management, and shall be designed to match the hazard and allow for employees to safely conduct their job tasks. The 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 the policy of Josephine County to ensure that working conditions are safe and PPE is used as a back-up for additional protection.

B. Definitions.

"Personal Protective Equipment (PPE)" 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.

C. Policy Guideline/Procedures. The basic requirements for personal protective equipment included in this policy are:

1. Eye and Face protection
2. Foot protection
3. Hand protection
4. Head protection

Other requirements for personal protective equipment are covered under specific written plans. These include:

1. Hearing/Ear protection (See Hearing Conservation Plan)
2. Respiratory protection (See Respiratory Protection Plan)
3. Fall protection (See Fall Protection Plan)

Departments are responsible for developing written certificates outlining work operations/jobs that require specific PPE for eye, face, head, food and hand protection using Appendix A, Personal Protective Equipment Hazard Assessment, or an equivalent form of documentation.

D. General Responsibilities.

Management: Management is responsible for training employees in the use of personal protective equipment and instructing employees on what is required for their work duties. Supervisors are responsible for completing and updating the PPE written certificates in Appendix A, and are responsible for ensuring that PPE requirements are followed.

All Employees: Employees must follow all safety procedures, 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. Problems with equipment must be promptly reported to the supervisor.

Safety Committee: The safety committee shall review personal protective equipment as part of the quarterly inspection activities.

E. General Requirements.

I. Head Protection:
   a. Hard hats are to be used to protect the head from flying objects, impact, and electrical shock. Hard hats used at County work operations shall minimally meet ANSI Z89.1-1986 standards for the job task.
   b. Hard hats shall be used by all employees in the following jobs:

c. When overhead hazards are present. This includes when working under floor openings or walkways, and working in areas with low ceilings or protruding objects.
d. While working around construction or maintenance field projects or equipment.
e. While working outside and around heavy equipment.
f. While working inside a confined space below ground level.

II. Eye & Face Protection
a. Eye and face protection shall 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.
b. Eye protection must minimally meet ANSI Z87.1-1989 requirements and the following criteria:
i. Provide adequate protection against the particular hazards for which they are designed.
ii. Provide reasonable comfort and not unduly interfere with the movements of the wearer.
iii. Be durable.
iv. Be capable of being cleaned easily.
v. Be kept in clean and good repair.
c. The specific type of eye and face protection needed depends on the type of hazard:
i. Particle hazards from grinding/chipping require safety glasses with side shields.
ii. Liquid splash hazards require chemical splash goggles or safety glasses with a face shield.
iii. Gas welding requires welding goggles.
iv. Face protection shall be worn when liquid splashes or significant particle matter could impact the face and cause injury.

III. Hand Protection
a. Hand protection shall be worn to protect the hands from mechanical injury due to friction, heat, shearing/cutting actions, and for protection against chemicals.
b. Chemical protective gloves should be selected based on the type of rubber or plastic material which provides proper protection against the specific chemical used. The selection will be made by the supervisor. Supervisors shall ensure that the MSDS for the chemical is reviewed for recommendations on the type of material needed for the protective gloves.
c. Chemical protective gloves shall be worn when there is skin contact with the following chemicals:
i. Solvents
ii. Corrosives
iii. Chemical spills
iv. Appropriate gloves providing adequate protection must be worn when employees are exposed to wood slivers, friction, sharp metal edges, hot or cold materials, and moving heavy objects.

IV. Foot Protection

a. 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.
b. The following footwear is expected to be worn:
    i. Leather work boots when working on or around equipment.
    ii. Safety steel toes when there is a hazard from dropping heavy objects.
    iii. Rubber boots when exposed to wet conditions.

F. Training. Departments shall ensure that all employees are trained in the hazards associated with their position assignment and in the appropriate use of Personal Protective Equipment. Training shall be provided as follows: At the time of initial assignment to tasks where occupational hazards requiring PPE are present; When changes such as modification of tasks of procedures or institution of new tasks or procedures affect the employee's occupational exposure to hazards.

Appendix A

PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT:

The following sample forms were developed to ensure compliance with the Oregon OSHA personal protective equipment hazard assessment and selection. The rules require that each employer assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment. If such hazards are present, or likely to be present, the County is responsible for:

1. Selecting, and having each affected employee use, the types of PPE that will protect the employee from the hazards identified in the hazard assessment.

2. Communicating the selection to each affected employee.

3. Ensuring that the selected PPE properly fits and is in good working condition.

This assessment must be in writing and signed by the person conducting the assessment (Form B). In addition a certification of the assessment must be completed and signed by both the person conducting the assessment and a person in authority certifying the assessment (Form A).

The following forms, or an equivalent alternative form, must be used for this assessment and shall be kept on record by each affected department to ensure compliance with OSHA regulations.

FORM A: CERTIFICATION OF PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT

Work Operation/Job Position:_____

Work/Facility Location: _____

PPE Selection	Type of Hazard:	
	Physical	Chemical
Eye/Face PPE Selected		
Head PPE Selected		
Respiratory PPE Selected		
Hand & Arm PPE Selected		
Foot PPE Selected		
Body & Leg PPE Selected		

Additional Comments:

This certifies that a hazard assessment identifying the PPE needs for the listed job position was completed.

_____

HAZARD ASSESSMENT PERFORMED BY (Name/Title) DATE

_____

HAZARD ASSESSMENT REVIEWED AND CERTIFIED BY (Name/Title) DATE
(Must be a supervisor or manager trained in associated safety regulations)

FORM B: PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT WORKSHEET
(29 CFR 1910 132)

DEPARTMENT: _____

LOCATION: _____

JOB TASK: _____

EVALUATOR: _____

ENGINEERING CONTROLS: _____

DATE: _____

Risk Level

☐ Probable

☐ Possible

☐ Unlikely

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

BODY PART: Check the part of the body that has the potential of becoming injured. If there is a multiple exposure, 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.

ENGINEERING CONTROLS:	Complete/List engineering controls being used for each job task. Controls include: barriers, guards, containment, ventilation, etc. If there are no controls being used then write 'none'.

FORM C : PPE ASSESSMENT CRITERIA

Eye & Face Protection 29 CFR 1910.133

Impact: 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.
TYPE OF PROTECTION: Safety glasses with side protection, goggles, face shields. For severe exposure add the use of faceshield.

Heat: hot sparks, splash from molten material, high temperature exposure (i.e. furnace operations, pouring, casting, hot dipping, and welding.
TYPE OF PROTECTION: Faceshields, goggles, or safety glasses with side protection. For severe exposure add the use of faceshield.

Chemicals: Splash or irritating mists (i.e. acid and chemical handling - transferring, degreasing)
TYPE OF PROTECTION: Chemical splash goggles, eyecup and cover types. For severe exposure add the use of faceshield.

Dust: Nuisance dust - irritation of the eyes (i.e. woodworking, buffing, general dusty conditions that can cause eye irritation.
TYPE OF PROTECTION: Goggles, eyecup and cover types

Light and/or Radiation (optical damage):
Welding - Electric Arc
TYPE OF PROTECTION: Welding helmets or welding shields - typical shades 10-14 -see ANSI standard chart in PPE Safety Manual
Welding - Gas:
TYPE OF PROTECTION: Welding goggles or welding shields - typical shades gas: 4-8; cutting: 3-6; brazing 3-4
Cutting, torch brazing, torch soldering
TYPE OF PROTECTION: Welding glasses or welding shields typical shades 1.5 to 3
Glare
TYPE OF PROTECTION: Glasses with shaded or special-purpose lenses

Head Protection 29 CFR 1910.135

Impact and penetration hazards caused by falling objects; Electrical shock and burn hazard:
TYPE OF PROTECTION:

- Class A helmets: impact & penetration resistance & electrical to 2,200 volts
- Class B helmets: impact & penetration resistance & electrical to 20,000 volts
- Class C helmets - impact & penetration resistance & NO electrical protection

Foot Protection 29 CFR 1910.136 (ANSI Z41-1991)

TYPE OF PROTECTION:
Impact and Compression: Safety shoes or boots with impact protection are required for carrying or handling materials such as packages, objects, parts or heavy tools, which could be dropped; and, for other activities where objects might fall onto the feet.
Puncture protection: is needed where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal, etc. could be stepped on by employees causing a foot injury.
Electrical: If there are electrical hazards from live work then boots rated for protection against electrical hazards are needed. 29 CFR 1910.137 designates special criteria and approvals for working on or near exposed energized conductors or systems. Only qualified electrical workers are permitted. The type of equipment includes: insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber.
Hand Protection 29 CFR 1910.138

Gloves may be needed for the prevention of cuts, abrasions, burns, and skin contact with chemicals that are capable of causing local or systemic effects following skin exposure. Selection of the glove material and style depend on type of contact, duration of exposure, and type of material. Glove selection charts that are published by glove manufacturers and technical bulletins will be used. The Safety Officer has additional technical information available for the selection of gloves (see Chemical Protective Clothing Selection Handbook)

1.6 HAZARD COMMUNICATION AND MSDS

A. Purpose. To set forth the County's policy regarding Hazard Communication and ensure compliance with OSHA Hazard Communication Standard (HCS) 29 CFR 1910 and Oregon Occupational Health and Safety Code, OAR Chapter 437, Division 2, Subdivision Z, Toxic and Hazardous Substances. To establish a safe working environment by ensuring that hazardous chemicals in use have Material Safety Data Sheets on file and that hazardous chemical containers are appropriately labeled as to contents and the hazards associated with their use. To ensure employees are informed of the presence of hazardous chemicals in the work place and trained in the use of such chemical. To ensure compliance with the "employee right to know" provisions of the Oregon Occupational Safety and Health Code.

B. General Policy. Written Hazard Communication Plans, Material Safety Data Sheets (MSDS) and lists of hazardous chemicals shall be maintained for worksites where employees are exposed to hazardous chemicals. Employees who are exposed to chemicals shall be made aware of the hazardous properties of the chemicals with which they work and measures to take to protect themselves from these chemicals.

C. Definitions.

"Chemical Name" means the chemical name, Chemical Abstracts Service (CAS) registry number, or any other information that reveals the precise chemical designation of the substance.

"Container" is any original bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or similar item used to contain a hazardous chemical substance. Pipes, piping systems, engines, fuel tanks, or other operating systems are not considered to be containers.

"Hazard Warnings" means words, pictures, symbols or color coding or combination thereof appearing on a label or other appropriate form of warning which convey the hazards of chemical substances in the container.

"Hazardous Chemical" means any chemical which is a physical or health hazard. Physical hazards are chemical reactions that could result in a fire, explosion, and/or toxic gas release which cause physical trauma if chemicals are handled or stored improperly. Health hazards are health effects (illness or disease) caused directly by the chemicals themselves, not an injury resulting from a reaction.

"Label" means any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

"Material Safety Data Sheets (MSDS)" means written or printed material concerning a chemical substance and its known hazards which is prepared in accordance with OAR 473-002-0360(36) and 29 CFR 1910.1200.

"Safety Officer" means the Human Resources Director or designee.

"Secondary Container" is a container that a chemical is transferred to from its original container. **"Trade Name"** means any designation or identification such as code name, code number, brand name or generic name used to identify a chemical substance other than by its chemical name.

"Use" means to package, handle, react or transfer.

"Worksite" means an area or location where hazardous chemicals are produced or used, and where employees are present.

D. Policy Requirements.

Hazard Communication Plans: Written Hazard Communication Plans are required for all work sites where employees are exposed to hazardous chemicals. Hazard Communication Plans shall contain procedures for the following:

1. Maintaining lists of hazardous chemicals used;

2. Labeling and identifying chemical containers;
3. Maintaining material safety data sheets;
4. Training employees about chemical hazards;
5. Informing employees who do non-routine tasks about the hazardous chemicals they may be exposed to, informing employees about hazardous chemicals in pipes, and informing contractor employees about hazardous chemicals they may be exposed to.

The Human Resources office will make available a standardized template for written Hazard Communication Plans.

Material Safety Data Sheet (MSDS):

1. Worksites shall keep a list of chemicals used.
2. Material safety data sheets for all hazardous chemicals used during the course of work shall be readily accessible to all employees and available for review at all times. The location in which the MSDS are kept should be appropriately posted so as to allow easy employee recognition and access.
3. Employees shall not introduce chemicals to a worksite without supervisory approval. Any person authorized to order, purchase or introduce any chemical to a worksite shall be responsible for ensuring that a current MSDS is on file.
4. Upon receipt of an MSDS, the original shall be maintained as designated in the written Hazard Communication Plan.
5. Record of the chemicals, where they were used, and the years they were used must be retained for at least 30 years to meet OSHA records retention requirements.

E. Chemical Labeling. The use of chemicals from unlabeled containers or the use of chemicals for which there is no current MSDS in possession is not permitted. All containers of chemicals shall have a label affixed or attached. Labels shall be in readable condition at all times. The label must contain, at a minimum, the following information:

1. The chemical name and trade name of the contents.
2. Any hazard warnings appropriate to the contents (toxicity, flammability, reactivity, or storage incompatibility with other chemicals).
3. The name and address of the manufacturer.

All employees shall take care not to deface or remove the labels of original containers. When chemical substances are transferred from original containers to secondary containers, labels for the secondary containers are required. The labeling of primary or secondary containers may be accomplished by any of the following means:

1. Attaching a photocopy of the original container's label (reduced in size if necessary) to the container.
2. Attaching a National Fire Prevention Association diamond (NFPA 704) or equivalent with hazard code information filled in.
3. Attaching a handwritten label having information equivalent to either of the above.

F. Employee Information and Training. Employees will be informed of this policy and their rights to receive information regarding hazardous chemicals to which they may be exposed. All employees will be advised of written Hazard Communication Plan associated with their worksites and the location of Material Safety Data Sheets. Training for new employees and a mandatory annual refresher course for present employees shall be provided for those employees that are exposed to hazardous chemicals. The annual

training sessions will include a review and explanation of any hazardous processes conducted in the work area and methods and observations that may be used to detect the presence or release of hazardous chemical in the work area. All employees shall be required to sign a record of training which will be retained in the MSDS folder. All employees shall be trained in the use of chemical exposure response procedures and use of equipment such as eyewash stations, blood spill kits, chemical spill kits, etc.

G. Information Release. Employee's physicians have a right to receive information regarding hazardous substances to which an employee is exposed if there is a medical emergency. The treating physician or nurse must be given the requested information immediately, by contacting the supervisor of the shift. As soon as circumstances permit, a request must be in writing to the Safety Officer and describe with reasonable detail the reason the physician or nurse is requesting the information.

H. Personal Protective Equipment (PPE). Supervisors shall train employees in the use of protective equipment required in conducting their work assignments. Employees shall be required to use approved PPE when handling or exposed to hazardous chemicals. Elected Officials, Division Directors, Program Managers, or their designees shall ensure that training plans for the use of PPE are in place and that PPE is properly maintained and utilized when necessary/required.

I. Notification of Contractors. Elected Officials, Division Directors, Program Managers, or their designees will inform all contractors of the possibility of exposure to hazardous chemicals for which they may be exposed.

J. Safety Officer Responsibilities. The Safety Officer is responsible for the final determination of the presence or absence of hazardous chemicals in worksites and will direct that written Hazard Communication Plan and chemical safety training programs be set in place when required. The Safety Officer shall ensure that the Safety Committee provides inspections for compliance regarding maintenance of Hazard Communications Plans.

K. Nondiscrimination. Employees will be advised of their right to the information described in this procedure and will not be penalized or discriminated against for exercising their right under this policy or for reporting safety hazards.

1.7 UNIVERSAL PRECAUTIONS AND SAFE HANDLING OF CONTAMINATED OBJECTS

A. General Policy. In order to prevent exposure to Hepatitis B, Hepatitis C, HIV and other bloodborne pathogens by county employees and volunteers, all used syringes, needles, lancets and other discovered contaminated objects, including blood spills, shall be reported and handled in a safe manner that is consistent with this policy.

B. Definitions.

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

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

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

"Decontamination" means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or items is rendered safe for handling, use, or disposal.
"Exposure incident" means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
"Parenteral" means piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts and abrasions.
"Personal protective equipment" is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (ie. uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.
"Sharps" mean any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.
"Universal precautions" is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV and other bloodborne pathogens.

C. Policy Guidelines/Procedures. Specific job classifications in which all or some employees have reasonably anticipated occupational exposures to blood or other potentially infectious materials when performing their routine job duties shall follow the procedures identified in County policy G-2 Bloodborne Pathogens - Exposure Control Plan. All other County employees and volunteers who discover a contaminated object or blood spill shall immediately notify maintenance or custodial staff to respond to clean up and decontaminate the area. Areas should be blocked from access by other employees and the public until clean up occurs. Employees should not handle contaminated objects or clean contaminated areas except under unusual circumstances where an area cannot be blocked from access and maintenance/custodial staff are unavailable. Employees shall use universal precautions as identified below while handling contaminated objects or cleaning contaminated areas.

D. Universal Precautions. Universal Precautions are a set of protocols that are recommended by the Center for Disease Control and Prevention and now required by OSHA to prevent skin and mucous membrane exposure when potential contact with blood or body fluids is anticipated.
The protocols are based on three basic premises:

1. Treat all blood or body fluids as potentially infectious.
2. Protective barriers must be used to reduce the risk of exposure.
3. The barriers only supplement existing infection control measures such as hand washing.

Universal Precautions specifically include:

1. Gloves must be worn when touching blood or body fluids.
2. Gloves must also be worn when handling items or surfaces soiled with blood or body fluids.
3. Bandage any cut, wound or break in the skin with watertight bandages to preclude contact with blood or body fluids.
4. Wash hands thoroughly with soap and water for at least 10-20 seconds after contact with blood or body fluid or handling contaminated articles. This procedure should be done even after wearing gloves.

E. Handling of Sharps. Employees should not handle sharps except under unusual circumstances where the object must be removed and maintenance/custodial staff are unavailable. When picking-up sharps (such as hypodermic needles) and broken contaminated glass, employees need to wear latex gloves and use tongs, rather than their fingers. Sharps, including blood contaminated utility knives or broken pop bottles that are found shall be disposed of in an approved sharps container. The sharps container shall be a closeable, puncture resistant, disposable container that is labeled as a 'bio-hazard' and color coded red. Procedures for picking-up sharps:

1. Have sharps container ready
2. Use latex gloves or vinyl gloves.
3. Use mechanical equipment (pliers, shovels, or dustpans) to pick up contaminated utility knives or scissors.
4. Dispose of needle in sharps container.

F. Disposal of Sharps Containers. Maintenance/Custodial staff shall be responsible for all sharps containers and shall ensure proper disposal. Biohazard waste requires special handling and disposal pursuant to state law.

G. Decontaminating Surfaces. Except due to unavoidable circumstance, maintenance/custodial staff shall be responsible for all decontamination processes. Hepatitis virus can survive for at least a week in a dried state at room temperature on work surfaces. HIV survival is less - 24 to 48 hours. As a result, it is important to ensure proper cleaning of all materials or surfaces contaminated with blood or body fluids. Cleaning up blood or body fluids shall be done as soon as possible. The chemical product's use instructions need to be followed for proper dilution and application methods. If commercial disinfectants are not available, a basic environmental disinfectant or fresh bleach solution can be used. A bleach solution made up of 500 ppm (parts per million) free available chlorine (a 1:100 dilution of common household bleach - approximately 1/4 cup bleach per gallon of tap water) is effective. Cleaning and Disposing of PPE:

1. Disposable latex or vinyl gloves or clothes should be disposed of in the regular trash after use unless soaked with blood or other potentially infectious materials (OPIM), in which case Maintenance/Custodial staff must dispose of as described in the Bloodborne Pathogens - Exposure Control Plan policy.
2. Goggles (that are not disposable) should be cleaned with soap and water and then wiped down with alcohol or other germicides if contaminated with blood or OPIM.

H. Exposure Incidents.

1. When stuck with a sharp object:
    a. When stuck with sharp object first force bleeding, then wash with soap and water or disinfectant.
    b. Report to your supervisor immediately and complete an Accident/Incident Report form.
2. When splattered with blood:
    a. When splattered with blood, rinse eyes, mouth and nose with water for as long as tolerated (10 minutes minimum).
    b. Use a hydrogen peroxide mouthwash (1/2 strength) without swallowing to cleanse mouth.
    c. Report to your supervisor and complete an Accident/Incident Report form.

See your physician or call the county health department if you have questions. In the event that an employee experiences an incident of occupational exposure, the hepatitis B vaccination and post exposure evaluation / follow-up shall be made available no later than 24 hours after the exposure.

I. Training. New employees shall receive a copy of this policy as part of the safety orientation and training process. Annual Bloodborne Pathogens training that is offered to specific county employees will contain a module regarding safe handling of sharps and post-exposure procedures.

J. Additional Departmental Written Policies. County departments that have employees and/or volunteers who possess job duties which take them out into the community, may have additional departmental written policies and procedures in place to guide staff when used syringes and other sharps are discovered during the course of their job duties. (Examples: Parks, Public Works, Building Safety, Corrections, Sheriff's Office, and Public Health). In addition to the departments identified above, some departments may have policies and procedures in place for employees and/or volunteers who discover used sharps, in or near worksites. Any written policies that are prepared by departments should include at least all of the provisions contained in this County Policy.

K. Recordkeeping. The County shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29CFR 1910.1020. The County Safety Officer or designee shall establish and maintain a sharps injury log for recording all percutaneous injuries from contaminated sharps as required by 29 CFR 1904, and shall retain the log for five years following the year in which the injury occurred.

1.8 INJURED WORKER RETURN TO WORK PROGRAM

A. General Policy. It is the policy of the County to administer a Return to Work Program for injured workers that effectively reduces medical, disability and premium costs, and positively impacts employee recovery from work-related illnesses and injuries. The Program shall be administered in accordance with Workers' Compensation regulations, including but limited to, ORS Chapter 656. The County is committed to providing temporary modified jobs or assisting in finding other available and suitable jobs for workers who are injured while performing assigned duties.

B. Policy Guidelines/Procedures. The County shall strive to return an injured worker to a transitional assignment that complies with medical limitations within three (3) days of being released from work restriction to transitional work.

1. Employees shall be provided a written offer of temporary transitional work that will notify the worker of the worker's responsibilities, including but not limited to:
   a. A description of job duties based on injured worker's physical restrictions;
   b. Physical work restrictions and limitations to be approved by the attending physician;
   c. The temporary nature of the transitional work assignment;
   d. The reevaluation process and associated timelines; and
   e. Potential loss of reemployment and reinstatement rights associated with failing to accept a bona fide offer of transitional work.

Supervisors and Human Resources shall review transitional work assignments every thirty (30) days, or more frequently if needed, in order to adjust the work assignment to align with the worker's temporary work restrictions and to monitor the injured worker's recovery.

C. Modified Duty. Modified duty jobs assignments shall be assessed individually and offered on a case by case basis. Modified duty jobs will be identified after the injured employee provides his/her supervisor with physical limitations or restrictions as outlined by the employees' physician. Modified duty may be any of the following:

1. The worker's regular job, modified by removing some tasks; or
2. A different regular or light duty job currently existing that accommodates the worker's restrictions; or
3. A job which is specifically designed around the worker's restrictions.

The modified duty job, if offered, shall end on the date the worker receives a regular release, or may be ended at any time if the County chooses to no longer make the modified duty work available. Modified duty positions may last up to 90 days and are not intended as a permanent modified position. Transitional work shall be limited to three, thirty-day review sequences unless there are extenuating factors based on written medical confirmation of the worker's prognosis, with an expected recovery date, that justifies continuing the transitional work assignments. Otherwise transitional work assignments will end when one of the following occur:

1. The injured worker is released by the attending physician to regular work;
2. The attending physician determines the employee to be medically stationary with permanent restrictions or releases the employee to suitable employment;
3. The injured worker fails to abide by medical restrictions or terms of the transitional work assignment;
4. The County determines that transitional work assignment will no longer be provided; or
5. The workers' compensation claim is denied by the insurer.

The County shall utilize to the fullest extent possible, the Employer-at-Injury Program and Preferred Worker Programs administered by the Department of Consumer & Business Services, Workers Compensation Division for the purposes of wage subsidy, worksite modification and reimbursement for related purchases.

D. Policy Implementation. The Human Resource Office is responsible for implementation of this policy. Human Resources shall oversee and manage the claims process and will work with the Supervisor and the Workers' Compensation carrier to coordinate injured worker assignments and claims resolution. Human Resources shall ensure compliance with leave or disability laws, bargaining agreements and injured worker/workers compensation laws and rules. Failure to accept modified work or return to full duty may be considered job abandonment and subject the employee to termination of employment if the leave is not qualified as Family Leave or other protected status.

ARTICLE 2 – RISK MANAGEMENT

2.1 RISK MANAGEMENT POLICY

A. General Policy. The County Risk Manager and Human Resources share the responsibility of formulating and implementing programs and procedures to minimize County property, revenue and personnel related losses. Risks that have been identified for Josephine County fall into the following categories:

Risk Manager: **Human Resources:**

Property (Building and Contents)
General Liability
Automobile Liability
Automobile Physical Damage
Professional Liability and Malpractice
Employee Fidelity
Airport Liability
Environmental Liability
Workers' Compensation
Volunteer Liability
OSHA Compliance
Safety Programs
Employment and Labor

B. Policy Guidelines/Procedures. The Risk Manager and Human Resources shall perform the following duties to provide the best recommendation to the Board of County Commissioners for protection of County assets:

1. Identify and evaluate all types of risks to which County assets might be exposed.
2. Develop and analyze a variety of risk management techniques to reduce those risks.
3. Select and implement the most viable risk management techniques for the reduction of identified risks.
4. Monitor the entire County risk management process on a continuous basis to ensure that the risk management techniques selected remain viable and continue to be the most effective options.

C. Insurance Coverages. Josephine County has a comprehensive insurance program designed to cover losses that occur. Insurance coverage is provided by an insurance carrier for most coverages effective after July 1, 2006. Prior claims remain under the self-insurance portion of the County and may utilize a Third Party Administrator. When purchase of commercial insurance is necessary, the Risk Manager or Human Resources (depending on responsibility area) will secure this insurance upon the approval of the Board of County Commissioners. In the administration of the remaining portion of the self-insurance program, the Risk Manager or Human Resources will work closely with the Claims Adjustment Service/Third Party Administrator to determine amounts to be paid on all claims covered by self-insurance (liability, property loss and workers' compensation claims prior to July 1, 2006).

D. Risk Management Responsibilities.

RISK MANAGER: It is the responsibility of the Risk Manager to review areas of potential liability that may result in third party claims against the County. The Risk manager shall review incidents and accidents that occur, and evaluate the risks and potential claims that may be made against the County. The evaluation includes investigating the incident and identifying potential risk reduction factors. It is the duty of the Risk Manager to process all third party claims against the County. The Risk Manager may prepare written recommendations for risk reduction improvements.

HUMAN RESOURCES: Human Resources will manage labor/employment related claims and the safety and workers' compensation programs. Human Resources is responsible for the development, organization, coordination, and implementation of personnel policies, employment related practices, safety procedures, safety committee, and safety education. It is the responsibility of Human Resources to review all accidents involving employee injuries and evaluate the risks and potential claims that may be made against the County. Human Resources may prepare written recommendations for risk reduction improvements in reference to labor claims and employee injury/accident data.

BOARD OF COUNTY COMMISSIONERS: The Board of County Commissioners shall require that Departments of the County comply with Occupational Safety and Health Laws, State and Federal Regulations and the Risk Management provisions of the policies of the County.

DEPARTMENT HEADS AND ELECTED OFFICIALS: Department Heads and Elected Officials shall administer this policy to provide for the safety, health and welfare of employees, and shall maintain areas accessed by citizens free from hazards. Supervisors may be delegated the authority to carry out safety policies in each department, but the responsibility for meeting objectives, and the overall protection of employees in the performance of their assignments, cannot be transferred.

SUPERVISORS: Supervisors shall assume the responsibility of thoroughly instructing their personnel in the safe practices to be observed in their work environment. Supervisors shall consistently enforce safety standards and requirements to the utmost of their ability and authority. Supervisors are responsible for taking action to eliminate any potential hazard within the activities under their supervision, and will set the example of good safety practices in the work place. Safety practices shall be measured along with all other phases of supervisor performance. The principal duties of supervisors in discharging responsibilities for safety are to enforce all safety regulations in effect and make employees aware that violations of safety rules will not be tolerated.

EMPLOYEES: Each employee, as a part of the comprehensive safety and loss prevention program, is responsible for adhering to safety and risk management requirements, following safety practices and providing timely reports of unsafe conditions.

EMPLOYEE DUTIES: It is the responsibility of all County employees to report occurrences an incidents or injuries. Employees shall inform the Department Head or their designee immediately upon becoming aware of personal injury or damage to County property. If an accident involves a vehicle, employees shall notify the appropriate local law enforcement authorities. In all cases of personal injury or damage to County property, the employee shall complete the Josephine County Incident Report Form and submit it as soon as possible to their supervisor and/or Department Head or their designee.

SUPEVISOR AND/OR DEPARTMENT HEADS AND ELECTED OFFICIALS DUTIES: Reports of incidents and accidents shall be forwarded to the Risk Manager or Human Resources within two business days of the incident. Department Heads and Elected Officials shall ensure that the appropriate local law enforcement authorities have been notified in the event of property damage. If the accident involves damage in excess of $5,000 or any bodily injury, notify the Risk Manager immediately. It is the responsibility of all Department Heads and Elected Officials, or their designees, to cooperate in the investigation of accidents. It may be required from time to time to provide information to the Insurance Carrier's Claims Adjuster and/or the Third Party Administrator in handling of claims made against the County. Department Heads shall report to the Risk Manager the following changes in property under their supervision:

1. Changes in building use - All changes in the use or occupancy of a building shall be reported. This is to include new construction, remodels or other alterations of County owned or leased property. All changes must have prior approval by the Facilities Department.
2. Changes in equipment and vehicles - It is important to provide a complete record of alterations of equipment or vehicles to the Risk Manager. All modifications of County owned vehicles must have prior approval of the Fleet Maintenance Department.

3. Property losses - Property losses occurring from fire, vandalism or other perils are covered by a general liability policy and should be reported on the Josephine County Incident Report Form. These losses should be reported immediately to the Risk Manager.

E. Incident/Accident Reporting. Incident/Accident reporting procedures shall be followed in reporting incidents or accidents in which a possibility exists that a claim for workers' compensation, general liability, property damage, or personal injury may be made against the County, or where the County may have a claim against a third party for damage to a County vehicle or other property or injuries to a County employee.

F. Adjustment Of Claims For Losses Of County Property. Replacement and/or repair of any damaged or destroyed County property, including all County vehicles, shall be undertaken only after the claim has been properly filed with the Risk Manager or designee and a determination of responsibility has been made, so that recovery measures, if any are available, can be undertaken.

G. Claims Management For Third Party Claims. It is the responsibility of the Risk Manager to develop all third party claims management processes, including recommendations of claim acceptance and denial, and coordinating defense of claims. Claims resulting in litigation shall be referred to the County's insurance carrier by the Risk Manager. Any County department may receive a claim by a third party for loss or damages. All such claims should be made on the Josephine County Incident Report Form. Departments should forward all such claims immediately to the Risk Manager. It is the responsibility of the Risk Manager to process all claims on behalf of the County. All offers of settlement or claims adjustments are made in concert with the Insurance Carrier or Third Party Administrator and the Risk Manager. No employee, Department Head or Elected Official shall engage in discussion or negotiation with parties involved in an accident or claiming a County liability. All such inquiries should be directed to the Risk Manager. The Risk Manager shall respond to any accident involving serious injury or extensive damage in which a claim may be made against the County by a third party. The County's Third Party Administrator or the Insurance Carrier shall be notified. All defense of claims matters will be reviewed by the insurance carrier, Risk Manager and the Board of County Commissioners. All claims settlements under the insurance deductible may be approved by the Risk Manager.

H. Claims Management For Workers' Compensation. It is the responsibility of Human Resources to develop all Workers' Compensation claims management processes. Each Workers' Compensation claim shall result in review and submission of the claim to the workers' compensation insurance carrier. For outstanding self-insurance claims, all settlements to a limit of $25,000 may be approved by concurrence of the Third Party Administer and Human Resources. All settlements in excess of $25,000 to a limit of $50,000 shall require the approval of Chief Financial Officer. All settlements in excess of $50,000 shall require the approval of the Board of County Commissioners.

I. County Insurance Certificates. Upon request to the Risk Manager, a certificate of insurance will be issued indicating the County's insurance status, policy number, limits and expiration date.

J. Coverage Of Volunteers. Human Resources is responsible for the administration of the volunteer insurance program. Volunteers and persons performing court ordered service for, and in behalf of, the County are not covered by Workers' Compensation of Josephine County, with the exception of Sheriff's Reserves and Search and Rescue. Injuries arising within the course and scope of service to the County shall be submitted to the County volunteer insurance carrier. If volunteer insurance does not provide coverage,

the County's general liability insurance may provide coverage. Volunteers who perform service for the County must abide by the County Volunteer Program policy.

2.2 SELF-INSURED LOSS PREVENTION PROGRAM

A. General Policy. OR-OSHA requires specific Loss Prevention Activities to be performed by group self-insured Employers. As a member of CIS workers' compensation, Josephine County is considered to be a self-insured employer and must comply with the specific OR-OSHA self-insured employer rules. This includes a written plan and specific activities.

B. Applicable Legal Standards. State: OAR 437-001-1055 & 1060

C. Written Occupational Health and Safety Loss Prevention Program. The program's function is to address the loss prevention effort and inform management and employees of the availability and process for requesting loss prevention services. Josephine County's Safety Manual is established to meet this requirement.

D. Required Loss Prevention Elements. The following elements are required by OR-OSHA for each group and self-insured employer. The overall operation of our safety program and recordkeeping will meet these elements.

1. **Management commitment to health and safety.**
   Method of compliance: Management's commitment to health and safety is demonstrated by the development and implementation of the Safety Manual. Additionally, commitment is shown by the allocation of resources to Safety Committee functions, along with management's responsiveness to the Safety Committee concerns and recommendations.
   Recordkeeping: The Safety Manual and written responses to Safety Committee concerns and recommendations are maintained by Human Resources.
2. **Accountability system for employer and employees.**
   Method of compliance: Employee performance evaluations include a review of safety behavior and activities. Supervisory accident/injury investigations and corrective actions are tracked and reviewed by the Safety Committee and Human Resources.
   Recordkeeping: Human Resources retains employee performance evaluation records and any record of discipline for safety violations. Human Resources also retains accident reports and investigations, along with record of corrective actions taken.
3. **Training practices and follow-up.**
   Method of compliance: Initial safety training is provided to new employees by Human Resources. Department specific training is also provided to new employees by department supervisor(s). Annual refresher training is provided, as well as topic specific training as necessary based on duties assigned to each employee.
   Recordkeeping: The record of training is maintained by department supervisors and/or Human Resources.
4. **A system for hazard assessment and control.**
   Method of compliance: The Safety Committee's quarterly inspections and supervisor's routine review of employee work activities at the various locations will serve to ensure appropriate auditing. Pursuant to OR-OSHA guidelines, quarterly safety inspections assess all

locations/operations. In addition, OSHA Consultants and insurance carrier Risk Management Consultants conduct periodic inspections at our facility upon request.
Recordkeeping: The primary records of the inspection and audit services are maintained by Human Resources. The Safety Committee completes a written record for each worksite inspected to be retained by Human Resources. Any written inspection report completed by a supervisor (i.e. lock out tag out annual inspection, hazard assessments) are kept in the supervisor's/department's safety file.

5. **A system for investigating all recordable occupational injuries and illnesses that includes corrective action and written findings.**
   Method of compliance: Management and/or the supervisors are responsible for completing accident investigations. Specific methods and training materials are provided in Article 1, Section 1.2 of the Safety Manual. The Safety Committee also reviews all accident investigations and may recommend further corrective action or participate in accident investigations.
   Recordkeeping: The primary accident investigation records are maintained by Human Resources.
6. **A system for evaluating, obtaining and maintaining personal protective equipment (PPE).**
   Method of compliance: Each supervisor has an overall responsibility for ensuring the selection and purchase of appropriate PPE and that the PPE are properly used and maintained. Supervisors and the Safety Committee provide routine review of PPE selection, maintenance, and training information as identified in the Safety Manual Section 1, Article 1.5.
   Recordkeeping: The primary records for PPE selection, maintenance and inspection are maintained by the department supervisors.
7. **On-site routine industrial hygiene and safety evaluations to detect physical and chemical hazards of the workplace, and the implementation of engineering or administrative controls.**
   Method of compliance: Basic occupational safety and health inspections are done by the Safety Committee and supervisors. Additional technical assistance may be provided by workers' compensation carrier consultants, OR-OSHA consultants, and/or private safety and industrial hygiene consultants as coordinated by Human Resources.
   Recordkeeping: The primary records of the inspection and audit services are maintained by Human Resources.
8. **Evaluation of workplace design, layout and operation, and assistance with job site modifications utilizing an ergonomic approach.**
   Method of compliance: Basic ergonomic inspections are done by the Safety Committee. More technical assistance may be arranged by Human Resources, to include workers' compensation carrier consultants, OR-OSHA consultants and/or private consultants.
   Recordkeeping: The primary records of the ergonomic survey and findings are maintained by Human Resources.
9. **Employee involvement in health and safety efforts.**
   Method of compliance: Safety Committee meetings and staff meetings are the primary method for employee involvement. Suggestion and recognition programs have also been developed to encourage employee participation.
   Recordkeeping: The primary records of employee involvement are found in the supervisor's safety files, minutes of staff meetings, or in Safety Committee minutes retained by Human Resources.

10. **An annual evaluation of the employer's loss prevention activities based on the location's current needs.**
    Method of compliance: An annual report will be prepared in April of each year for the previous year's activities and for the purpose of developing goals for the upcoming year. The report will be prepared by the Safety Committee and the Human Resources Director for submission to the Board of County Commissioners. An annual review of losses and loss prevention activities takes place with the involvement of management staff. Recordkeeping: Annual reports are maintained by Human Resources and available to the Safety Committee, management and OR-OSHA upon request.

SECTION 2:
BLOODBORNE PATHOGENS: EXPOSURE CONTROL PLAN

JOSEPHINE COUNTY EXPOSURE CONTROL PLAN

The purpose of this Bloodborne Pathogens - Exposure Control Plan is to prevent exposure for employees who come into contact with human blood and other potentially infectious materials in the course of assigned duties, and to comply with Oregon Occupational Safety and Health Administration's (OR-OSHA) and the Occupational Safety and Health Administration's (OSHA) standards on exposure control, OAR 437, Division 2/Z, 29CFR1910.1030.

Table of Contents

A. OBJECTIVE

It is the policy of Josephine County that all employees who could reasonably be expected to come into contact with human blood and other potentially infectious materials in the course of their assigned duties shall receive training in exposure to bloodborne pathogens and universal precautions to prevent exposure. Hepatitis B vaccinations will be offered to employees who may reasonably anticipate exposure in the course of their employment. Each department with at risk employees shall maintain records and follow procedures according to OR-OSHA (OAR 437, Division 2/Z) and federal OSHA (29CFR1910.1030).

B. DEFINITIONS

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.
"Blood" means human blood, human blood components, and products made from human blood.
"Bloodborne pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
"Contaminated" means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.
"Decontamination" means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.
"Director" means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.
"Engineering controls" mean controls (ie. sharps disposal container, self-sheathing needles) that isolate or remove the bloodborne pathogen hazard from the work place.
"Exposure incident" means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
"Hand washing facilities" mean a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.
"HBV" means hepatitis B virus.
"HIV" means human immunodeficiency virus.
"Licensed Health Care Professional" is a person who is legally permitted scope of practice allows him or her to independently perform the activities of Hepatitis B vaccination and Post-exposure Evaluation and Follow-up.
"Occupational exposure" means reasonably anticipated skin, eye mucous membrane or parenteral contact with blood or other potentially infectious materials that may result from the

performance of an employee's duties.

"Other potentially infectious materials (OPIM)" means the following human body fluids:

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

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

"Personal protective equipment" is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (i.e. uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

"Reasonably anticipated" means a rational conclusion to expect or foresee an occupational exposure.

"Regulated waste" means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

"Sharps" mean any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

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

"Sterilize" means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

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

"Work practice controls" means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (i.e. prohibiting the recapping of needles by a two-handed technique).

C. PLAN IMPLEMENTATION

EXPOSURE DETERMINATION

Specific job classifications in which all employees have reasonably anticipated occupational exposures to blood or other potentially infectious materials when performing their routine job duties, without regard to the use of personal protective equipment, are:

Job classification	Task or exposure
Designated First Aid and Health Care Providers Animal Care Providers	Blood drawing Process and package of blood and other biological specimens Cleanse and bandage of cuts, burns, and other open wounds Emergency treatment of traumatic wounds Cardiopulmonary resuscitation Clean up spilled blood or OPIM Decontamination of work surfaces and reusable equipment Immunization and euthanization of animals
Corrections and Youth Care Providers	Collecting urine samples Searching client, potential exposure to sharps Cleanse and bandage of cuts, burns, and other open wounds Emergency treatment of traumatic wounds Cardiopulmonary resuscitation
Law Enforcement and Emergency Response Personnel	Searching and detainment of citizens, potential exposure to bodily fluids, blood, sharps, etc. Process and package of blood and other biological specimens Cleanse and bandage of cuts, burns, and other open wounds Emergency treatment of traumatic wounds Cardiopulmonary resuscitation

Specific job classifications in which some employees may have reasonably anticipated occupational exposures to blood or other potentially infectious materials when performing their routine job duties, without regard to the use of personal protective equipment, are:

Job classification	Task or exposure
Supervisors (Assigned to provide first-aid assistance as part of their job duties)	Cleanse and bandage of cuts, burns, and other open wounds Emergency treatment of traumatic wounds Cardiopulmonary resuscitation Clean up spilled blood or OPIM Decontamination of work surfaces and reusable

	equipment
Custodians / Maintenance	Clean up spilled blood or OPIM Empty biological trash cans Decontamination of work surfaces and reusable equipment

In the event that an employee not listed above experiences an incident of occupational exposure, the hepatitis B vaccination and post exposure evaluation / follow-up will be made available no later than 24 hours after the exposure. Volunteers assigned to positions with occupational exposure will be asked to provide proof of hepatitis B vaccination, or will be required to begin the vaccination series prior to performing such volunteer duties.

METHODS OF COMPLIANCE

Universal Precautions:

1. Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. All body fluids shall be considered potentially infectious materials.
2. Use protective devices: gloves; goggles/masks for risk of splattering; and double glove with extremely hazardous procedures. Remove gloves if torn, punctured or cut. Wash hands, and then re-glove.
3. Wash hands after all procedures (before eating, smoking, drinking, applying cosmetics or contact lenses).
4. With gloves on, wash surfaces with hot, soapy water then disinfect with stabilized bleach solution.
5. Dispose of all sharp materials (sharps) in a puncture-resistant container immediately.
6. Never recap, bend, or break needles. Dispose of needles in sharps container.
7. All contaminated articles to be discarded must be placed in red alert bag and disposed of in an appropriate receptacle.
8. Do not store urine/blood/tissue samples in refrigerator meant for food.

WHAT TO DO:

When stuck with a sharp object:

1. When stuck with sharp object first force bleeding, then wash with soap and water or disinfectant.
2. Report to your supervisor and complete an Accident/Incident Report form.

When splattered with blood:

1. When splattered with blood, rinse eyes, mouth and nose with water for as long as tolerated (10 minutes minimum).
2. Use a hydrogen peroxide mouthwash (1/2 strength) without swallowing to cleanse mouth.
3. Report to your supervisor and complete an Accident/Incident Report form.

See your physician or call the county health department if you have questions.

ENGINEERING AND WORK PRACTICE CONTROLS

Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

1. Departments with employees that use medical sharps in direct patient care shall, at least annually, identify, evaluate and select engineering and work practice controls, including safer medical devices pursuant to OAR 437-002-1030. Associated documentation shall be retained with the departmental written exposure control plan.
2. Hand washing facilities shall be provided which are readily accessible to employees.
3. When hand washing facilities are not feasible, antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes shall be provided. Hands shall be washed with soap and running water as soon as feasible.
4. Employees shall wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.
5. Employees shall wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.
6. Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted in a. and b. below. Shearing or breaking of contaminated needles is prohibited.
    a. Contaminated needles and other contaminated sharps shall not be bent, recapped or removed unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical procedure.
    b. Such bending, recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.
7. Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:
    a. Puncture resistant;
    b. Labeled or color-coded in accordance with this policy;
    c. Leak proof on the sides and bottom; and
    d. Stored or processed in a manner that does not require employees to reach by hand into the containers where these sharps have been placed.
8. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.
9. Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on counter tops or bench tops where blood or other potentially infectious materials are present.
10. All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, splattering and generation of droplets of these substances.
11. Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

12. Specimens of blood or other potentially infections materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.
    a. The container for storage, transport, or shipping shall be labeled or color-coded accordingly and closed prior to being stored, transported, or shipped.
    b. If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled or color-coded.
    c. If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture resistant in addition to the above characteristics.
13. Equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary. A readily observable label shall be attached to the equipment stating which portions remain contaminated. This information shall be conveyed to all affected employees, the servicing representative and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

PERSONAL PROTECTIVE EQUIPMENT

When there is occupational exposure, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, foot coverings or foot protection, face shields or masks and eye protection, mouthpieces, resuscitation bags, pocket masks, or other ventilation devices shall be provided at no cost to the employee. The employee must wear the provided appropriate personal protective equipment unless it can be shown that the employee temporarily and briefly declined to use personal protective equipment when, under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or a co-worker. When the employee makes this judgment, the circumstances shall be reported to the supervisor, and investigated and documented by the supervisor, in order to determine whether changes can be instituted to prevent such occurrences in the future. The appropriate personal protective equipment shall be readily accessible at the work site or issued to employees in the appropriate sizes. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided. The County shall clean, launder, and dispose of personal protective equipment at no cost to the employee.

The County shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee. If a garment is penetrated by blood or other potentially infectious materials, the garment shall be removed immediately or as soon as feasible. All personal protective equipment shall be removed prior to leaving the work area. When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal. Gloves and protective clothing

covering exposed skin shall be worn when it can be reasonably anticipated that the employee may have contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures and when handling or touching contaminated items or surfaces.

1. Disposable (single use) gloves such as surgical or examination gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.
2. Disposable gloves shall not be washed or decontaminated for re-use.
3. Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.
4. Gloves are required for phlebotomy in the following circumstances:
    a. When the employee has cuts, scratches, or other breaks in his or her skin;
    b. When the employee judges that hand contamination with blood may occur;
    c. When the employee is receiving training in phlebotomy.

Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose or mouth contamination can be reasonably anticipated. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and the degree of exposure anticipated. Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated. Shoe covers or boots shall be worn in instances when it can be reasonably anticipated that the employee may handle devices containing blood or other potentially infectious materials that may be dropped or spilled.

HOUSEKEEPING

Work sites shall be maintained in a clean and sanitary condition. All equipment and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

1. Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.
2. Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated, or at the end of the work shift if they may have become contaminated during the shift.

3. All bins, pails, cans and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.
4. Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs or forceps.
5. Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.
6. Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:
    a. Closable;
    b. Puncture resistant;
    c. Leak-proof on sides and bottom; and
    d. Labeled and color coded red.
7. During use, containers for contaminated sharps shall be:
    a. 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;
    b. Maintained upright throughout use; and
    c. Replaced routinely and not be allowed to overfill.
8. When moving containers of contaminated sharps from the area of use, the containers shall be:
    a. Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;
    b. Placed in a secondary container if leakage is possible. The second container shall be:
        i. Closable;
        ii. Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and
        iii. Labeled or color-coded red.
9. Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.
10. Contaminated laundry shall be handled as little as possible.
    a. Contaminated 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.
    b. Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded red.
    c. Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through of 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.

11. The County shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.
12. When contaminated laundry is shipped off-site to a second facility to be laundered, the contaminated laundry must be placed in laundry bags or containers which are labeled and color-coded red.

D. HEPATITIS B VACCINATION AND POST-EXPOSURE EVALUATION AND FOLLOW-UP

The County shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident. The County shall ensure that all medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are:

1. Made available at no cost to the employee;
2. Made available to the employee at a reasonable time and place;
3. Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed health care professional; and
4. Provided according to recommendations of the U.S. Public Health Service current at the time these evaluations and procedures take place.

The County shall ensure that all laboratory tests are conducted by an accredited laboratory at no cost to the employee.

HEPATITIS B VACCINATION

Hepatitis B vaccination shall be made available to all employees who have occupational exposure after the employee has received initial training and within 10 working days of initial assignment, unless the employee has previously received the complete hepatitis B vaccination series and antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons. The employee's initial consent or declination of the vaccination shall be documented on Appendix A, Hepatitis B Vaccination Consent / Waiver. Employees assigned to law enforcement, health care, or youth/corrections direct care positions shall have antibody testing conducted approximately 1-2 months after completion of the hepatitis B vaccination series to ensure the employee is immune in accordance with the Center for Disease Control (CDC) guidelines. Employees who have received the vaccination series in the past may request a single dose of hepatitis B vaccine and subsequent antibody testing in order to verify continued immunity. The County shall not make participation in a pre-screening program a prerequisite for receiving hepatitis B vaccination. If the employee initially declines hepatitis B vaccination, but at a later date while still covered under this policy decides to accept the vaccination, the County shall make available hepatitis B vaccination at that time. Such decision shall be documented using

Appendix A, Hepatitis B Vaccination Consent / Waiver. The County shall ensure that employees who decline to accept hepatitis B vaccination offered by the County sign Appendix A, Hepatitis B Vaccination Consent / Waiver. If a routine booster dose of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available at no cost to the employee. The full hepatitis B vaccination series will be made available as soon as possible, but in no event later than 24 hours, to all unvaccinated employees who have an exposure incident.

POST EXPOSURE EVALUTION AND FOLLOW-UP

Following a report of an exposure incident, the incident shall be documented using Appendix B, Blood or Other Body Fluid Post Exposure Report. The County shall make immediately available to the exposed employee a confidential medical evaluation and follow-up at no cost to the employee, including at least the following elements:

1. Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;
2. The County shall seek to obtain consent to test the source individual's blood;
3. Collection and testing of blood for HBV and HIV serological status;
4. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.
5. If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as possible.
6. Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;
7. Counseling; and
8. Evaluation of reported illnesses.

The County shall seek to obtain consent of the source individual (or that of the source individual's parent or legal guardian if a minor). Identification and consent of the source individual shall be documented using Appendix D, Source Individual History and Consent, unless the County can establish that identification is infeasible or prohibited by state or local law. If the source individual refuses consent for testing, the County shall document the refusal using Appendix E, Source Individual Refusal for Blood Testing:

1. The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If the source individual refuses to consent to testing, the County shall document the refusal in writing. If the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

2. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.
3. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

The County shall ensure that the health care professional responsible for the employee's Hepatitis B vaccination is provided a copy of OAR 437, Division 2/Z, Toxic and Hazardous Substances. Appendix C. Bloodborne Pathogen Exposure History and Consent shall be used to document exposure information which will be provided to the employee's designated physician and to document the employee's consent for the exchange of information between the County and the designated physician.

INFORMATION TO THE HEALTHCARE PROFESSIONAL

The County Human Resources Office or designee shall ensure that the health care professional evaluating an employee after an exposure incident is provided the following information:

1. A copy of OAR 437-002-1030, 437-002-1035, and 29 CFR 1910.1030.
2. A description of the exposed employee's duties as they relate to the exposure incident;
3. Documentation of the route(s) of exposure and circumstances under which exposure occurred;
4. Results of the source individual's blood testing, if available; and
5. All medical records relevant to the appropriate treatment of the employee, including vaccination status, which are the employer's responsibility to maintain.

HEALTHCARE PROFESSIONAL'S WRITTEN OPINION

The County shall obtain and provide the employee a copy of the evaluating health care professional's written opinion within 15 days of the completion of the evaluation using Appendix F, Physician Statement on Source Individual.

1. The health care professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.
2. The health care professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:
    a. That the employee has been informed of the results of the evaluation; and
    b. That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

All other findings or diagnoses shall remain confidential and shall not be included in the written report.

E. COMMUNICATION OF HAZARDS TO EMPLOYEES

1. Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials.
2. Labels required by this section shall include the biohazard symbol. These labels shall be fluorescent orange or orange-red or predominantly so, with lettering or symbols in a contrasting color. All required labels shall either be an integral part of the container or shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.
3. Red bags or red containers may be substituted for labels.
4. Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements.
5. Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.
6. Labels required for contaminated equipment shall be in accordance with this policy and shall also state which portions of the equipment remain contaminated.
7. Regulated waste that has been decontaminated need not be labeled or color coded.

F. TRAINING

The County shall ensure that all employees with occupational exposure participate in a training program which shall be provided at no cost to the employee and during work hours. Training shall be provided as follows:

1. At the time of initial assignment to tasks where occupational exposure may take place;
2. Within 90 days after the effective date of the standard; and
3. At least annually thereafter.

For employees who have received training on bloodborne pathogens in the year preceding the effective date of the standard, only training with respect to the provisions of the standard which were not included need be provided. Annual training for all employees shall be provided within one year of their previous training. The County shall provide additional training when changes such as modification of tasks of procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new

exposures created. Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used. The training program shall contain at a minimum the following elements:

1. A copy of the regulations referenced in this policy and an explanation of its contents;
2. A general explanation of the epidemiology and symptoms of bloodborne diseases;
3. An explanation of the modes of transmission of bloodborne pathogens;
4. An explanation of the County's exposure control plan as contained in this policy and the means by which the employee can obtain a copy of the policy;
5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;
6. 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;
7. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;
8. An explanation of the basis for selection of personal protective equipment;
9. 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;
10. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
11. 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;
12. Information of the post-exposure evaluation and follow-up that the County is required to provide for the employee following an exposure incident;
13. An explanation of the signs and labels and/or color coding required; and
14. An opportunity for interactive questions and answers with the person conducting the training session.

The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the work place that the training will address. Examples of qualified trainers include: health care professionals, emergency medical technicians, industrial hygienists or other professional trainers knowledgeable in the subject area.

G. RECORDKEEPING

The County shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.1020. This record shall include:

1. The name and social security number of the employee;

2. 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;
3. A copy of all results of examinations, medical testing, and follow-up procedures;
4. The County's copy of the health care professionals written opinion;
5. A copy of the information provided to the health care professional.

County shall ensure that employee medical records are:

1. Kept confidential; and
2. Are not disclosed or reported without the employee's express written consent to any person within or outside the work place except as required by law.

The County shall maintain the required records for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.1020. The County shall establish and maintain a sharps injury log for recording all percutaneous injuries from contaminated sharps as required by 29 CFR 1904, and shall retain the log for five years following the year in which the injury occurred. Training records shall include the following information:

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

Training records shall be maintained for 3 years from the date on which the training occurred. The County Safety Officer shall ensure that all records required to be maintained by this section shall be made available upon request to the Assistant Secretary and Director for examination and copying. Employee training records shall be provided upon request for examination and copying to employees, to employee representatives, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.1020. Employee medical records shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.1020. The County shall comply with the requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

Appendix A - HEPATITIS B VACCINATION CONSENT / WAIVER

Employee: _____

Position: _____

Department: _____

During the Bloodborne Pathogens training session I was informed that due to my job duties or procedures I have reasonably anticipated occupational exposures to blood or other potentially infectious materials and that I have the opportunity to be vaccinated with the Hepatitis B vaccine at no charge to myself. Check one below:

___ I wish to receive the Hepatitis B vaccination series (three doses). I have no known sensitivity to yeast or any preservatives. Also (for women only) if I am pregnant, I am advised to consult with my private medical practitioner regarding the administration of the Hepatitis B vaccine.

___ I do not wish to receive the Hepatitis B vaccination series (three doses). I have been informed that by declining the vaccine, I may have an occupational exposure risk of acquiring the Hepatitis B infection which can be a serious disease.

Employee's Signature: _____

Date: ____/____/____

CONSENT AFTER INITIAL WAVIER

After initially declining the vaccine, I have now decided to receive the Hepatitis B vaccination series (three doses).

Employee's Signature: _____

Date: ____/____/____

Appendix B - BLOOD OR OTHER BODY FLUID POST-EXPOSURE REPORT

Date of Exposure: ____/____/____ Time of Exposure: _____

Reported By: _____Date Reported: ____/____/____

EXPOSED EMPLOYEE

Name: _____

Job Classification: _____

Department: _____

SOURCE INDIVIDUAL

Name: _____Date of Birth: ____/____/____

Address: _____

Home Phone: _____

EXPOSURE CIRCUMSTANCES

Description of incident including route(s) and circumstances of exposure:

(Attach additional pages if necessary)

Report Completed By: _____Date: ____/____/____

Appendix C - BLOODBORNE PATHOGEN EXPOSURE HISTORY AND CONSENT

Employee's Name: _____
Home Address: _____

Home Phone: _____Work Phone: _____

The above employee has reported an occupational exposure incident to blood or other potentially infectious material as defined by OR-OSHA Admin. Rules (1910.1030).

EXPOSURE HISTORY

Date of Exposure: ____/____/____Time of Exposure: _____

Description of Exposure:

_____

_____

_____

EMPLOYEE'S CONSENT FOR EXCHANGE OF INFORMATION
I hereby authorize an exchange of information pertaining to my occupational exposure to blood or OPIM to occur between my employer's Human Resources Department and my designated health provider.

My Physician's Name: _____

Address:_____

Phone: _____

My Employer's Human Resources Department:

Address: _____

Phone: _____

Employee's Signature: _____Date: ____/____/____

Appendix D - SOURCE INDIVIDUAL HISTORY AND CONSENT

I hereby authorize an exchange of information to occur between the three agencies/physicians listed below and the exposed individual in accordance with Oregon statute/rules. The employee's physician will discuss results/recommendations with the exposed employee. I am aware that I, or my child, has been identified as a source individual where an employee may have been exposed to blood or other potentially infectious body fluids.

County (Human Resources Department)

Address: _____

Phone: _____

Exposed Employee's Physician
Address: _____

Phone: _____

Source Individual's Physician
Address: _____

Phone: _____

I am aware of the risks to the exposed employee and I have agreed to blood testing to be performed for Hepatitis B and HIV. I have been informed that in consenting to this testing, this information will be released to the exposed employee, to the exposed employee's physician and to the exposed employee's employer.

Signature of Source Individual/Parent/Guardian:

_____

Date: ____/____/____

Appendix E - SOURCE INDIVIDUAL'S REFUSAL FOR BLOOD TESTING

Source Individual's Name: _____

Parent or Guardian (if minor): _____

Address: _____

Phone: _____

Date Parent or Guardian was notified: ____/____/____

Notified By: _____

Please read, sign below and return.

I have been informed by Josephine County that I or my child has been identified as being a source individual in an employee exposure incident to blood or other potentially infectious body fluids.

I am aware of the risks to the employee, and I have declined blood testing to be performed for Hepatitis B and HIV. I have been informed that if I had consented to this testing, this information would have been released to the exposed employee, to the exposed employee's physician and to the exposed employee's employer.

Signature Source Individual or of Parent or Guardian:

_____

Date: ____/____/____

Appendix F - PHYSICIAN STATEMENT ON SOURCE INDIVIDUAL

To: Source Individual's Designated Physician:

Name:
_____

Source Individual: _____Birth Date: ____/____/____
Address:
_____
Home Phone:
_____

The above source individual has been identified as a source in a potential bloodborne pathogens exposure incident. The source individual or the individual's parent/guardian has been informed of the required OSHA procedures following such an incident and has given consent for the exchange of information and for the testing of the source individual to determine Hepatitis B infectivity (see the attached consent).

As the source individual's designated physician, please provide the following results of the source individual's infectivity to the exposed employee's employer and to the exposed employee's physician (see the attached consent).

PHYSICIAN'S STATEMENT OF SOURCE INDIVIDUAL'S
INFECTIVITY STATUS

Results of:
HBsAG _____Date: ____/____/____HIV _____Date: ____/____/_____

Physician's Signature: _____

Date: ____/____/_____

SECTION 3:
FIRE PREVENTION PLAN

JOSEPHINE COUNTY FIRE PREVENTION

The purpose of this Fire Prevention Plan is to eliminate the causes of fire, prevent loss of life and property by fire, and to comply with the Occupational Safety and Health Administration's (OSHA) standard on fire prevention, 29 CFR 1910.39.

Table of Contents

A. OBJECTIVE

The purpose of this Fire Prevention Plan is to eliminate the causes of fire, prevent loss of life and property by fire, and to comply with the Occupational Safety and Health Administration's (OSHA) standard on fire prevention, 29 CFR 1910.39. It provides employees with information and guidelines that will assist them in recognizing, reporting, and controlling fire hazards.

B. BACKGROUND

Josephine County is committed to minimizing the threat of fire to employees, visitors, and property. Josephine County complies with all applicable laws, regulations, codes, and good practices pertaining to fire prevention. Josephine County's separate Emergency Action Plans identify department specific procedures for responding to fires. This Fire Prevention Plan serves to reduce the risk of fires at all County facilities in the following ways:

1. Identifies materials that are potential fire hazards and their proper handling and storage procedures;
2. Distinguishes potential ignition sources and the proper control procedures of those materials;
3. Describes fire protection equipment and/or systems used to control fire hazards;
4. Identifies persons responsible for maintaining the equipment and systems installed to prevent or control ignition of fires;
5. Identifies persons responsible for the control and accumulation of flammable or combustible material;
6. Describes good housekeeping procedures necessary to insure the control of accumulated flammable and combustible waste material and residues to avoid a fire emergency; and
7. Provides training to employees with regard to fire hazards to which they may be exposed.

C. ASSIGNMENT OF RESPONSIBILITY

Fire safety is the responsibility of all County employees. All employees should know how to prevent and respond to fires, and are responsible for adhering to County policy regarding fire emergencies.

MANAGEMENT

Management will provide adequate controls to provide a safe workplace, and will provide adequate resources and training to its employees to encourage fire prevention and the safest possible response in the event of a fire emergency.

PLAN ADMINISTRATOR

The Facilities department shall manage the Fire Prevention Plan for Josephine County, and shall maintain all records pertaining to the plan. The Facilities department shall also:

- Develop standards and procedures for employee training as identified in the plan, and coordinate implementation of trainings with Human Resources.
- Ensure that fire control equipment and systems are properly maintained and fuel sources hazards are controlled.
- Coordinate with Human Resources to ensure that Safety Committee functions associated with the plan are in place, to include basic fire risk assessments being conducted as part of quarterly safety inspections.

SUPERVISORS

Supervisors are responsible for ensuring that employees receive appropriate fire safety training, and for notifying **Human Resources and the Facilities department** when changes in operation increase the risk of fire. Supervisors are also responsible for enforcing the County's fire prevention and protection policies.

EMPLOYEES

All employees shall:

- Complete all required training before working without supervision
- Conduct operations safely to limit the risk of fire
- Report potential fire hazards to their supervisors
- Follow fire emergency procedures

D. PLAN IMPLEMENTATION

GOOD HOUSEKEEPING

To limit the risk of fires, employees shall take the following precautions:

1. Minimize the storage of combustible materials.
2. Store and label combustible materials appropriately.
3. Make sure that doors, hallways, stairs, and other exit routes are kept free of obstructions.
4. Dispose of combustible waste in covered, airtight, metal containers and remove daily.
5. Use and store flammable materials in well-ventilated areas away from ignition sources.

6. Use only nonflammable cleaning products.
7. Keep incompatible (i.e., chemically reactive) substances away from each other.
8. Perform "hot work" (i.e., welding or working with an open flame or other ignition sources) in controlled and well-ventilated areas.
9. Keep equipment in good working order (i.e., inspect electrical wiring and appliances regularly and keep motors and machine tools free of dust and grease.
10. Ensure that heating units are safeguarded.
11. Report all gas leaks immediately. The Facilities department shall ensure that all gas leaks are repaired immediately upon notification.
12. Repair and clean up flammable liquid leaks immediately.
13. Keep work areas free of dust, lint, sawdust, scraps, and similar material.
14. Do not rely on extension cords if wiring improvements are needed, and take care not to overload circuits with multiple pieces of equipment.
15. Ensure that required hot work permits are obtained.
16. Turn off electrical equipment when not in use.

MAINTENANCE

The **Facilities** department will ensure that fire prevention measures conform with general fire prevention requirements at least annually by completing Appendix A, B, and C. The **Facilities** department will also ensure that equipment is maintained according to manufacturers' specifications and will comply with requirements of the National Fire Protection Association (NFPA) codes for specific equipment. Only properly trained individuals shall perform maintenance work.

The following equipment is subject to quarterly or annual routine maintenance, inspection, and testing procedures depending on fire protection standards:

1. Equipment installed to detect fuel leaks, control heating, and control pressurized systems;
2. Portable fire extinguishers, automatic sprinkler systems, and fixed extinguishing systems;
3. Detection systems for smoke, heat, or flame;
4. Fire alarm systems; and
5. Emergency backup systems and the equipment they support.

E. TYPES OF HAZARDS

The following sections address the major workplace fire hazards at County facilities and the procedures for controlling the hazards.

ELECTRICAL FIRE HAZARDS

Electrical system failures and the misuse of electrical equipment are leading causes of workplace

fires. Fires can result from loose ground connections, wiring with frayed insulation, or overloaded fuses, circuits, motors, or outlets.

To prevent electrical fires, the **Facilities** department shall:

1. Make sure that worn wires are replaced.
2. Use only appropriately rated fuses.
3. Never use extension cords as substitutes for wiring improvements.
4. Use only approved extension cords [i.e., those with the Underwriters Laboratory (UL) or Factory Mutual (FM) label].
5. Check wiring in hazardous locations where the risk of fire is especially high.
6. Check electrical equipment to ensure that it is either properly grounded or double insulated.
7. Ensure adequate spacing while performing maintenance.

PORTABLE HEATERS

All portable heaters shall be approved by the Facilities department. Portable electric heaters shall have tip-over protection that automatically shuts off the unit when it is tipped over. There shall be adequate clearance between the heater and combustible furnishings or other materials at all times.

OFFICE FIRE HAZARDS

Fire risks are not limited to any one type of facility. Fires in offices have become more likely because of the increased use of electrical equipment, such as computers and fax machines. To prevent office fires, employees shall:

1. Avoid overloading circuits with office equipment.
2. Turn off nonessential electrical equipment at the end of each workday.
3. Keep storage areas, and areas adjacent to equipment, clear of rubbish.
4. Ensure that extension cords are not placed under carpets.
5. Ensure that trash and paper set aside for recycling is not allowed to accumulate.

CUTTING, WELDING, AND OPEN FLAME WORK

The Facilities department will ensure the following:

1. All necessary hot work permits have been obtained prior to work beginning.
2. Cutting and welding are done by authorized personnel in designated cutting and welding areas whenever possible.
3. Adequate ventilation is provided.

4. Torches, regulators, pressure-reducing valves, and manifolds are UL listed or FM approved.
5. Oxygen-fuel gas systems are equipped with listed and/or approved backflow valves and pressure-relief devices.
6. Cutters, welders, and helpers are wearing eye protection and protective clothing as appropriate.
7. Cutting or welding is prohibited in sprinkler areas while sprinkler protection is out of service.
8. Cutting or welding is prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations in confined spaces.
9. Cutting or welding is prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering.
10. Confined spaces such as tanks are tested to ensure that the atmosphere is not over ten percent of the lower flammable limit before cutting or welding in or on the tank.
11. Small tanks, piping, or containers that cannot be entered are cleaned, purged, and tested before cutting or welding on them begins.

FLAMMABLE AND COMBUSTIBLE MATERIAL

The County's Safety Committee shall regularly evaluate the presence of combustible materials at each building when performing quarterly safety inspections. Certain types of substances can ignite at relatively low temperatures or pose a risk of catastrophic explosion if ignited. Such substances require special care and handling.

CLASS A FIRE COMBUSTIBLES

These include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in non-specialized areas such as offices.

To handle Class A combustibles safely:

1. Do not store combustibles within 18 inches of ceiling.
2. Dispose of waste daily.
3. Keep trash in metal-lined receptacles with tight-fitting covers (metal wastebaskets that are emptied every day do not need to be covered).
4. Keep work areas clean and free of fuel paths that could allow a fire to spread.
5. Keep combustibles away from accidental ignition sources, such as hot plates, soldering irons, or other heat- or spark-producing devices.
6. Store paper stock in metal cabinets.
7. Store rags in metal bins with self-closing lids.
8. Do not order excessive amounts of combustibles.
9. Make frequent inspections to anticipate fires before they start.

Water, multi-purpose dry chemical (ABC), and halon 1211 are approved fire extinguishing agents for Class A combustibles.

CLASS B FIRE COMBUSTIBLES

These include flammable and combustible liquids (oils, greases, tars, oil-based paints, and lacquers), flammable gases, and flammable aerosols.

To handle Class B combustibles safely:

1. Use only approved pumps, taking suction from the top, to dispense liquids from tanks, drums, barrels, or similar containers (or use approved self-closing valves or faucets).
2. Do not dispense Class B flammable liquids into containers unless the nozzle and container are electrically interconnected by contact or by a bonding wire. Either the tank or container must be grounded.
3. Store, handle, and use Class B combustibles only in approved locations where vapors are prevented from reaching ignition sources such as heating or electric equipment, open flames, or mechanical or electric sparks.
4. Do not use a flammable liquid as a cleaning agent inside a building (the only exception is in a closed machine approved for cleaning with flammable liquids).
5. Do not use, handle, or store Class B combustibles near exits, stairs, or any other areas normally used as exits.
6. Do not weld, cut, grind, or use ignition electrical appliances or equipment near Class B combustibles.
7. Do not generate heat, allow an open flame, or smoke near Class B combustibles.
8. Ensure that a portable fire extinguisher rated for Class B fire is accessible.

Water should not be used to extinguish Class B fires caused by flammable liquids. Water can cause the burning liquid to spread, making the fire worse. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid. The following fire-extinguishing agents are approved for Class B combustibles: carbon dioxide, multi-purpose dry chemical (ABC), halon 1301, and halon 1211. (NOTE: Halon has been determined to be an ozone-depleting substance and is no longer being manufactured. Existing systems using halon can be kept in place.)

CLASS C FIRE COMBUSTIBLES

These include energized electrical equipment, such as appliances, motors, computers, heaters, switches, panel boxes and power tools.

To safely handle Class C combustibles:

1. Replace old wiring, worn insulation and broken fittings.
2. Keep electrical motors clean.
3. Use only approved extension cords.
4. Investigate any appliance or electrical equipment that smells strange.
5. Unusual odors can be the first sign of fire.
6. Don't overload wall outlets.
7. Do not place cords under rugs or furniture.
8. Use extension cords for temporary use only.
9. Do not create electrical hazards.

Water should not be used to extinguish Class B fires caused by flammable liquids. Electrical fire may be fought in the same way as an ordinary combustible fire, but water, foam, and other conductive agents are not to be used. The fire can be fought with any extinguishing agent rated for electrical fire. Carbon dioxide CO2, FM-200 and multi-purpose dry chemical powder extinguishers (ABC) and even baking soda are especially suited to extinguishing this sort of fire. Once electricity is shut off to the equipment involved, the fire will generally become a Class A fire.

F. SMOKING

Smoking is prohibited in all County buildings and within 10 feet of entrances, exits, windows, ventilation intakes and service lines pursuant to Oregon's Smokefree Workplace Law and Oregon Indoor Clean Air Act (ORS- 433.835-433.990).

G. TRAINING

Each Department Manager/Supervisor shall present basic fire prevention training to all employees upon employment, and shall maintain documentation of the training, which includes:

1. Review of this Fire Prevention Plan, including how a copy of the plan can be accessed;
2. Good housekeeping practices;
3. Proper response and notification in the event of a fire;
4. Instruction on fire exits and the use of portable fire extinguishers (as determined by facility specific Emergency Action Plans); and
5. Recognition of potential fire hazards.

Supervisors shall train employees about the fire hazards associated with the specific materials and processes to which they are exposed and responsible for, and will maintain documentation of the training. Employees will receive this training:

1. At their initial assignment;
2. Annually; and
3. When changes in work processes necessitate additional training.

H. PROGRAM REVIEW

The County's Safety Committee shall review this Fire Prevention Plan at least annually for necessary changes.

Appendix A - General Fire Prevention Checklist

Use this checklist to ensure fire prevention measures conform with the general fire prevention requirements found in OSHA standards.

□ Yes □ No Is the local fire department acquainted with your facility, its location, and specific hazards?

□ Yes □ No If you have a fire alarm system, is it tested at least annually?

□ Yes □ No If you have interior stand pipes and valves, are they inspected regularly?

□ Yes □ No If you have outside private fire hydrants, are they on a routine preventive maintenance schedule and flushed at least once a year?

□ Yes □ No Are fire doors and shutters in good operating condition?

□ Yes □ No Are fire doors and shutters unobstructed and protected against obstructions, including their counterweights?

□ Yes □ No Are automatic sprinkler system water control valves, air pressure, and water pressure checked periodically?

□ Yes □ No Has responsibility for the maintenance of automatic sprinkler systems been assigned to an employee or contractor?

□ Yes □ No Are sprinkler heads protected by metal guards (or as originally installed)?

□ Yes □ No Is proper clearance maintained below sprinkler heads?

□ Yes □ No Are portable fire extinguishers provided in adequate number, location and type?

□ Yes □ No Are fire extinguishers mounted in readily accessible locations and in all vehicles?

□ Yes □ No Are fire extinguishers inspected and recharged regularly with the recharge date noted on an inspection tag?

□ Yes □ No Are assigned employees periodically instructed in the use of extinguishers and fire protection procedures?

Completed by:_____ Date:_____

Appendix B - Exits Checklist

Use this checklist to evaluate compliance with OSHA's standard on emergency exit routes.

□ Yes □ No Is each exit marked with an exit sign and illuminated (when required) by a reliable light source?

□ Yes □ No Are the directions to exits, when not immediately apparent, marked with visible signs?

□ Yes □ No Are doors, passageways, or stairways that are neither exits nor access to exits, and which could be mistaken for exits, marked "NOT AN EXIT" or other appropriate marking?

□ Yes □ No Are exit signs provided with the word "EXIT" in letters at least five inches high and with lettering at least one inch wide?

□ Yes □ No Are exit doors side-hinged?

□ Yes □ No Are all exits kept free of obstructions?

□ Yes □ No Are there at least two exit routes provided from elevated platforms, pits, or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?

□ Yes □ No Is the number of exits from each floor of a building and from the building itself appropriate for the building occupancy? (NOTE: Do not count revolving, sliding, or overhead doors when evaluating whether there are sufficient exits.)

□ Yes □ No Are exit stairways, that are required to be separated from other parts of a building, enclosed by at least one-hour fire-resistant walls (or at least two-hour fire-resistant walls in buildings over four stories high)?

□ Yes □ No Are the slopes of ramps used as part of emergency building exits limited to one foot vertical and 12 feet horizontal?

□ Yes □ No Are glass doors or storm doors fully tempered, and do they meet the safety requirements for human impact?

□ Yes □ No Can exit doors be opened from the direction of exit travel without the use of a key or any special knowledge or effort?

□ Yes □ No Are doors on cold storage rooms provided with an inside release mechanism that will release the latch and open the door even if it's padlocked or otherwise locked on the outside?

□ Yes □ No Where exit doors open directly onto any street, alley, or other area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees from stepping into the path of traffic?

□ Yes □ No Are doors that swing in both directions and are located between rooms where there is frequent traffic equipped with glass viewing panels?

Completed by:_____ Date:_____

Appendix C - Flammable and Combustible Material Checklist

Use this checklist to evaluate compliance with OSHA's standards on flammable and combustible materials:

□Yes □No	Are combustible scrap, debris, and waste materials such as oily rags stored in covered metal receptacles and removed from the worksite promptly?
□Yes □No	Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?
□Yes □No	Are all connections on drums and combustible liquid piping vapor and liquid tight?
□Yes □No	Are all flammable liquids kept in closed containers when not in use?
□Yes □No	Are metal drums of flammable liquids electrically grounded during dispensing?
□Yes □No	Do storage rooms for flammable and combustible liquids have appropriate ventilation systems?
□Yes □No	Are NO SMOKING signs posted on or near liquefied petroleum gas tanks as required?
□Yes □No	Are all solvent wastes and flammable liquids kept in fire-resistant covered containers until they are removed from the worksite?
□Yes □No	Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?
□Yes □No	Are fuel gas cylinders and oxygen cylinders separated by distances or fire-resistant barriers while in storage?
□Yes □No	Are fire extinguishers appropriate for the materials in the areas where they are mounted?
□Yes □No	Are appropriate fire extinguishers mounted within 75 feet of outside areas containing flammable liquids and within 10 feet of any inside storage area for such materials?
□Yes □No	Are extinguishers free from obstruction or blockage?

□Yes □No Are all extinguishers serviced, maintained, and tagged at least once a year?

□Yes □No Are all extinguishers fully charged and in their designated places?

□Yes □No Where sprinkler systems are permanently installed, are the nozzle heads directed or arranged so that water will not be sprayed into operating electrical switchboards and equipment?

□Yes □No Are NO SMOKING signs posted in areas where flammable or combustible materials are used or stored?

□Yes □No Are safety cans utilized for dispensing flammable or combustible liquids at the point of use?

□Yes □No Are all spills of flammable or combustible liquids cleaned up promptly?

□Yes □No Are storage tanks adequately vented to prevent the development of an excessive vacuum or pressure that could result from filling, emptying, or temperature changes?

Completed by:_____ Date:_____

SECTION 4:
HEARING CONSERVATION

JOSEPHINE COUNTY HEARING CONSERVATION PROGRAM

The purpose of this Hearing Conservation Program is to protect employees from hearing loss and to comply with the Oregon Occupational Safety and Health Administration's (OR-OSHA) standards on hearing protection, OAR 437 Division 2 and 29 CFR 1910.95.

Table of Contents

A. OBJECTIVE

The purpose of this Hearing Conservation Program is to protect employees from exposure to hazardous work-related noise levels and hearing loss, and to comply with OR-OSHA standards for hearing conservation, OAR 437, Division 2, Subdivision G and the Occupational Safety and Health Administration's (OSHA) standard on occupation noise exposure, 29 CFR 1910.95. This written program provides for the management of employees exposed to noise exceeding permissible threshold levels.

B. DEFINITIONS

Permissible Noise Exposure: Eight hour time-weighted average level of 90 decibels on the A scale or a dose of 100% (90 dBA TWA-8). **Hearing protection is required/mandatory at this point pursuant to OSHA.**

Action Level: Action level is an eight hour time-weighted average of 85 decibels on the A scale or a dose of 50% (85 dBA TWA-8). **OSHA requires protection be made available at this point, but does not mandate use. This written program mandates Josephine County employees to use hearing protection at this point.**

Noise Exposed Employee: An employee exposed to an area where the eight-hour time weighted exposure to noise is above 85 dBA.

Representative Noise Exposure: Measurements of an employee's noise dose or 8 hour time-weighted average sound level that management deems to be representative of the exposures of other employees in the work area.

Sound Measurement: A document identifying the person conducting the noise survey, date of survey, and results from one, or both, of the following types of measurement instruments:

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

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

Standard Threshold Shift: An average shift in hearing ability in either ear of 10dB or more at 2,000, 3,000 and 4,000 Hz.

Time-weighted average sound level (TWA): A sound level, which if constant over an 8-hour exposure, would result in the same noise dose as is measured. The TWA is the average of the actual time sampled. A TWA-8 is when the sample time is 8 hours, or projected to be 8 hours.

C. ASSIGNMENT OF RESPONSIBILITY

Hearing Conservation is the responsibility of all County employees. All noise exposed employees should know how to prevent hearing loss, and are responsible for adhering to County policy regarding personal protective equipment.

MANAGEMENT

Management is responsible for seeing 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 the hearing conservation program. This includes auditing the on-going program and **annually** training employees in the hazards of noise and required controls.

PROGRAM ADMINISTRATOR

Human Resources shall manage the Hearing Conservation Program for Josephine County, and shall maintain all records pertaining to the program. Human Resources shall also:

- Ensure that representative noise surveys are conducted and associated records are maintained.
- Oversee the program and develop standards and procedures for noise exposed employee testing and training as identified in the program.
- Ensure that noise exposed employee medical records are maintained by Human Resources or designated departments per the OSHA standard.

SUPERVISORS

Supervisors are responsible for ensuring that noise exposed employees receive appropriate position specific noise protection training, wear hearing protection, receive annual hearing tests, and participate in annual noise training. Supervisors are responsible for notifying **Human Resources** when changes in operations increase noise exposures.

EMPLOYEES

All noise exposed employees are responsible for wearing appropriate hearing protection when exposed to over 85dBA TWA-8. Noise exposed employees shall participate in the annual training and testing.

D. NOISE SURVEYS

Employees exposed to equipment or devices normally known to emit noise over 85 dBA TWA-8 shall automatically be included in this program. Noise surveys may be conducted on work

operations that have potentially high noise levels (85 dBA TWA-8 and above) in order to determine actual exposure for inclusion in this program.

The requirements to be followed when noise surveys are conducted include:

1. The noise measurements shall be documented.

2. The noise survey measurements shall be recorded on the hearing test records of those employees exposed to the noise being surveyed.

3. Each employee exposed to noise at or above the 85 dBA eight-hour average is to be informed of the results. This shall be done by posting the data and including the information as part of employee training at the time of hire and annually.

Assistance with noise monitoring can be arranged through Human Resources and may be obtained from our insurance carrier, Oregon OSHA Consultants, or through outside consultants. Additional noise surveys may be taken when additional equipment or processes are introduced which could result in higher noise levels or periodically to re-verify the test results.

E. HEARING PROTECTION

Hearing protection is required to be worn during the operation of equipment or processes that exceed 85 dBA noise levels as an eight-hour time weighted average exposure.

The hearing protection devices (ear barrier plugs, foam plugs, and/or muffs) are made available by supervisors at worksites. The use and availability of the hearing protection is identified to each new employee during their initial safety orientation. Employees shall be trained by their supervisor, or with assistance from outside safety/health consultants, in how to properly fit the hearing protection device(s). All devices provided shall be evaluated to ensure adequate noise attenuation for the noise exposure levels.

Each noise exposed employee shall be responsible for the maintenance of his/her assigned hearing protective devices as follows:

- Discarding disposable plugs at end of shift or when they become excessively soiled;
- Checking inserts or barriers prior to each use for any defects. Checking head band to ensure it is tight and that the insert is not torn, disfigured, or does not properly seal;
- Reporting and/or obtain new devices as needed;
- Following manufacturer recommended maintenance.

Employees who have experienced a standard threshold shift shall be retrained and properly fitted for appropriate hearing protection devices.

F. AUDIOMETRIC (HEARING) TESTING

BASELINE TESTING

Newly hired noise exposed employees shall be given a baseline hearing test and shall be tested annually thereafter. The hearing test shall be given by certified audiometric technicians. Hearing tests showing a significant hearing loss are forwarded to a professional reviewer. The baseline tests require that the employee not be in an occupational noise area for 14 hours prior to the test. This test shall be the reference for further tests to determine if hearing levels change.

ANNUAL TESTING

1. Annual hearing test can be taken any time during a work shift. Results shall be compared with the baseline tests.

2. Standard 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. The re-test results shall be considered to determine if a permanent shift has occurred.

4. Employees shall be informed by written letter when tests show significant changes in hearing levels based on Oregon OSHA standards. (SEE APPENDIX B)

5. In all cases of hearing loss, the employee shall be re-instructed on how to properly wear hearing protection.

6. The contracted audiologist shall determine if additional tests are needed and the status of the employee's hearing.

7. Specific follow-up procedures pursuant to OSHA regulations shall be followed.

G. TRAINING

OR-OSHA requires a copy of Occupational Noise Exposure 1910.95 be made available to employees and their representatives. Supervisors shall present hearing conservation training to all noise exposed employees upon employment, and shall maintain documentation of the training, which includes:

1. Identification of hazardous noise levels associated with the employee's position assignment;
2. Review of Oregon OSHA Noise & Hearing Conservation Rules;
3. Proper use and storage of Personal Protective Equipment (PPE);
4. Completed employee quiz (Appendix D).

Supervisors shall train employees in the hazards of the noise to which they are exposed, and shall maintain documentation of the training. Employees shall receive training as follows:

1. At their initial assignment;
2. Annually; and
3. When changes in work processes necessitate additional training.

H. NOISE ENGINEERING CONTROLS

The Safety Officer is responsible for determining if there are feasible engineering controls that could reduce noise levels to below 85 dBA TWA-8. Noise control studies shall be retained in compliance with Oregon OSHA noise engineering control standards. Records shall be maintained for the duration the equipment or process is in use.

I. RECORDKEEPING

Records must be maintained for the various elements of the program as identified in the following records retention requirements:

Noise Exposure Measurements

Noise exposure measurements must be retained as long as the exposure exists, or a minimum of 2 years from the date of the measurement. All engineering controls implemented shall be documented and retained for the same time period.

Audiogram Records

Employee audiogram records must be retained for the duration of employment, plus an additional five years.

Training Records

OSHA does not mandate records retention of employee training records. However, it is the policy of Josephine County that departments retain employee training records for the duration of employment.

OSHA 300 Log Record

Hearing loss is recorded on the OSHA 300 Log when an annual audiogram reveals a Standard Threshold Shift (STS) in either or both ears, and the hearing level in the same ear is 25 decibels (dBA) above audiometric zero, and re-testing for verification confirms the results. Employees must be informed in writing within 21 days of the determination of the hearing shift.

J. PROGRAM REVIEW

The County's Safety Committee shall review this Hearing Conservation Program at least annually for necessary changes. Human Resources shall ensure that the Hearing Conservation Program conforms to general hearing conservation requirements at least annually by completing Appendix C.

Appendix A – Employee Hearing Test Notification Form

(If a testing facility is used, this form may be substituted with the testing facility form)

EMPLOYEE NAME: _____

DATE OF HEARING TEST NOTIFICATION: _____

Your last (date: _____) annual audiogram shows a hearing level change greater than OSHA's permitted level as compared to the baseline. Your audiogram was reviewed by a certified audiologist who provided us with a report. You have also received notification of the shift by the Safety Officer. Because of the change in hearing we need to ensure that you are wearing proper hearing protection and that you are trained how to fit the protection and understand the potential effects of noise on your hearing.

REFITTING OF HEARING PROTECTION:

- Type Of Hearing Protector: _____
- Trained On How To Insert Following the Manufacturer's Recommended Procedures:
  Yes _____ No _____

BASIC NOISE TRAINING REVIEW

The following issues were reviewed with the employee regarding noise exposure in the work area.

_____Overexposure to noise can cause noise-induced hearing loss which can be permanent.

_____ Noise damage is to the inner ear nerve cells.

_____ Hearing protection is required to protect your hearing.

_____ Loss due to noise is cumulative including on and off the job exposure

_____ Loss is not evident to you during the early stages of hearing damage

_____ A person generally hears better in a noisy environment with hearing protection

_____ Noise exposure increases general fatigue and in some cases blood pressure during the noise exposure.

_____ _____

SUPERVISOR WHO REVIEWED THIS MATERIAL **DATE**

_____ _____

EMPLOYEE SIGNATURE **DATE**

Appendix B – Employee Notification Letter Regarding Significant Threshold

The following letter (or a similar testing facility generated letter) shall be sent to employees who the contract audiologist has determined to have experienced a significant threshold shift on his/her annual audiogram as compared to the baseline test. This letter shall be sent to the employee within 21 days of receipt of the notification from the audiologist.

This letter shall be signed by the Safety Officer and follow-up notification shall be done by the employee's supervisor or the safety representative. The employee's supervisor shall be notified of the change by the Safety Officer so the employee's supervisor can ensure proper follow-up training.

There are two formats for the notification letter.

- Format 1 – To be used when an employee has a significant threshold shift but no further medical evaluation is recommended by the audiologist reviewer.

- Format 2 – To be used when the professional reviewer recommends that the employee have further medical follow-up, in which case the employee's medical expenses for the referral will be paid by the County.

FORMAT 1 - SIGNIFICANT THRESHOLD SHIFT - NO ADDITIONAL MEDICAL TESTING RECOMMENDED.

During the month of _____ your hearing was tested by a certified audiometric technician and your hearing test reviewed as standard procedure by _____, Audiologist. _____ has notified the Safety Officer that your hearing threshold has decreased in comparison to the original baseline test.

At this point _____ has recommended that we ensure you are properly wearing hearing protection during all exposures to noise. We recommend you wear protection even off the job if you are exposed to high noise levels. _____has not recommended further testing at this point.

You will be refitted and retrained in how to wear hearing protection by your supervisor or safety representative. A different type of protection with greater protection may also be needed. This is a policy of our organization and required by Oregon Occupational Safety and Health Regulations.

FORMAT 2 - SIGNIFICANT THRESHOLD SHIFT - ADDITIONAL MEDICAL TESTING

RECOMMENDED

During the month of _____ your hearing was tested by a certified audiometric technician and your hearing test reviewed as standard procedure by _____, Audiologist. _____ has notified us that your hearing threshold has decreased in comparison to the original baseline test.

_____ has recommended that unless you are currently under the care of an audiologist or otolaryngologist (ear specialist), that you need further medical evaluation. The County will cover the expense of the referral for follow-up based on _____'s referral. Human Resources can assist you with making an appointment with Dr. _____.

You will also be refitted and retrained in how to wear hearing protection by your supervisor or safety representative. A different type of protection with greater protection may also be needed.

Appendix C – Noise Compliance Checklist

The following checklist shall be used when conducting an overall audit of the noise and hearing conservation program. This checklist is based on the OR-OSHA standards.

NOTE: Explain areas not in compliance and describe recommendations for corrections.

A. Noise Exposure Monitoring: **COMPLIANCE (Y - N)**

1. Current noise exposure levels are available for all work positions that may be over 85 dBA as an 8 hour time weighted average. _____
2. The noise readings were done with a calibrated instrument. _____
3. Noise measurement are retained and would be available to employees and OSHA inspectors. _____
4. The noise readings are noted on employee audiogram record. _____
5. Employees are notified of the noise exposure level results. _____
6. Employee representatives were allowed to observe noise exposure monitoring procedures. _____

B. Noise Control Measures & Hearing Protection:

1. All feasible noise controls have been implemented for employees whose noise exposures exceed 90 dBA. _____
2. Records of noise control measures are maintained and would be available for an OSHA inspector. _____
3. All employees whose noise exposure exceeds 90 dBA or 85 dBA with hearing loss are wearing hearing protection. _____
4. Employees were trained and fitted in hearing protectors. _____
5. Employees are offered a variety of suitable protections to choose from. _____
6. Hearing protection attenuation was calculated and provides adequate protection for employee's noise exposure _____

(at least to less than 85 dBA TWA-8). _____

7. Employees are wearing protection per manufacturer's requirements. _____

C. Hearing Conservation Program:

1. All employees whose exposure exceeds 85 dBA TWA-8 are part of the Hearing Conservation Program. (Includes hearing tests, noise protection, and annual employee training) _____

2. Only audiometric technicians, audiologists, or physicians meeting state certification requirements conduct the hearing tests. _____

3. Baseline audiograms are obtained within 180 days of assignment to noise areas over 85 dBA. _____

4. The baseline audiogram is taken when the employee is away from workplace noise for 14 hours or more. _____

5. Employees receive annual audiograms which are compared to the baseline audiogram. _____

6. The audiograms are taken with audiometers that are properly calibrated:
   - Functional before use test _____
   - Annual calibration _____
   - Exhaustive calibration every 2 years _____

7. All significant threshold shift audiograms are evaluated by an audiologist, otolaryngologist, or a qualified physician. _____

8. Recommendations of professional reviewer are implemented. _____

9. Proper follow-up is done for all employees showing a significant threshold shift:
   - Employee is notified of the change within 21 calendar days _____
   - Employee is retrained and refitted in hearing protection _____
   - Employee is referred for medical attention as necessary _____
   - The STS is recorded on the OSHA 300 injury/illness log _____

D. Employee Training Program:

1. All employees with noise exposures equal to or greater than TWA-8 of 85 dBA receive initial and annual noise training. _____

2. Training covers the following topics:
   - Effects of noise on hearing _____
   - Hearing protector use, maintenance, advantages/disadvantages _____
   - Purpose of hearing testing _____

Access to Information:

1. The noise standard is posted and copies are available to employees or their representatives. _____

2. Training and educational materials are available to an OSHA inspector. _____

Recordkeeping:

1. Noise exposure monitoring records are maintained and available. _____

2. Audiometric test record must have the following:
   - Audiogram _____
   - Name & job classification of the employee _____
   - Date of audiogram _____
   - Examiner's name and certification number _____
   - Date of last acoustic or exhaustive calibration _____
   - Employee's most recent noise exposure assessment _____

3. Records including information on the background noise level of the audiometric test booth are available or maintained. _____

Appendix D – Employee Hearing Conservation Quiz

_____

Employee Name Date

_____

Initial Training Date Annual Refresher Date

True or False	Questions
_____	1. Hearing protection is only required at the shop.
_____	2. OSHA requires that hearing protection be worn when employees' noise exposure exceeds 85 dBA for an eight hour average.
_____	3. The best way to determine noise exposure levels is to measure using a noise dosimeter (meter that integrates the noise levels).
_____	4. We hear when sound waves enter the ear and are transmitted through the middle ear into the inner ear which transfers the noise as an electrical signal to our brain that interprets the sound.
_____	5. Prolonged exposure to excessive noise levels can cause a noise-induced hearing loss.
_____	6. When you are exposed to excessive noise levels, the first effect is usually a temporary hearing loss.
_____	7. Noise-induced hearing loss involves damage to the inner ear.
_____	8. Early noise-induced hearing loss normally is not detected by an individual, since it occurs above the speech range. By the time an individual is aware of a hearing loss, the amount of loss may be significant.
_____	9. Muffs provide the highest level of protection as compared to foam plugs.
_____	10. There are no disadvantages in using foam plugs.

_____ 11. The reduction of noise by hearing protectors is called attenuation.

_____ 12. Earplugs including foam plugs must fit tightly to provide a good seal.

_____ 13. The reason we are generally not using earmuffs is because safety glasses interfere with the proper fitting of the muff over the ear.

_____ 14. When hearing protectors are initially worn, it may take a short time to adjust to the new sounds.

_____ 15. The primary type of hearing protectors we use are disposable plugs, however, they can be reused, especially during the day as long as they are clean.

_____ 16. Audiometric testing can protect your hearing.

_____ 17. Audiometric testing is a means of determining your hearing ability.

_____ 18. The accepted normal range of hearing is between 0 and 25 decibels.

_____ 19. The audiometric test will show the amount of hearing loss. The higher the decibel reading, the greater the hearing loss.

SECTION 5:
RESPIRATORY PROTECTION

JOSEPHINE COUNTY RESPIRATORY PROTECTION PROGRAM

The purpose of this program is to ensure that Josephine County employees are properly protected from airborne chemical hazards during their work activities, and to comply with the Occupational Safety and Health Administration's (OSHA) standard on respiratory protection, 29 CFR 1910.134.

Table of Contents

A. OBJECTIVE

The purpose of this program is to ensure that Josephine County employees are properly protected from airborne chemical hazards during their work activities. This will be accomplished by: (1) Evaluating respiratory hazards when selecting appropriate respirators; (2) Ensuring that employees are medically able to wear respirators; (3) Fit-testing employees with appropriate respirators; (4) Establishing procedures to ensure that employees use respirators correctly; (5) Ensuring that employees properly maintain and care for their respirators; (6) Ensuring that high quality breathing air is supplied for respirators; (7) Conducting ongoing respirator training; and, (8) Periodically evaluating the program's effectiveness.

B. DEFINITIONS

Material Safety Data Sheets (MSDS) are written or printed information covering a hazardous chemical, prepared in accordance with OR-OSHA's hazard communication requirements (OAR 437 Division 2/Z, 29 CFR 1910.1200).

Permissible Exposure Limit means the exposure, inhalation, or dermal exposure limits specified in 29 CFR 1910, Subparts G *(Occupational Health and Environmental Control)* and Z *(Toxic and Hazardous Substances).*

C. ASSIGNMENT OF RESPONSIBILITY

This program applies to all employees who are required to wear respirators during their normal work activities and during emergencies. All employees required to wear respirators shall be identified by departmental position assignment as identified by Department Addendums - Section H of this written plan.

MANAGEMENT

Management shall provide appropriate respirators when needed to protect the health of employees. Management shall provide worksite procedures for all employees required to wear respirators.

PLAN ADMINISTRATOR

Human Resources shall manage the Respiratory Protection Program, except where otherwise designated in a department addendum attached to this program. The Administrator's responsibilities include:

- Establishing procedures for selecting respirators;

- Arranging employees' medical evaluations;
- Developing fit-testing procedures for tight-fitting respirators;
- Developing procedures for proper use of respirators in routine and emergency situations;
- Developing procedures and schedules for inspecting, cleaning, maintaining, repairing, and storing respirators;
- Developing procedures for self-contained breathing apparatus;
- Ensuring employee training, including respiratory hazards and the proper use of respirators;
- Ensuring that employees are provided a copy of Appendix D in 1910.134 and trained regarding equipment inspection, cleaning, and maintenance; and
- Regularly evaluating the program.

SUPERVISORS

Supervisors are responsible for ensuring that employees receive appropriate respiratory protection training, and for notifying **Human Resources** when changes in operation increase the occupational exposure. Supervisors are also responsible for monitoring the use of respirators and enforcing the County's respiratory protection policies.

EMPLOYEES

Employees who wear respirators must use them in accordance with the instructions and training provided. Employees must maintain their respirators properly and not alter them in any way. Any employee wearing a respirator in a hazardous area must take reasonable periodic breaks in a safe area to rest and to wash the face piece if it needs cleaning. If the respirator does not work properly on the job, the employee must immediately go to a safe area and report the problem to their immediate supervisor who will notify the Plan Administrator.

D. PLAN IMPLEMENTATION

Hazard Evaluation

Josephine County will identify and evaluate all workplace respiratory hazards. The evaluation will include a reasonable estimate of employee exposures to the hazards and the identity of each hazard's chemical state and physical form. The Plan Administrator will make arrangements to evaluate employee exposures to respiratory hazards. When hazards are unable to be mitigated using engineering controls, positions requiring the use of a respirator shall be identified and addressed by a department specific addendum attached to this plan. The hazard evaluation will be used to select and assign respirators to employees.

Respirator Selection

The Plan Administrator will select respirators by determining whether there is either a potential for employees to be exposed above the Permissible Exposure Limit (PEL) or there is a specific reason that an employee needs such protection. Only filters and/or chemical cartridges matched to expected atmospheric contaminants known to be present shall be used. A variety of respirator sizes will be selected to ensure a proper fit for all employees who need respirators. The Plan Administrator is responsible for selecting appropriate respirator filters and/or cartridges based on a review of material safety data sheets (MSDSs) or other relevant air contaminant data. Josephine County will use only NIOSH-certified respirators. The Plan Administrator will select respirators based on the criteria in Table 1.

TABLE 1: Respirator Selection Criteria

Type of Exposure	Selection Procedure
Particulate exposure	Respirators will be selected on the basis of potential oil-mist exposure (N, R or P), severity of the inhalation hazard (95%, 99% or 100% efficient), air-particulate concentration, and the availability of 21 % oxygen.
Vapor and gas exposure	Respirators will be selected on the basis of chemical composition, physical state (vapor or gas), air-contaminant concentration, and the availability of 21 % oxygen.
Atmospheric oxygen at or below 19.5% or air contaminants immediately dangerous to life or health	Supplied-air respirators will be selected. Only Grade D breathing air will be used for supplied-air respirators. Only oilless breathing air compressor or oil-compressor systems provided with carbon monoxide (10 ppm) or high-temperature alarms periodically tested for the presence of carbon monoxide will be used.
Escape-only respirators	Respirators will be selected based on the potential for a specific type of hazardous gas leak, relevant engineering controls, and the time required for workers to escape to a safe place. Only NIOSH-approved escape respirators will be used.

The Plan Administrator will rely on the current NIOSH-assigned protection factors (APFs) in the *2005 NIOSH Pocket Guide to Chemical Hazards* when selecting respirators until Federal OSHA issues a final rule covering APFs.

Medical Evaluations

Each employee required by Josephine County to wear a respirator, or who requests an air-purifying respirator, must be medically evaluated before being fit-tested. The Plan Administrator, or designee, will make arrangements for each employee to have a medical evaluation by the following professionally licensed health care provider (PLHCP): Occupational Services, 777 NE 7th Street, Grants Pass, OR 97526, 541-474-0381. The Plan Administrator will provide the confidential *OSHA Respirator Medical Evaluation Questionnaire* (1910.134, Appendix C) to each employee who must complete it and deliver it to the PLHCP.

The Plan Administrator, or designee, will also provide the PLHCP with the following information: (1) the type and weight of the respirator each employee will use; (2) the duration and frequency of use; (3) the expected physical work effort; (4) any other protective clothing and equipment worn; (5) temperature and humidity extremes at the workplace, and; (6) air contaminants and concentration levels that each employee may encounter. The PLHCP will discuss the results of the evaluation with the employee and provide a written determination to the Plan Administrator. The determination will not contain confidential medical information but will include: (1) the PLHCP's opinion regarding the employee's ability to tolerate a respirator; (2) any limitations on respirator use; (3) any need for follow-up evaluations, and; (4) a statement that the employee has been informed of the determination. If the PLHCP recommends alternative respiratory protection, such as a powered air-purifying respirator, the Plan Administrator will comply with the recommendation. The Plan Administrator will maintain a file of the PLHCP's written determination for each employee. Employees will receive follow-up medical evaluations under the following conditions: (1) the employee reports medical signs or symptoms related to respirator use; (2) the PLHCP, a supervisor, or the program administration recommends reevaluation; (3) fit-test or other program information indicates a need for reevaluation; (4) when changes in the workplace increase respiratory stress on an employee.

Fit-Testing

All employees using a tight-fitting face piece respirator must pass an appropriate qualitative fit-test (QLFT) or quantitative fit-test (QNFT). The Plan Administrator will determine which test is appropriate for each type of respirator. Qualitative and quantitative fit-tests will be administered with the appropriate OR-OSHA protocol from 29 CFR 1910.134, Appendix A. A qualitative fit-test will be used only to fit-test negative pressure air-purifying respirators that achieve a fit factor of 100 or less. Employees must be fit-tested before they use a respirator for the first time; whenever they use a different respirator face piece; and after any changes in their physical condition that could affect respirator fit. Fit-tests will be administered using the employee's assigned respirator (from previous fit-testing results) or from a selection of respirators set up for fit-testing purposes (for an initial fit-test). All employees must be fit-tested annually. Fit-testing will be documented and a record supplied to the Human Resources department.

Respirator Use

(1) *Using tight-fitting respirators:* Employees who have beards or other conditions that interfere with the face-to-face piece seal or valve function cannot wear tightfitting respirator face pieces. Clean-shaven skin must contact all respirator sealing surfaces. Personal protective equipment or clothing that interferes with the face-to-face piece seal or valve function is not permitted. Corrective lenses with temple bars or straps that interfere with the face-to-face piece sealing area cannot be used with any respirator. Each employee must perform a user seal check (following the procedures in 1910.134, Appendix B-1) before putting on a tight-fitting respirator.

(2) *Monitoring respirator effectiveness:* The Plan Administrator will monitor and reevaluate the effectiveness of employees' respirators after any significant changes in work conditions or exposure levels. Employees must leave the areas in which they wear respirators to wash their faces and their respirator face pieces; if they detect face piece leaks or changes in breathing resistance; and to change respirators, filters, cartridges, or canister elements.

(3) *Using respirators in IDLH atmospheres:* Any employee who enters an atmosphere immediately dangerous to life and health (IDLH) must follow the procedures below:

- At least one other employee must stay immediately outside the IDLH atmosphere to respond to emergencies.
- The person entering the IDLH atmosphere and the person outside the IDLH atmosphere must maintain visual, voice, or signal line contact.
- The person outside the IDLH atmosphere must be trained and equipped to provide effective emergency response.
- The person outside the IDLH atmosphere must be equipped with a positive-pressure self-contained breathing apparatus (SCBA) or positive-pressure supplied-air respirator with auxiliary SCBA and appropriate rescue retrieval equipment.
- The Plan Administrator or another designated person must be notified before an emergency responder enters the IDLH environment.

Respirator Maintenance and Care

Before any new respirator is used, it must be washed, cleaned, sanitized, and inspected according to the manufacturer's instructions or the instructions in 29 CFR 1910.134, Appendix B-2. Employees must clean and disinfect their own respirators after each use and store them in a sanitary location so that the face pieces and valves are not deformed. Respirators used for fit-testing must be cleaned and disinfected after each use by the person conducting the fit-test. Employees must inspect their respirators before they use them and after they clean them.

Inspection includes a check of respirator function; tightness of connections; and the condition of the elastomeric face piece, head straps, valves, connecting tubes, cartridges, canisters, and filters. Only trained employees can replace worn or deteriorated respirator parts. All repair work, adjustments, and replaced parts must comply with the respirator manufacturer's instructions.

Tables 2 and 3 show the required intervals for cleaning, disinfecting, and inspecting respirators.

TABLE 2: **Respirator Cleaning and Disinfecting Intervals**	
Type of Use	**Cleaning and Disinfecting Interval**
Respirators issued for the exclusive use of an employee	Cleaned and disinfected as often as necessary to be maintained in a sanitary condition.
Respirators issued to more than one employee	Cleaned and disinfected before being worn by different individuals.
Respirators maintained for emergency use	Cleaned and disinfected after each use.
Respirators used in fit testing and training	Cleaned and disinfected after each use.

TABLE 3: Respirator Inspection Intervals	
Type of Use	**Inspection. Interval**
Respirators used in routine situations	Inspect before each use and during cleaning.
Respirators used in emergency situations	Inspect at least monthly, in accordance with manufacturers' recommendations; check for proper function before and after each use.
Respirators used for emergency-escape-only situations	Inspect just before use.

Identity of Filters, Cartridges, and Canisters

All filters, cartridges and canisters must be maintained as received by the manufacturer, distributer, or suppler, and be labeled and color-coded for designated use with the NIOSH approval label. The label cannot be removed and must remain legible. Defective filters, cartridges, and canisters cannot be used and must be removed from service.

Air Quality in Atmosphere-supplying Respirators

Compressed oxygen, liquid oxygen, and compressed breathing air used in atmosphere-supplying respirators must meet the criteria in Table 4.

TABLE 4: Air Quality Requirements for Breathing Air		
Compressed Oxygen	**Liquid Oxygen**	**Compressed Breathing Air**
Meets all U.S.P. requirements for medical or breathing oxygen	Meets all U.S.P. requirements for medical or breathing oxygen	Meets all ANSI requirements for Type 1-Grade D breathing air
Cannot be used in atmosphere-supplying respirators that have used compressed air		
Oxygen concentrations greater than 23.5% must be used only in equipment designed for oxygen service		

E. TRAINING

Before any employee wears a respirator for the first time, he or she must receive and understand training that covers the following:

- Why the respirator is necessary;
- How improper fit, use, or maintenance can compromise the protective effect of the respirator;
- The respirator's capabilities and limitations;
- How to use the respirator in emergency situations, including situations in which the respirator malfunctions;
- How to inspect, put on, check the seals, and remove the respirator;
- Proper maintenance and storage procedures;
- How to recognize medical signs and symptoms that may limit or prevent effective use of the respirator.

Training will be provided by the Plan Administrator, or their designee as stated in the department addendum, and will be fully documented to certify that the employee understands the concepts presented and has demonstrated how to use and wear the respirator. The training must give each

user an opportunity to handle the respirator; to have it fitted properly; to test its face-to-face piece seal; to wear it in normal air for a trial period; and to wear in a test atmosphere. Retraining must be performed at least annually or as deemed necessary by the Plan Administrator. Employees who are responsible for inspecting emergency and supplied-air respirators will receive supplied-air respirator-specific training. Employees who ask for and are permitted to wear respirators must first read the information in 1910.134, Appendix D.

F. PROGRAM REVIEW

The Plan Administrator shall evaluate this program annually, or as often as necessary, to ensure that it remains effective. The Plan Administrator shall consult employees about respirator fit, selection, proper use and maintenance and will make periodic workplace observations to confirm that respirators are being used and maintained correctly. Josephine County's safety committee is encouraged to evaluate respirator use during inspection activities. This program shall be updated to reflect changes in workplace conditions and processes that affect employees' use of respirators.

G. RECORDKEEPING

The Plan Administrator shall maintain records of non-confidential medical evaluation determinations, fit testing, training documentation, and annual inspection audits and make them available to employees and to OR-OSHA. All records shall be maintained in the Josephine County Human Resources Department.

H. DEPARTMENTAL ADDENDUMS

Addendum A: Josephine County Sheriff's Office Respiratory Protection Plan

POSITIONS EXPOSED: DETECTIVES AND EVIDENCE PROCESSORS

A. **The Plan Administrator:** The Respiratory Protection Plan Administrator for the Josephine County Sheriff's Office is the Major Crimes Unit (MCU) supervisor.

B. **Hazard Evaluation:** MCU handles special operations for the Josephine County Sheriff's Office which include the identification, processing and clean up of methamphetamine labs. An evaluation of the hazards made it clear that the County has no clear indication of what the exposures to an employee might be when processing an enclosed meth lab. This factor is the basis of determining the respirator employees will use for enclosed meth labs. For outdoor labs, the respiratory protection plan will be followed.

Evidence Processors handle a variety of materials of unknown origin, which may include potentially hazardous drug manufacturing chemicals or by-products.

C. **Respirator Selection for Enclosed Meth Labs:** The Plan Administrator has determined that, in Sheriff's Office activities related to meth labs, employees will use "Supplied-Air" respirators. Only Grade D breathing air will be used for supplied-air respirators. Only oil-less breathing air compressor or oil-compressor systems provided with carbon monoxide (10 PPM) or high-temperature alarms periodically tested for the presence of carbon monoxide will be used. The use of "supplied-Air" respirators will also occur in routine and reasonably foreseeable emergency situations, including situations where a meth lab/chemical use is suspected but not yet identified.

Respirator Selection for Evidence Processing: The Plan Administrator has determined that, in Sheriff's Office activities related to evidence processing, employees will mandatorily use dust mask, and will voluntarily use a charcoal layer respirator such as Moldex 2800 while processing chemical evidence.

D. **Training:** Employees assigned to MCU will receive 40 hours of training provided by the State Department of Public Safety Standards and Training (DPSST). The training includes types of chemicals, hazards relating to chemicals, and hands on training using the APR and SCBA. Employees who complete the course will receive a CLAN Lab Certification which meets the DEA requirements. The Josephine County Sheriff's Office will make available eight hours of annual training on the same topics.

I. ASSOCIATED REGULATIONS

29 CFR 1910.134, Appendix A : Mandatory fit-testing procedures
29 CFR 1910.134, Appendix B-1 : Mandatory user seal-check procedures
29 CFR 1910.134, Appendix B-2: Mandatory respirator cleaning procedures
29 CFR 1910.134, Appendix C: Mandatory respirator medical evaluation questionnaire
29 CFR 1910.134, Appendix D: Information for employees who ask to use respirators (but who are not required to use them)

Appendix A – 29 CFR § 1910.134: Fit Testing Procedures (Mandatory)

Part I. OSHA-Accepted Fit Test Protocols

A. Fit Testing Procedures -- General Requirements

The employer shall conduct fit testing using the following procedures. The requirements in this appendix apply to all OSHA-accepted fit test methods, both QLFT and QNFT.

1. The test subject shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

2. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.

3. The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.

4. The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.

5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item A.6. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.

6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:

(a) Position of the mask on the nose

(b) Room for eye protection

(c) Room to talk

(d) Position of mask on face and cheeks

7. The following criteria shall be used to help determine the adequacy of the respirator fit:

(a) Chin properly placed;

(b) Adequate strap tension, not overly tightened;

(c) Fit across nose bridge;

(d) Respirator of proper size to span distance from nose to chin;

(e) Tendency of respirator to slip;

(f) Self-observation in mirror to evaluate fit and respirator position.

8. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Appendix B-1 of this section or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Appendix B-1. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.

9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while

performing her or his duties.

11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.

12. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.

13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.

14. Test Exercises.

(a) Employers must perform the following test exercises for all fit testing methods prescribed in this appendix, except for the CNP quantitative fit testing protocol and the CNP REDON quantitative fit testing protocol. For these two protocols, employers must ensure that the test subjects (i.e., employees) perform the exercise procedure specified in Part I.C.4(b) of this appendix for the CNP quantitative fit testing protocol, or the exercise procedure described in Part I.C.5(b) of this appendix for the CNP REDON quantitative fit-testing protocol. For the remaining fit testing methods, employers must ensure that employees perform the test exercises in the appropriate test environment in the following manner:

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.

(3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.

(4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

(6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT)

(7) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall

be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.

(8) Normal breathing. Same as exercise (1).

(b) Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

B. Qualitative Fit Test (QLFT) Protocols

1. General

(a) The employer shall ensure that persons administering QLFT are able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.

(b) The employer shall ensure that QLFT equipment is kept clean and well maintained so as to operate within the parameters for which it was designed.

2. Isoamyl Acetate Protocol

Note: This protocol is not appropriate to use for the fit testing of particulate respirators. If used to fit test particulate respirators, the respirator must be equipped with an organic vapor filter.

(a) Odor Threshold Screening

Odor threshold screening, performed without wearing a respirator, is intended to determine if the individual tested can detect the odor of isoamyl acetate at low levels.

(1) Three 1 liter glass jars with metal lids are required.

(2) Odor-free water (e.g., distilled or spring water) at approximately 25 deg. C (77 deg. F) shall be used for the solutions.

(3) The isoamyl acetate (IAA) (also known at isopentyl acetate) stock solution is prepared by adding 1 ml of pure IAA to 800 ml of odor-free water in a 1 liter jar, closing the lid and shaking for 30 seconds. A new solution shall be prepared at least weekly.

(4) The screening test shall be conducted in a room separate from the room used for actual fit testing. The two rooms shall be well-ventilated to prevent the odor of IAA from becoming evident in the general room air where testing takes place.

(5) The odor test solution is prepared in a second jar by placing 0.4 ml of the stock solution into 500 ml of odor-free water using a clean dropper or pipette. The solution shall be shaken for 30 seconds and allowed to stand for two to three minutes so that the IAA concentration above the liquid may reach equilibrium. This solution shall be used for only one day.

(6) A test blank shall be prepared in a third jar by adding 500 cc of odor-free water.

(7) The odor test and test blank jar lids shall be labeled (e.g., 1 and 2) for jar identification. Labels shall be placed on the lids so that they can be peeled off periodically and switched to maintain the integrity of the test.

(8) The following instruction shall be typed on a card and placed on the table in front of the two test jars (i.e., 1 and 2): "The purpose of this test is to determine if you can smell banana oil at a low concentration. The two bottles in front of you contain water. One of these bottles also contains a small amount of banana oil. Be sure the covers are on tight, then shake each bottle for two seconds. Unscrew the lid of each bottle, one at a time, and sniff at the mouth of the bottle. Indicate to the test conductor which bottle contains banana oil."

(9) The mixtures used in the IAA odor detection test shall be prepared in an area separate from where the test is performed, in order to prevent olfactory fatigue in the subject.

(10) If the test subject is unable to correctly identify the jar containing the odor test solution, the IAA qualitative fit test shall not be performed.

(11) If the test subject correctly identifies the jar containing the odor test solution, the test subject may proceed to respirator selection and fit testing.

(b) Isoamyl Acetate Fit Test

(1) The fit test chamber shall be a clear 55-gallon drum liner suspended inverted over a 2-foot diameter frame so that the top of the chamber is about 6 inches above the test subject's head. If no drum liner is available, a similar chamber shall be constructed using plastic sheeting. The inside top center of the chamber shall have a small hook attached.

(2) Each respirator used for the fitting and fit testing shall be equipped with organic vapor cartridges or offer protection against organic vapors.

(3) After selecting, donning, and properly adjusting a respirator, the test subject shall wear it to the fit testing room. This room shall be separate from the room used for odor threshold screening and respirator selection, and shall be well-ventilated, as by an exhaust fan or lab hood, to prevent general room contamination.

(4) A copy of the test exercises and any prepared text from which the subject is to read shall be taped to the inside of the test chamber.

(5) Upon entering the test chamber, the test subject shall be given a 6-inch by 5-inch piece of paper towel, or other porous, absorbent, single-ply material, folded in half and wetted with 0.75 ml of pure IAA. The test subject shall hang the wet towel on the hook at the top of the chamber. An IAA test swab or ampule may be substituted for the IAA wetted paper towel provided it has been demonstrated that the alternative IAA source will generate an IAA test atmosphere with a concentration equivalent to that generated by the paper towel method.

(6) Allow two minutes for the IAA test concentration to stabilize before starting the fit test exercises. This would be an appropriate time to talk with the test subject; to explain the fit test, the importance of his/her cooperation, and the purpose for the test exercises; or to demonstrate some of the exercises.

(7) If at any time during the test, the subject detects the banana-like odor of IAA, the test is failed. The subject shall quickly exit from the test chamber and leave the test area to avoid olfactory fatigue.

(8) If the test is failed, the subject shall return to the selection room and remove the respirator. The test subject shall repeat the odor sensitivity test, select and put on another respirator, return to the test area and again begin the fit test procedure described in (b) (1) through (7) above. The process continues until a respirator that fits well has been

found. Should the odor sensitivity test be failed, the subject shall wait at least 5 minutes before retesting. Odor sensitivity will usually have returned by this time.

(9) If the subject passes the test, the efficiency of the test procedure shall be demonstrated by having the subject break the respirator face seal and take a breath before exiting the chamber.

(10) When the test subject leaves the chamber, the subject shall remove the saturated towel and return it to the person conducting the test, so that there is no significant IAA concentration buildup in the chamber during subsequent tests. The used towels shall be kept in a self-sealing plastic bag to keep the test area from being contaminated.

3. Saccharin Solution Aerosol Protocol

The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Taste threshold screening. The saccharin taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of saccharin.

(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches in diameter by 14 inches tall with at least the front portion clear and that allows free movements of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.

(2) The test enclosure shall have a 3/4-inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.

(3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his/her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a sweet taste.

(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the threshold check solution into the enclosure. The nozzle is directed away from the nose and mouth of the person. This nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.

(5) The threshold check solution is prepared by dissolving 0.83 gram of sodium saccharin USP in 100 ml of warm water. It can be prepared by putting 1 ml of the fit test solution (see (b)(5) below) in 100 ml of distilled water.

(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that it collapses completely, then released and allowed to fully expand.

(7) Ten squeezes are repeated rapidly and then the test subject is asked whether the saccharin can be tasted. If the test subject reports tasting the sweet taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.

(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the saccharin is tasted. If the test subject reports tasting the sweet taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.

(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked

whether the saccharin is tasted. If the test subject reports tasting the sweet taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.

(10) The test conductor will take note of the number of squeezes required to solicit a taste response.

(11) If the saccharin is not tasted after 30 squeezes (step 10), the test subject is unable to taste saccharin and may not perform the saccharin fit test.

Note to paragraph 3. (a): If the test subject eats or drinks something sweet before the screening test, he/she may be unable to taste the weak saccharin solution.

(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test.

(13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.

(14) The nebulizer shall be thoroughly rinsed in water, shaken dry, and refilled at least each morning and afternoon or at least every four hours.

(b) Saccharin solution aerosol fit test procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.

(2) The fit test uses the same enclosure described in 3. (a) above.

(3) The test subject shall don the enclosure while wearing the respirator selected in section I. A. of this appendix. The respirator shall be properly adjusted and equipped with a particulate filter(s).

(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.

(5) The fit test solution is prepared by adding 83 grams of sodium saccharin to 100 ml of warm water.

(6) As before, the test subject shall breathe through the slightly open mouth with tongue extended, and report if he/she tastes the sweet taste of saccharin.

(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of saccharin fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test. A minimum of 10 squeezes is required.

(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.

(9) Every 30 seconds the aerosol concentration shall be replenished using one half the original number of squeezes used initially (e.g., 5, 10 or 15).

(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of saccharin is detected. If the test subject does not report tasting the saccharin, the test is passed.

(11) If the taste of saccharin is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator

shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

(12) Since the nebulizer has a tendency to clog during use, the test operator must make periodic checks of the nebulizer to ensure that it is not clogged. If clogging is found at the end of the test session, the test is invalid.

4. BitrexTM (Denatonium Benzoate) Solution Aerosol Qualitative Fit Test Protocol

The BitrexTM (Denatonium benzoate) solution aerosol QLFT protocol uses the published saccharin test protocol because that protocol is widely accepted. Bitrex is routinely used as a taste aversion agent in household liquids which children should not be drinking and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Taste Threshold Screening.

The Bitrex taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of Bitrex.

(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches (30.5 cm) in diameter by 14 inches (35.6 cm) tall. The front portion of the enclosure shall be clear from the respirator and allow free movement of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.

(2) The test enclosure shall have a \3/4\ inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.

(3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his or her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a bitter taste

(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the Threshold Check Solution into the enclosure. This Nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.

(5) The Threshold Check Solution is prepared by adding 13.5 milligrams of Bitrex to 100 ml of 5% salt (NaCl) solution in distilled water.

(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely, and is then released and allowed to fully expand.

(7) An initial ten squeezes are repeated rapidly and then the test subject is asked whether the Bitrex can be tasted. If the test subject reports tasting the bitter taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.

(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.

(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the third set of ten squeezes, the

screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.

(10) The test conductor will take note of the number of squeezes required to solicit a taste response.

(11) If the Bitrex is not tasted after 30 squeezes (step 10), the test subject is unable to taste Bitrex and may not perform the Bitrex fit test.

(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test.

(13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.

(14) The nebulizer shall be thoroughly rinsed in water, shaken to dry, and refilled at least each morning and afternoon or at least every four hours.

(b) Bitrex Solution Aerosol Fit Test Procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.

(2) The fit test uses the same enclosure as that described in 4. (a) above.

(3) The test subject shall don the enclosure while wearing the respirator selected according to section I. A. of this appendix. The respirator shall be properly adjusted and equipped with any type particulate filter(s).

(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.

(5) The fit test solution is prepared by adding 337.5 mg of Bitrex to 200 ml of a 5% salt (NaCl) solution in warm water.

(6) As before, the test subject shall breathe through his or her slightly open mouth with tongue extended, and be instructed to report if he/she tastes the bitter taste of Bitrex.

(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.

(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.

(9) Every 30 seconds the aerosol concentration shall be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).

(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of Bitrex is detected. If the test subject does not report tasting the Bitrex, the test is passed.

(11) If the taste of Bitrex is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

5. Irritant Smoke (Stannic Chloride) Protocol

This qualitative fit test uses a person's response to the irritating chemicals released in the "smoke" produced by a stannic chloride ventilation smoke tube to detect leakage into the respirator.

(a) General Requirements and Precautions

(1) The respirator to be tested shall be equipped with high efficiency particulate air (HEPA) or P100 series filter(s).

(2) Only stannic chloride smoke tubes shall be used for this protocol.

(3) No form of test enclosure or hood for the test subject shall be used.

(4) The smoke can be irritating to the eyes, lungs, and nasal passages. The test conductor shall take precautions to minimize the test subject's exposure to irritant smoke. Sensitivity varies, and certain individuals may respond to a greater degree to irritant smoke. Care shall be taken when performing the sensitivity screening checks that determine whether the test subject can detect irritant smoke to use only the minimum amount of smoke necessary to elicit a response from the test subject.

(5) The fit test shall be performed in an area with adequate ventilation to prevent exposure of the person conducting the fit test or the build-up of irritant smoke in the general atmosphere.

(b) Sensitivity Screening Check

The person to be tested must demonstrate his or her ability to detect a weak concentration of the irritant smoke.

(1) The test operator shall break both ends of a ventilation smoke tube containing stannic chloride, and attach one end of the smoke tube to a low flow air pump set to deliver 200 milliliters per minute, or an aspirator squeeze bulb. The test operator shall cover the other end of the smoke tube with a short piece of tubing to prevent potential injury from the jagged end of the smoke tube.

(2) The test operator shall advise the test subject that the smoke can be irritating to the eyes, lungs, and nasal passages and instruct the subject to keep his/her eyes closed while the test is performed.

(3) The test subject shall be allowed to smell a weak concentration of the irritant smoke before the respirator is donned to become familiar with its irritating properties and to determine if he/she can detect the irritating properties of the smoke. The test operator shall carefully direct a small amount of the irritant smoke in the test subject's direction to determine that he/she can detect it.

(c) Irritant Smoke Fit Test Procedure

(1) The person being fit tested shall don the respirator without assistance, and perform the required user seal check(s).

(2) The test subject shall be instructed to keep his/her eyes closed.

(3) The test operator shall direct the stream of irritant smoke from the smoke tube toward the faceseal area of the test subject, using the low flow pump or the squeeze bulb. The test operator shall begin at least 12 inches from the facepiece and move the smoke stream around the whole perimeter of the mask. The operator shall gradually make two more passes around the perimeter of the mask, moving to within six inches of the respirator.

(4) If the person being tested has not had an involuntary response and/or detected the irritant smoke, proceed with

the test exercises.

(5) The exercises identified in section I.A. 14. of this appendix shall be performed by the test subject while the respirator seal is being continually challenged by the smoke, directed around the perimeter of the respirator at a distance of six inches.

(6) If the person being fit tested reports detecting the irritant smoke at any time, the test is failed. The person being retested must repeat the entire sensitivity check and fit test procedure.

(7) Each test subject passing the irritant smoke test without evidence of a response (involuntary cough, irritation) shall be given a second sensitivity screening check, with the smoke from the same smoke tube used during the fit test, once the respirator has been removed, to determine whether he/she still reacts to the smoke. Failure to evoke a response shall void the fit test.

(8) If a response is produced during this second sensitivity check, then the fit test is passed.

C. Quantitative Fit Test (QNFT) Protocols

The following quantitative fit testing procedures have been demonstrated to be acceptable: Quantitative fit testing using a non-hazardous test aerosol (such as corn oil, polyethylene glycol 400 [PEG 400], di-2-ethyl hexyl sebacate [DEHS], or sodium chloride) generated in a test chamber, and employing instrumentation to quantify the fit of the respirator; Quantitative fit testing using ambient aerosol as the test agent and appropriate instrumentation (condensation nuclei counter) to quantify the respirator fit; Quantitative fit testing using controlled negative pressure and appropriate instrumentation to measure the volumetric leak rate of a facepiece to quantify the respirator fit.

1. General

(a) The employer shall ensure that persons administering QNFT are able to calibrate equipment and perform tests properly, recognize invalid tests, calculate fit factors properly and ensure that test equipment is in proper working order.

(b) The employer shall ensure that QNFT equipment is kept clean, and is maintained and calibrated according to the manufacturer's instructions so as to operate at the parameters for which it was designed.

2. Generated Aerosol Quantitative Fit Testing Protocol

(a) Apparatus.

(1) Instrumentation. Aerosol generation, dilution, and measurement systems using particulates (corn oil, polyethylene glycol 400 [PEG 400], di-2-ethyl hexyl sebacate [DEHS] or sodium chloride) as test aerosols shall be used for quantitative fit testing.

(2) Test chamber. The test chamber shall be large enough to permit all test subjects to perform freely all required exercises without disturbing the test agent concentration or the measurement apparatus. The test chamber shall be equipped and constructed so that the test agent is effectively isolated from the ambient air, yet uniform in concentration throughout the chamber.

(3) When testing air-purifying respirators, the normal filter or cartridge element shall be replaced with a high efficiency particulate air (HEPA) or P100 series filter supplied by the same manufacturer.

(4) The sampling instrument shall be selected so that a computer record or strip chart record may be made of the test

showing the rise and fall of the test agent concentration with each inspiration and expiration at fit factors of at least 2,000. Integrators or computers that integrate the amount of test agent penetration leakage into the respirator for each exercise may be used provided a record of the readings is made.

(5) The combination of substitute air-purifying elements, test agent and test agent concentration shall be such that the test subject is not exposed in excess of an established exposure limit for the test agent at any time during the testing process, based upon the length of the exposure and the exposure limit duration.

(6) The sampling port on the test specimen respirator shall be placed and constructed so that no leakage occurs around the port (e.g., where the respirator is probed), a free air flow is allowed into the sampling line at all times, and there is no interference with the fit or performance of the respirator. The in-mask sampling device (probe) shall be designed and used so that the air sample is drawn from the breathing zone of the test subject, midway between the nose and mouth and with the probe extending into the facepiece cavity at least 1/4 inch.

(7) The test setup shall permit the person administering the test to observe the test subject inside the chamber during the test.

(8) The equipment generating the test atmosphere shall maintain the concentration of test agent constant to within a 10 percent variation for the duration of the test.

(9) The time lag (interval between an event and the recording of the event on the strip chart or computer or integrator) shall be kept to a minimum. There shall be a clear association between the occurrence of an event and its being recorded.

(10) The sampling line tubing for the test chamber atmosphere and for the respirator sampling port shall be of equal diameter and of the same material. The length of the two lines shall be equal.

(11) The exhaust flow from the test chamber shall pass through an appropriate filter (i.e., high efficiency particulate filter) before release.

(12) When sodium chloride aerosol is used, the relative humidity inside the test chamber shall not exceed 50 percent.

(13) The limitations of instrument detection shall be taken into account when determining the fit factor.

(14) Test respirators shall be maintained in proper working order and be inspected regularly for deficiencies such as cracks or missing valves and gaskets.

(b) Procedural Requirements.

(1) When performing the initial user seal check using a positive or negative pressure check, the sampling line shall be crimped closed in order to avoid air pressure leakage during either of these pressure checks.

(2) The use of an abbreviated screening QLFT test is optional. Such a test may be utilized in order to quickly identify poor fitting respirators that passed the positive and/or negative pressure test and reduce the amount of QNFT time. The use of the CNC QNFT instrument in the count mode is another optional method to obtain a quick estimate of fit and eliminate poor fitting respirators before going on to perform a full QNFT.

(3) A reasonably stable test agent concentration shall be measured in the test chamber prior to testing. For canopy or shower curtain types of test units, the determination of the test agent's stability may be established after the test subject has entered the test environment.

(4) Immediately after the subject enters the test chamber, the test agent concentration inside the respirator shall be measured to ensure that the peak penetration does not exceed 5 percent for a half mask or 1 percent for a full facepiece respirator.

(5) A stable test agent concentration shall be obtained prior to the actual start of testing.

(6) Respirator restraining straps shall not be over-tightened for testing. The straps shall be adjusted by the wearer without assistance from other persons to give a reasonably comfortable fit typical of normal use. The respirator shall not be adjusted once the fit test exercises begin.

(7) The test shall be terminated whenever any single peak penetration exceeds 5 percent for half masks and 1 percent for full facepiece respirators. The test subject shall be refitted and retested.

(8) Calculation of fit factors.

(i) The fit factor shall be determined for the quantitative fit test by taking the ratio of the average chamber concentration to the concentration measured inside the respirator for each test exercise except the grimace exercise.

(ii) The average test chamber concentration shall be calculated as the arithmetic average of the concentration measured before and after each test (i.e., 7 exercises) or the arithmetic average of the concentration measured before and after each exercise or the true average measured continuously during the respirator sample.

(iii) The concentration of the challenge agent inside the respirator shall be determined by one of the following methods:

(A) Average peak penetration method means the method of determining test agent penetration into the respirator utilizing a strip chart recorder, integrator, or computer. The agent penetration is determined by an average of the peak heights on the graph or by computer integration, for each exercise except the grimace exercise. Integrators or computers that calculate the actual test agent penetration into the respirator for each exercise will also be considered to meet the requirements of the average peak penetration method.

(B) Maximum peak penetration method means the method of determining test agent penetration in the respirator as determined by strip chart recordings of the test. The highest peak penetration for a given exercise is taken to be representative of average penetration into the respirator for that exercise.

(C) Integration by calculation of the area under the individual peak for each exercise except the grimace exercise. This includes computerized integration.

(D) The calculation of the overall fit factor using individual exercise fit factors involves first converting the exercise fit factors to penetration values, determining the average, and then converting that result back to a fit factor. This procedure is described in the following equation:

$$\text{Overall Fit Factor} = \frac{\text{Number of exercises}}{1/ff_1 + 1/ff_2 + 1/ff_3 + 1/ff_4 + 1/ff_5 + 1/ff_6 + 1/ff_7 + 1/ff_8}$$

Where ff1, ff2, ff3, etc. are the fit factors for exercises 1, 2, 3, etc.

(9) The test subject shall not be permitted to wear a half mask or quarter facepiece respirator unless a minimum fit

factor of 100 is obtained, or a full facepiece respirator unless a minimum fit factor of 500 is obtained.

(10) Filters used for quantitative fit testing shall be replaced whenever increased breathing resistance is encountered, or when the test agent has altered the integrity of the filter media.

3. Ambient aerosol condensation nuclei counter (CNC) quantitative fit testing protocol.

The ambient aerosol condensation nuclei counter (CNC) quantitative fit testing (Portacount TM) protocol quantitatively fit tests respirators with the use of a probe. The probed respirator is only used for quantitative fit tests. A probed respirator has a special sampling device, installed on the respirator, that allows the probe to sample the air from inside the mask. A probed respirator is required for each make, style, model, and size that the employer uses and can be obtained from the respirator manufacturer or distributor. The CNC instrument manufacturer, TSI Inc., also provides probe attachments (TSI sampling adapters) that permit fit testing in an employee's own respirator. A minimum fit factor pass level of at least 100 is necessary for a half-mask respirator and a minimum fit factor pass level of at least 500 is required for a full facepiece negative pressure respirator. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Portacount Fit Test Requirements.

(1) Check the respirator to make sure the sampling probe and line are properly attached to the facepiece and that the respirator is fitted with a particulate filter capable of preventing significant penetration by the ambient particles used for the fit test (e.g., NIOSH 42 CFR 84 series 100, series 99, or series 95 particulate filter) per manufacturer's instruction.

(2) Instruct the person to be tested to don the respirator for five minutes before the fit test starts. This purges the ambient particles trapped inside the respirator and permits the wearer to make certain the respirator is comfortable. This individual shall already have been trained on how to wear the respirator properly.

(3) Check the following conditions for the adequacy of the respirator fit: Chin properly placed; Adequate strap tension, not overly tightened; Fit across nose bridge; Respirator of proper size to span distance from nose to chin; Tendency of the respirator to slip; Self-observation in a mirror to evaluate fit and respirator position.

(4) Have the person wearing the respirator do a user seal check. If leakage is detected, determine the cause. If leakage is from a poorly fitting facepiece, try another size of the same model respirator, or another model of respirator.

(5) Follow the manufacturer's instructions for operating the Portacount and proceed with the test.

(6) The test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.

(7) After the test exercises, the test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried.

(b) Portacount Test Instrument.

(1) The Portacount will automatically stop and calculate the overall fit factor for the entire set of exercises. The overall fit factor is what counts. The Pass or Fail message will indicate whether or not the test was successful. If the test was a Pass, the fit test is over.

(2) Since the pass or fail criterion of the Portacount is user programmable, the test operator shall ensure that the pass or fail criterion meet the requirements for minimum respirator performance in this Appendix.

(3) A record of the test needs to be kept on file, assuming the fit test was successful. The record must contain the test subject's name; overall fit factor; make, model, style, and size of respirator used; and date tested.

4. Controlled negative pressure (CNP) quantitative fit testing protocol.

The CNP protocol provides an alternative to aerosol fit test methods. The CNP fit test method technology is based on exhausting air from a temporarily sealed respirator facepiece to generate and then maintain a constant negative pressure inside the facepiece. The rate of air exhaust is controlled so that a constant negative pressure is maintained in the respirator during the fit test. The level of pressure is selected to replicate the mean inspiratory pressure that causes leakage into the respirator under normal use conditions. With pressure held constant, air flow out of the respirator is equal to air flow into the respirator. Therefore, measurement of the exhaust stream that is required to hold the pressure in the temporarily sealed respirator constant yields a direct measure of leakage air flow into the respirator. The CNP fit test method measures leak rates through the facepiece as a method for determining the facepiece fit for negative pressure respirators. The CNP instrument manufacturer Occupational Health Dynamics of Birmingham, Alabama also provides attachments (sampling manifolds) that replace the filter cartridges to permit fit testing in an employee's own respirator. To perform the test, the test subject closes his or her mouth and holds his/her breath, after which an air pump removes air from the respirator facepiece at a pre-selected constant pressure. The facepiece fit is expressed as the leak rate through the facepiece, expressed as milliliters per minute. The quality and validity of the CNP fit tests are determined by the degree to which the in-mask pressure tracks the test pressure during the system measurement time of approximately five seconds. Instantaneous feedback in the form of a real-time pressure trace of the in-mask pressure is provided and used to determine test validity and quality. A minimum fit factor pass level of 100 is necessary for a half-mask respirator and a minimum fit factor of at least 500 is required for a full facepiece respirator. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) CNP Fit Test Requirements.

(1) The instrument shall have a non-adjustable test pressure of 15.0 mm water pressure.

(2) The CNP system defaults selected for test pressure shall be set at -- 15 mm of water (-0.58 inches of water) and the modeled inspiratory flow rate shall be 53.8 liters per minute for performing fit tests.

(Note: CNP systems have built-in capability to conduct fit testing that is specific to unique work rate, mask, and gender situations that might apply in a specific workplace. Use of system default values, which were selected to represent respirator wear with medium cartridge resistance at a low-moderate work rate, will allow inter-test comparison of the respirator fit.)

(3) The individual who conducts the CNP fit testing shall be thoroughly trained to perform the test.

(4) The respirator filter or cartridge needs to be replaced with the CNP test manifold. The inhalation valve downstream from the manifold either needs to be temporarily removed or propped open.

(5) The employer must train the test subject to hold his or her breath for at least 10 seconds.

(6) The test subject must don the test respirator without any assistance from the test administrator who is conducting the CNP fit test. The respirator must not be adjusted once the fit-test exercises begin. Any adjustment voids the test, and the test subject must repeat the fit test.

(7) The QNFT protocol shall be followed according to section I. C. 1. of this appendix with an exception for the CNP test exercises.

(b) CNP Test Exercises.

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally for 1 minute. After the normal breathing exercise, the subject needs to hold head straight ahead and hold his or her breath for 10 seconds during the test measurement.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply for 1 minute, being careful not to hyperventilate. After the deep breathing exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during test measurement.

(3) Turning head side to side. Standing in place, the subject shall slowly turn his or her head from side to side between the extreme positions on each side for 1 minute. The head shall be held at each extreme momentarily so the subject can inhale at each side. After the turning head side to side exercise, the subject needs to hold head full left and hold his or her breath for 10 seconds during test measurement. Next, the subject needs to hold head full right and hold his or her breath for 10 seconds during test measurement.

(4) Moving head up and down. Standing in place, the subject shall slowly move his or her head up and down for 1 minute. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling). After the moving head up and down exercise, the subject shall hold his or her head full up and hold his or her breath for 10 seconds during test measurement. Next, the subject shall hold his or her head full down and hold his or her breath for 10 seconds during test measurement.

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song for 1 minute. After the talking exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during the test measurement.

(6) Grimace. The test subject shall grimace by smiling or frowning for 15 seconds.

(7) Bending Over. The test subject shall bend at the waist as if he or she were to touch his or her toes for 1 minute. Jogging in place shall be substituted for this exercise in those test environments such as shroud-type QNFT units that prohibit bending at the waist. After the bending over exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during the test measurement.

(8) Normal Breathing. The test subject shall remove and re-don the respirator within a one-minute period. Then, in a normal standing position, without talking, the subject shall breathe normally for 1 minute. After the normal breathing exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during the test measurement. After the test exercises, the test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of a respirator shall be tried.

(c) CNP Test Instrument.

(1) The test instrument must have an effective audio-warning device, or a visual-warning device in the form of a screen tracing, that indicates when the test subject fails to hold his or her breath during the test. The test must be terminated and restarted from the beginning when the test subject fails to hold his or her breath during the test. The test subject then may be refitted and retested.

(2) A record of the test shall be kept on file, assuming the fit test was successful. The record must contain the test subject's name; overall fit factor; make, model, style and size of respirator used; and date tested.

5. Controlled negative pressure (CNP) REDON quantitative fit testing protocol.

(a) When administering this protocol to test subjects, employers must comply with the requirements specified in paragraphs (a) and (c) of Part I.C.4 of this appendix ("Controlled negative pressure (CNP) quantitative fit testing protocol"), as well as use the test exercises described below in paragraph (b) of this protocol instead of the test exercises specified in paragraph (b) of Part I.C.4 of this appendix.

(b) Employers must ensure that each test subject being fit tested using this protocol follows the exercise and measurement procedures, including the order of administration, described below in Table A-1 of this appendix.

Table A-1. -- CNP REDON Quantitative Fit Testing Protocol

Exercises(1)	Exercise procedure	Measurement procedure
Facing Forward	Stand and breathe normally, without talking, for 30 seconds.	Face forward, while holding breath for 10 seconds.
Bending Over	Bend at the waist, as if going to touch his or her toes, for 30 seconds.	Face parallel to the floor, while holding breath for 10 seconds
Head Shaking	For about three seconds, shake head back and forth vigorously several times while shouting.	Face forward, while holding breath for 10 seconds.
REDON 1	Remove the respirator mask, loosen all facepiece straps, and then redon the respirator mask.	Face forward, while holding breath for 10 seconds.
REDON 2	Remove the respirator mask, loosen all facepiece straps, and then redon the respirator mask again.	Face forward, while holding breath for 10 seconds.

1 Exercises are listed in the order in which they are to be administered.

(c) After completing the test exercises, the test administrator must question each test subject regarding the comfort of the respirator. When a test subject states that the respirator is unacceptable, the employer must ensure that the test administrator repeats the protocol using another respirator model.

(d) Employers must determine the overall fit factor for each test subject by calculating the harmonic mean of the fit testing exercises as follows:

$$\text{Overall Fit Factor} = \frac{N}{\left[1/FF_1 + 1/FF_2 + \ldots\ 1/FF_N\right]}$$

Where:
N = The number of exercises;
FF1 = The fit factor for the first exercise;
FF2 = The fit factor for the second exercise; and
FFN = The fit factor for the nth exercise.

Part II. New Fit Test Protocols

A. Any person may submit to OSHA an application for approval of a new fit test protocol. If the application meets the following criteria, OSHA will initiate a rulemaking proceeding under section 6(b)(7) of the OSH Act to determine whether to list the new protocol as an approved protocol in this Appendix A.

B. The application must include a detailed description of the proposed new fit test protocol. This application must be supported by either:

1. A test report prepared by an independent government research laboratory (e.g., Lawrence Livermore National Laboratory, Los Alamos National Laboratory, the National Institute for Standards and Technology) stating that the laboratory has tested the protocol and had found it to be accurate and reliable; or

2. An article that has been published in a peer-reviewed industrial hygiene journal describing the protocol and explaining how test data support the protocol's accuracy and reliability.

C. If OSHA determines that additional information is required before the Agency commences a rulemaking proceeding under this section, OSHA will so notify the applicant and afford the applicant the opportunity to submit the supplemental information. Initiation of a rulemaking proceeding will be deferred until OSHA has received and evaluated the supplemental information.

Appendix B-1 – 29 CFR § 1910.134: User Seal Check Procedures (Mandatory)

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

I. Facepiece Positive and/or Negative Pressure Checks

A. Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

B. Negative pressure check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

II. Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

Appendix B-2 – 29 CFR § 1910.134: Respirator Cleaning Procedures (Mandatory)

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix B- 2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in Appendix B-2, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,

2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,

3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried.

G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

H. Test the respirator to ensure that all components work properly.

Appendix C - Sec. 29 CFR 1910.134: OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Can you read (circle one): Yes/No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date:_____

2. Your name:_____

3. Your age (to nearest year):_____

4. Sex (circle one): Male/Female

5. Your height: _____ ft. _____ in.

6. Your weight: _____ lbs.

7. Your job title:_____

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____

9. The best time to phone you at this number: _____

10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No

11. Check the type of respirator you will use (you can check more than one category):
a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

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

If "yes," what type(s):_____
_____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you ***currently*** smoke tobacco, or have you smoked tobacco in the last month: Yes/No

2. Have you ***ever had*** any of the following conditions?

a. Seizures (fits): Yes/No
b. Diabetes (sugar disease): Yes/No
c. Allergic reactions that interfere with your breathing: Yes/No
d. Claustrophobia (fear of closed-in places): Yes/No
e. Trouble smelling odors: Yes/No

3. Have you ***ever had*** any of the following pulmonary or lung problems?

a. Asbestosis: Yes/No
b. Asthma: Yes/No
c. Chronic bronchitis: Yes/No
d. Emphysema: Yes/No
e. Pneumonia: Yes/No
f. Tuberculosis: Yes/No
g. Silicosis: Yes/No
h. Pneumothorax (collapsed lung): Yes/No
i. Lung cancer: Yes/No
j. Broken ribs: Yes/No
k. Any chest injuries or surgeries: Yes/No
l. Any other lung problem that you've been told about: Yes/No

4. Do you ***currently*** have any of the following symptoms of pulmonary or lung illness?

a. Shortness of breath: Yes/No
b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
d. Have to stop for breath when walking at your own pace on level ground: Yes/No
e. Shortness of breath when washing or dressing yourself: Yes/No
f. Shortness of breath that interferes with your job: Yes/No
g. Coughing that produces phlegm (thick sputum): Yes/No
h. Coughing that wakes you early in the morning: Yes/No
i. Coughing that occurs mostly when you are lying down: Yes/No
j. Coughing up blood in the last month: Yes/No
k. Wheezing: Yes/No
l. Wheezing that interferes with your job: Yes/No
m. Chest pain when you breathe deeply: Yes/No
n. Any other symptoms that you think may be related to lung problems: Yes/No

5. Have you ***ever had*** any of the following cardiovascular or heart problems?

a. Heart attack: Yes/No
b. Stroke: Yes/No
c. Angina: Yes/No

d. Heart failure: Yes/No
e. Swelling in your legs or feet (not caused by walking): Yes/No
f. Heart arrhythmia (heart beating irregularly): Yes/No
g. High blood pressure: Yes/No
h. Any other heart problem that you've been told about: Yes/No

6. Have you ***ever had*** any of the following cardiovascular or heart symptoms?

a. Frequent pain or tightness in your chest: Yes/No
b. Pain or tightness in your chest during physical activity: Yes/No
c. Pain or tightness in your chest that interferes with your job: Yes/No
d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
e. Heartburn or indigestion that is not related to eating: Yes/No
f. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you ***currently*** take medication for any of the following problems?

a. Breathing or lung problems: Yes/No
b. Heart trouble: Yes/No
c. Blood pressure: Yes/No
d. Seizures (fits): Yes/No

8. If you've used a respirator, have you ***ever had*** any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

a. Eye irritation: Yes/No
b. Skin allergies or rashes: Yes/No
c. Anxiety: Yes/No
d. General weakness or fatigue: Yes/No
e. Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ***ever lost*** vision in either eye (temporarily or permanently): Yes/No

11. Do you ***currently*** have any of the following vision problems?

a. Wear contact lenses: Yes/No
b. Wear glasses: Yes/No
c. Color blind: Yes/No
d. Any other eye or vision problem: Yes/No

12. Have you ***ever had*** an injury to your ears, including a broken 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

Part B Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No

If "yes," name the chemicals if you know them:_____
_____
_____

3. Have you ever worked with any of the materials, or under any of the conditions, listed below:

a. Asbestos: Yes/No
b. Silica (***e.g.***, in sandblasting): Yes/No
c. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No
d. Beryllium: Yes/No
e. Aluminum: Yes/No
f. Coal (for example, mining): Yes/No
g. Iron: Yes/No
h. Tin: Yes/No
i. Dusty environments: Yes/No
j. Any other hazardous exposures: Yes/No

If "yes," describe these exposures:_____
_____
_____

4. List any second jobs or side businesses you have:_____
_____

5. List your previous occupations:_____
_____

6. List your current and previous hobbies:_____
_____

7. Have you been in the military services? Yes/No

If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes/No

8. Have you ever worked on a HAZMAT team? Yes/No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No

If "yes," name the medications if you know them:_____

10. Will you be using any of the following items with your respirator(s)?

a. HEPA Filters: Yes/No
b. Canisters (for example, gas masks): Yes/No
c. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

a. Escape only (no rescue): Yes/No
b. Emergency rescue only: Yes/No
c. Less than 5 hours ***per week:*** Yes/No
d. Less than 2 hours ***per day:*** Yes/No
e. 2 to 4 hours per day: Yes/No
f. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:

a. ***Light*** (less than 200 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift:_____hrs._____mins.

Examples of a light work effort are ***sitting*** while writing, typing, drafting, or performing light assembly work; or ***standing*** while operating a drill press (1-3 lbs.) or controlling machines.

b. ***Moderate*** (200 to 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift:_____hrs._____mins.

Examples of moderate work effort are ***sitting*** while nailing or filing; ***driving*** a truck or bus in urban traffic; ***standing***

while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; ***walking*** on a level surface about 2 mph or down a 5-degree grade about 3 mph; or ***pushing*** a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. ***Heavy*** (above 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift:_____hrs._____mins.

Examples of heavy work are ***lifting*** a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; ***shoveling; standing*** while bricklaying or chipping castings; ***walking*** up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes/No

If "yes," describe this protective clothing and/or equipment:_____
_____

14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No

15. Will you be working under humid conditions: Yes/No

16. Describe the work you'll be doing while you're using your respirator(s):
_____
_____

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):
_____
_____

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of the first toxic substance:_____
Estimated maximum exposure level per shift:_____
Duration of exposure per shift:_____
Name of the second toxic substance:_____
Estimated maximum exposure level per shift:_____
Duration of exposure per shift:_____
Name of the third toxic substance:_____
Estimated maximum exposure level per shift:_____
Duration of exposure per shift:_____
The name of any other toxic substances that you'll be exposed to while using your respirator:
_____
_____
_____

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):
_____

Appendix D – 29 CFR 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

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

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

SECTION 6:
WORKPLACE VIOLENCE PREVENTION PROGRAM

JOSEPHINE COUNTY WORKPLACE VIOLENCE PREVENTION PROGRAM

The purpose of this Workplace Violence Prevention Program is to protect employees from threats and violence in the workplace.

Table of Contents

A. OBJECTIVE

The purpose of this Workplace Violence Prevention Program (WVPP) is to provide a work environment that minimizes workplace violence and security risks. Violence in the workplace poses a threat to the safety of employees and the public.

B. POLICY STATEMENT AND GENERAL POLICY REQUIREMENTS

Pursuant to Personnel Policy 23.2 – Workplace Violence, threats and acts of violence made by employees or members of the public against another person's life, health, well-being, family, or property will be dealt with in a zero tolerance manner. Acts or behaviors that are likely to result in workplace violence, including but not limited to, abusive language, hitting or shoving, threats of bodily harm, threats or violence arising out of sexual or racial harassment, brandishing of an object which may be used as a weapon, insubordination, the sending of threatening, harassing or abusive e-mail and faxes, using the workplace to violate protective orders, and stalking shall not be tolerated.

Employees are prohibited from possessing firearms or other weapons on County property or while on duty (except fire-arms certified/sworn personnel).

All employees are responsible for prompt and accurate reporting of all violent incidents. Discrimination against victims of workplace violence, or employees who report workplace violence, shall not be tolerated.

A copy of this policy is readily available to all employees from Human Resources. Management responsibilities include ensuring that all safety and health policies and procedures involving workplace security are clearly communicated and understood by all employees. Managers and supervisors are expected to enforce the rules fairly and uniformly.

C. DEFINITIONS

Workplace Violence: Any intentional act that inflicts, attempts to inflict, or threatens to inflict bodily harm upon another person or that inflicts, attempts to inflict, or threatens to inflict, damage to property, whether committed by an employee or non-employee and which occurs in a workplace, at a worksite location or while an employee is performing work.

Workplace: All County property and any other locations where employees are performing work.

Threat Assessment Committee: A committee comprised of representatives from various

County departments. The role of Threat Assessment Committee may be assigned to the County Safety Committee.

D. THREAT ASSESSMENT COMMITTEE

Appointment and Purpose **-** The Threat Assessment Committee is responsible for conducting the initial assessment of employees' vulnerability to workplace violence during the course and scope of duties, recommend preventive actions to be taken, and participate in the development the overall Workplace Violence Prevention Program. The Threat Assessment Committee shall assist in reviewing the program and facilitating the development of departmental plans for preparing, responding to, and minimizing workplace violence.

Membership **-** The Threat Assessment Committee shall be chaired by the Human Resources Director, or designee. Membership on the committee shall include, at a minimum, membership by/from each of the following: Facilities Department, Sheriff's Office, Safety Committee, and the Risk Management Coordinator or designee.

E. INITIAL HAZARD ASSESSMENT

The Threat Assessment Team's initial hazard assessments consisted of a records review, worksites security analysis and survey, discussions regarding work environments, and an employee survey.

F. WORKPLACE HAZARD CONTROL AND PREVENTION

Based on the Initial Hazard Assessment and in order to reduce the risk of workplace violence, the following measures are recommended:

1. Employees who have client contact shall have their work areas designed to ensure that they are protected from possible threats from clients by taking the following actions:
    a. Arranging desks and chairs to prevent entrapment of the employees;
    b. Removing items from the top of desks, such as scissors, staplers, etc. that can be used weapons;
    c. Installing easily activated panic buttons where appropriate;
    d. Setting up phones with intercom capabilities.
2. Installation of plexi-glass payment windows for employees who handle money or take payments from clients (the number of employees who take money should be limited whenever possible);
3. Installation and maintenance of adequate lighting systems outside the worksites and in the parking areas;
4. Institution of a 'buddy' system when employees leave the building at night or travel to

an unsafe environment;
5. Installation of locks or keypads on employee restroom doors. Employee restroom doors should be kept locked at all times;
6. Issuance and training on use of pepper spray when appropriate. (Must be approved by Human Resources);
7. Employees who work in the field should be issued a cell phone and should report to their supervisor periodically throughout the day;
8. Limiting access to worksites to one main entrance whenever possible;
9. Issuance of employee and visitor name badges to be worn at all times;
10. Providing ongoing training on incident reporting and follow up procedures;

G. ASSIGNMENT OF RESPONSIBILITY

Workplace violence prevention is the responsibility of all County employees. All supervisors and managers are responsible for implementing and maintaining the WVPP. Employee participation in designing, maintaining, and implementing the program is encouraged. All employees, including managers and supervisors, are responsible for using safe work practices, for following all directives, policies and procedures, and for assisting in maintaining a safe and secure work environment.

MANAGEMENT

Managers and supervisors have the responsibility of ensuring that behaviors and actions that are likely to result in workplace violence are dealt with promptly, firmly and fairly. Management responsibilities include:

- Ensuring that employees are trained on departmental and County workplace violence policies and procedures.
- Including workplace violence training in employee orientation and training sessions.
- Ensuring that regular on-site reviews of safety and security of buildings and offices is performed.
- Allocating funding for appropriate safety and security of employees.
- Ensuring that performance standards of appropriate staff reflect the importance of workplace safety and security.
- Ensuring that employees know specific procedures for dealing with workplace threats and emergencies, and how to contact police, fire, and other safety and security officials.
- Ensuring that employees are aware of emergency evacuation procedures and have assistance (as necessary) regarding emergency evacuation situations.
- Taking all threats seriously and responding to potential threats and escalating situations by utilizing proper resources, including contacting law enforcement, reporting the threat to Human Resources,
- Notifying employees of his/her rights under OFLA, FMLA and the Oregon Victims of Certain Crimes Act.

- Notifying employees of the Employee Assistance Program.

EMPLOYEES

Employee responsibilities include:

- Being familiar with departmental and County policies regarding workplace violence.
- Being responsible for securing work areas.
- Being responsible for monitoring and/or reporting strangers to supervisors.
- Being aware of any threats, physical or verbal, and/or any disruptive behavior of any individual and reporting incidents to supervisors.
- Being familiar with local procedures for dealing with workplace threats and emergencies.
- Refraining from confronting individuals who are a threat.
- Being familiar with the resources of the Employee Assistance Program.
- Taking all threats seriously and reporting all incidents immediately.

PROGRAM ADMINISTRATOR

Human Resources shall manage the Workplace Violence Prevention Program for Josephine County, and shall maintain all records pertaining to the program. Human Resources responsibilities include:

- Providing for supervisory training related to the Workplace Violence Prevention Program.
- Providing technical expertise and consultation to help supervisors determine what course of administrative action is most appropriate in specific situations.
- Determining whether sufficient evidence exists to justify taking disciplinary action once the investigation of any workplace violence related misconduct is complete.
- Providing information related to employee resources and rights.
- Helping supervisors determine proper reasonable accommodation.

FACILITIES DEPARTMENT

Facilities Department responsibilities include:

- Serving as the liaison with law enforcement as well as the expert on facility security matters.
- Reviewing or conducting departmental Facility Risk Assessments and instituting corrections or improvements when necessary.
- Serving as the facility security expert, keeping management advised of the risk of violence, the security gaps identified by threat assessments, and the means to close these gaps, including use of the latest technologies.

- Working with management and employees to ensure buildings, areas, and grounds are safe for employees and visitors. This includes keeping buildings and grounds well maintained, keeping management informed of the status of the facilities, and providing budget requests with justification for security upgrades.
- Training facility personnel in security measures and violence prevention techniques.

H. RESPONDING TO AND REPORTING WORKPLACE VIOLENCE

All employees shall promptly report workplace violence to their supervisor or department head using the Threat and Violence Report form. In emergency situations, employees shall immediately call 9-1-1. Employees shall promptly report to their supervisors situations that they believe could lead to workplace violence involving themselves or others, including but not limited to protective orders or other "no contact" orders.

i. **Employees' Responsibilities when Workplace Violence Occurs -** Employees shall respond promptly to incidents of workplace violence in accordance with departmental procedures and County policy. Workplace violence shall be reported immediately to the supervisor.

ii. **Management and Supervisory Responsibilities when Workplace Violence is Reported –** Managers and Supervisors shall respond promptly to workplace violence in accordance with departmental procedures and County policy. All acts of workplace violence shall be reported to Human Resources.

I. INVESTIGATION AND REVIEW OF WORKPLACE VIOLENCE REPORTS

Each incident will be evaluated by the Threat Assessment Committee or Safety Committee. The Threat Assessment Committee and Safety Committee shall maintain confidentiality of all sensitive information. The causes of the incident shall be reviewed and recommendations shall be made as to how to prevent similar incidents from occurring. All revisions of the Workplace Violence Prevention Program will be put into writing and made available to all employees.

J. FACILITY RISK ASSESSMENTS

i. Department heads or designees shall conduct and maintain a facility risk assessment to determine the risk of workplace violence or other security risks that exist as a result of the nature of the work and physical environment within each department.

ii. The Threat Assessment Committee shall conduct a general risk assessment determining the typical risks associated with the environments County employees work within. In addition, the Threat Assessment Committee shall conduct a risk assessment for all property that is not in the control of specific departments. Results of the risk assessment shall be maintained by Human Resources and updated when changes in operations require additional review. The Threat Assessment Committee shall develop guidelines for conducting risk assessments and shall consult with departments when requested (see ATTACHMENT 1).

iii. The facility risk assessment report may include recommendations to alter the physical environment to improve security from the risk of violent acts, while at the same time maintaining an appropriate level of public access to the department's employees and facilities.

iv. The Threat Assessment Committee may review and revise the report or return it to the department for further review.

v. The results of the risk assessment report shall be reviewed with the Facilities department for follow-up when appropriate.

vi. Copies of the risk assessment report shall be kept by the department and by Human Resources. The risk assessment report shall be updated any time the department's physical environment changes or the nature of the work performed by employees changes.

K. DEPARTMENTAL SECURITY PROCEDURES

i. The WVPP shall serve as the basic guidelines for employee and management response to workplace violence. Departments may institute additional procedures to meet department specific circumstances.

ii. Departmental procedures shall provide instruction and guidance on responding to threats specific to the nature of work performed by employees assigned to the department. These procedures shall also provide for on-going measures to minimize and respond to workplace violence that occurs away from the facility for those departments that have employees who regularly perform duties in the field.

iii. The Program Administrator or designee may assist departments in developing departmental procedures (see ATTACHMENT II). Copies of a department's

procedures shall be kept in the department and in Human Resources and shall be distributed to employees.

L. TRAINING

i. A significant factor in minimizing workplace violence is a workforce trained in the identification of situations that are likely to result in workplace violence and in the handling and reporting of such situations. Human Resources, in consultation with the Threat Assessment Committee, shall develop and provide training programs to inform employees of methods and procedures to identify, minimize and respond to such situations, whether perpetrated by a co-worker or by a third party.

ii. Human Resources, in consultation with the Threat Assessment Committee, shall develop training requirements (See ATTACHMENT III) and provide training to departments in conducting departmental facility risk assessments and developing departmental procedures.

iii. Supervisors shall provide training to employees, and shall maintain documentation of the training. Employees shall receive training as follows:

1. At their initial assignment;
2. Annually; and
3. When changes in work processes necessitate additional training.

M. RECORDKEEPING

Human Resources shall maintain records of all workplace violence incidents. Any injury requiring treatment beyond first aid, loss of work time, modified duty shall be recorded pursuant to OSHA requirements. Doctors' reports and supervisors' reports shall be kept of each recorded incident, if applicable.

Incidents of abuse, verbal attack, or aggressive behavior which may be threatening to the employee, but not resulting in injury, shall be recorded. Such records shall be evaluated on a regular basis by the Threat Assessment Team.

Minutes of the Threat Assessment Team meetings shall be kept for three (3) years.

N. PROGRAM REVIEW

The Josephine County Safety Committee shall review and update the WVPP program annually.

ATTACHMENT I - FACILITY RISK ASSESSMENT GUIDELINES

I. IDENTIFY POSSIBLE TYPES OF VIOLENCE

A. Violence by Strangers
B. Violence by Clients/Customers
C. Violence by Co-Workers
D. Violence by Personal Relations

II. PERFORM BUSINESS ASSESSMENT

A. Identify Potential Risks and Vulnerabilities

1. What type of business does the department handle?
2. How much public contact is there?
3. Are there many employee terminations?
4. Is there a high stress level associated with the type of work performed in the department?
5. Does the department handle cash transactions?
6. Consider the location of the building/department. Is it a high crime area? Is it in a remote location or is it around other departments? Do employees work in the field? Do employees work alone or in small numbers?
7. Do employees work with unstable or volatile clients?
8. Are employees transporting people or goods?
9. Are employees securing or protecting valuable goods?

III. ASSESS PHYSICAL AND ENVIRONMENTAL SECURITY

A. Outside of Facility

1. Lighting
2. Shrubs
3. Hiding places
4. Obstructions (i.e. dumpsters) etc.

B. **Access Control**

1. Door and window locks
2. Number of public entrances
3. After hours lock down plan
4. Key control

C. **Inside of Facility**

1. Visitor and employee identification methods (I.D. badges, sign in procedures etc.)
2. Public areas and personal work spaces
3. Electronic security options (closed circuit TV, Card access, electromagnetic combination locks, door alarms and duress devices)

IV. IDENTIFY APPROPRIATE PREVENTATIVE ACTIONS TO BE TAKEN WITHIN AVAILABLE BUDGET

Balance customer service (citizen access) with employee safety.

V. IMPLEMENT FACILITY SECURITY IMPROVEMENT

Develop timeline for completion.

ATTACHMENT II - DEPARTMENT SECURITY PROCEDURE GUIDELINES
TOPICS TO ADDRESS IN DEPARTMENT SECURITY PROCEDURE

I. STAFF RISKS AND VULNERABILITIES

A. Evaluate facility risk assessment as it applies to department staff and visitors
B. Assess staff and visitor interactions
C. Assess field operations

II. SAFETY STRATEGIES

A. Cash control, secondary door usage, duress devices, code names etc.

III. REPORTING ACTUAL OR POTENTIALWORKPLACE VIOLENCE

A. Department reports, police reports, report to Workplace Violence Coordinator

IV. RESPONDING TO ACTUAL OR POTENTIAL WORKPLACE VIOLENCE

B. Develop a response plan

ATTACHMENT III – TOPICS COVERED IN WORKPLACE VIOLENCE TRAINING

SUPERVISORS

A. How to conduct and write a Facility Risk Assessment
B. How to develop a Department Security Procedure

ALL EMPLOYEES

A. Definition of workplace violence
B. Full description of the Workplace Violence Prevention Program
C. Warning signs of potentially violent individuals
D. Ways of minimizing or diffusing potentially violent situations
E. Instructions on how to report all incidents including threats and verbal abuse
F. Methods of recognizing and responding to workplace security hazards
G. Use of security equipment and procedures
H. Procedures for responding in emergency or hostage situation
I. Post-incident procedures, including medical follow-up and the availability of counseling and referral
J. Rights under OFLA, FMLA and Oregon Victims of Certain Crimes Act
K. Role of Employee Assistance program
L. Minimizing domestic violence in the workplace
M. Additional specialized training is provided to:
    1. Employees who work in the field
    2. Employees who handle money with clients
    3. Employees who work outside normal operating hours

    Specialized training includes:
    1. Personal safety
    2. Importance of the buddy system
    3. Recognizing unsafe situations and how to handle them during off hours

SECTION 7:
SPECIALIZED SAFETY FUNCTIONS

GENERAL SAFETY REQUIREMENTS

The purpose of this policy manual is to provide basic training to ensure that Josephine County employees are properly protected from safety hazards during their work activities, and to comply with the Occupational Safety and Health Administration's (OSHA) standards.

Table of Contents

Section 7 – SPECIALIZED SAFETY FUNCTIONS

7.1 LOCK OUT / TAG OUT – ENERGY CONTROL PROGRAM

A. General Policy. Josephine County is committed to providing maximum protection to employees when isolation of machines or equipment from energy sources is required, and to prevent unexpected energization, start-up or release of stored energy that could cause injury. Hazardous energy control will be accomplished by utilization of this lockout/tagout procedure. This policy is intended to meet or exceed minimum requirements defined by Oregon Occupational Safety and Health Division (OR-OSHA) OAR 437, Division 2, and Occupational Safety and Health Administration's (OSHA) 29 CFR 1910.147.

B. Definitions.

"Affected employee" is an employee whose job requires him/her to operate or use equipment on which servicing and maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

"Authorized Employee" is an employee who has received special training to recognize and understand the particular hazards involved with the tasks to be performed and the type and magnitude of energy to be controlled are authorized to implement the LOCKOUT/TAGOUT procedure.

"Energy sources" include, but aren't limited to, electrical, pneumatic, hydraulic, stored energy such as gravity or springs; thermal; fluid flow - pressure, all geothermal piping, and gasoline/diesel driven machines.

"Capable of being locked out" means an energy isolating device will be considered to be capable of being locked out either if it is designed with a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices will also be considered to be capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

"Energized" means connected to an energy source or containing residual or stored energy.

"Energy isolating device" means a mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors and, in addition, no pole can be operated independently; a slide gate; a slip blind; a line valve; a block; and any similar device used to block or isolate energy. Push button, selector switches and other control circuit type devices are not energy isolating devices.

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

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

"Lockout device" is a device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

"Servicing and/or maintenance" Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes,

where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

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

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

C. Policy Guidelines/Procedures. This policy applies to employees involved in the maintenance, repair, and servicing of equipment that requires the by-passing of guards or other safety devices. This policy also applies to employees required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle. This policy does not apply work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or start-up of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance.

D. Responsibilities.

1. Each operator and maintenance person will know all the energy sources within equipment and machinery. All sources of energy are covered under the procedures of this program, including electrical, mechanical, hydraulic, pneumatic, chemical and thermal energy.
2. Safety Officer is responsible to see that the overall policy is developed and works with the safety committee and supervisors to ensure implementation. The Safety Officer is also responsible for ensuring that periodic audits and review of the policy implementation are conducted.
3. Supervisors are responsible for ensuring that all affected employees are trained. The authorized employees are to receive additional specialized training as outlined in this program. The training must be documented by the supervisor.
4. Authorized Employees are responsible for following this policy. Employees are to use their own lock and key (or individual lock at the lockout center). No other person shall be allowed access to or removal of an authorized employee's key or lock.
5. Affected Employees are responsible for following all safety procedures in shut down and restarting equipment and shall not attempt to operate any equipment being locked-out/tagged-out.

E. Equipment Identification. Each piece of equipment or type of equipment with more than one source of energy shall be identified. Departments shall use Appendix B, or an equivalent form, for listing of machinery and equipment. The Lockout procedures section of this program outlines the procedures by "like" pieces of equipment. The electrical disconnects shall be labeled and be in near vicinity of the machinery.

F. Basic Lockout/Tagout Usage. All equipment energy sources capable of being locked out during servicing, repair, or maintenance shall be locked-out to prevent accidental or inadvertent operations which could cause injury. Equipment energy sources not capable of being locked out shall be isolated and then tagged-out to inform all others of the safety procedure in use and warning that no operation of the

equipment is permitted. Example: Equipment not capable of being locked out include 110 circuit breakers and older power panel installations. Tags will be used at these energy isolating devices. Design of systems capable of being locked-out shall take place if major replacement, repair, renovation or modifications are made on the electrical systems or equipment. Typical conditions requiring lockout or tagout devices include:

1. Repairs, servicing and/or changes being performed on machines or equipment when safeguards are by-passed, or work on electrical circuits in which the employee could come into contact with hazardous energy (mechanical, pneumatic, hydraulic, or stored energy).
2. Cleaning or oiling moving parts of machinery or equipment where accidental contact with movable parts is possible.
3. Removing a plug or clearing a blocked mechanisms or pump which exposes the employee to potential release of hazardous energy.
4. Working on lines which contain hazardous substances, or high-pressure lines.
5. To prevent machinery or equipment use by unauthorized persons and/or to prevent use in off hours.

G. General Requirements. No employee shall attempt to operate any switch, valve, or other energy isolating device bearing a lockout or tagout device. Lock securing switch levers shall be used to prevent activation of electrical circuits or equipment on which work is being done. If the equipment is not capable of being locked, a tagout shall be securely fastened to the disconnect lever or at the immediate area to warn of the on-going procedure. Other basic controls that may be needed due to the type of energy present include:

1. Hydraulic Energy: Close valve and bleed off line or block the device.
2. Air Pressure: Close valve and bleed off pressure from line prior to working on the device. Note: Valves may lose pressure when open, which can cause hydraulic or other liquid flows which could be hazardous to employees. Valves must be isolated and controlled.
3. Springs: Attach a hold down device or leave in open position where no stored energy is present.
4. Fluid Flow - Water Pressure: Insure proper gate devices are used to hold the back pressure, or drain lines so no fluid pressures are present.

H. Additional Shutdown and Lockout Procedures. Additional shutdown and lockout procedures are needed for servicing heavy equipment and vehicles. The following procedure shall be followed:

a. Mechanics shall follow a normal shut down of the equipment.
b. The heavy equipment shall have a tagout placed on the steering wheel which indicates that the mechanic could be injured if the equipment is started.
c. All other various sources of energy such as hydraulic and gravity that could dissipate during servicing shall be identified.
d. Additional control steps shall be taken such as securing any type of hopper or hood that could fall, i.e. a dump bed or device shall have the safety bars in place prior to any work around or under a lifted bed to prevent gravitational pull due to the potential loss of hydraulic pressure; backhoes or other hydraulic operated boom devices shall have the safety bar or blocking devices in place if an employee is working under the device. If the shovel or boom devices are on the ground in an energy neutral position additional controls are not necessary.

I. Lockout/Tagout Hardware (Equipment).

a. Locks, tags and hasps shall be used as energy isolating devices. Valves with handle and lock attachment hole shall be locked out. Locks, tags and hasps shall be immediately replaced when damaged in any way.

b. Valves not capable of being locked-out shall have tags placed on them with a slip lock attachment device capable of withstanding 50 pounds of pressure.

c. All devices shall be:

- Durable - Capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected. Tagout devices shall be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible. Tags shall not deteriorate when used in corrosive environments such as areas where acid and alkali chemicals are handled and stored.

- Standardized - Lockout and tagout devices shall be standardized within the facility in at least one of the following criteria: Color; shape; or size; and additionally, in the case of tagout devices, print and format shall be standardized.

- Substantial - Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools. Tagout devices, including their means of attachment, shall be substantial enough to prevent inadvertent or accidental removal. Tagout device attachment means shall be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds and having the general design and basic characteristics of being at least equivalent to a one-piece, all environment-tolerant nylon cable tie.

- Identifiable - Lockout devices and tagout devices shall indicate the identity of the employee applying the device(s). Tagout devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: Do Not Start. Do Not Open. Do Not Close. Do Not Energize. Do Not Operate.

d. Locks, tags, hasps, chains, and other restraining devices shall be kept by each authorized employee. Extra locks and equipment shall be kept at the supervisor's office. The Safety Officer, Supervisor, or designee shall review the location of the lockout equipment and how to obtain additional lockout equipment as necessary.

e. Out of Service Tag: Employees may need to use an out of service tag when a piece of equipment is not functioning properly and it needs to be removed from service for the protection of the equipment.

The OUT-OF-SERVICE tag is NOT TO BE USED FOR LOCKOUT/TAGOUT HAZARDOUS ENERGY CONTROL. REMEMBER once work begins on the equipment that places the employee in danger of hazardous energy release the authorized employee(s) must place their personal lock and tag on the energy isolating device.

J. Sequence for Lockout or Tagout Procedure. The lockout/tagout procedure must be conducted in the following manner. Deviations are prohibited.

1. The authorized employee shall notify the affected employees that the lockout/tagout system is to be utilized. In many cases other employee's safety will not be affected by maintenance and repair activities, thus there will not be any affected employees.
2. If a particular piece of equipment is operating, it must be shut down by the normal stopping procedure such as depressing the stop button or opening the switch. Some equipment has detailed procedures that shall be followed by trained employees.
3. The authorized employee shall lock out and tag out the energy isolating device of the equipment or machines with their individual assigned lock, or by using individually keyed locks.
4. Only the authorized employee shall operate the switch, valve or other energy isolating device to make sure the equipment is isolated from its energy source. Stored energy, such as the energy found in springs, rotating fly wheels, hydraulic system or compressed air or gas lines must be dissipated or restrained by either repositioning, blocking or bleeding down.
5. After ensuring that no personnel are exposed, the authorized employee shall complete another check to make sure that all of the energy sources have been disconnected. The type of verification testing will depend on the type of equipment or electrical installation. Equipment may be tested by trying to operate it by turning on the controls. CAUTION: Return operating controls to neutral or off position after test.
6. Most of the electrical disconnects operating various pieces of equipment can be locked out; however, if other equipment energy requiring control cannot be locked out then a tagout device shall be used. The tagout device must be attached on or as close as possible to the energy isolating device. The tag must clearly indicate that operation or start-up of the energy isolating device from the safe or off position is prohibited.

K. **Equipment Testing Under Lockout/Tagout.** The following procedure must be followed when equipment is tested or positioned while doing maintenance or repair:

1. The machine or equipment shall be cleared of all non-essential items, such as tools and materials.
2. All of the employees shall be clear of the machine or equipment and notified that the machine will be energized.
3. The authorized employee shall remove the lock or tag.
4. The authorized employee shall energize and proceed with the testing or positioning.
5. The authorized employee shall de-energize all systems and complete the shut-down procedures before continuing any maintenance or service.

L. Restoring Equipment to Normal Operational Status. When the authorized employee has completed their work, the lockout device or tag can be removed. The following procedure will be followed during that process:

1. The authorized employee shall inspect the work area to make sure all tools are removed from the machine and ensure that the machine or equipment components are operationally intact.
2. The authorized employee shall check the work area to ensure that all employees are safely positioned or removed.
3. The authorized employee shall notify all affected employees that the equipment is to be reenergized.

4. The authorized employee shall remove lockout or tagout device.

Note: The authorized employee is the only person who shall remove the lockout or tagout device. The only exception to this is under the conditions cited under "Removal by Someone Other than the Person that Applied the Lock".

M. Removal by Someone Other than the Person that Applied the Lock. Removal of a safety lockout or tagout device by a person other than the authorized employee who applied it shall only be peformed under the direction of the Supervisor. The following procedure shall be followed:

1. The Supervisor shall verify that the authorized employee who applied the device is not at the facility by checking with co-workers and inspecting the facility.
2. The Supervisor shall contact the authorized employee if possible to inform the employee that the lockout and/or tagout device needs to be removed. If the employee cannot return to remove the lock, the supervisor shall inform the employee that the lock is being removed. The Supervisor or designee shall then use a master key to remove the lockout device. NOTE: Master keys shall be kept in a locked, inaccessible location known only by the Supervisor or designee.
3. The Supervisor shall follow all protocols for removal of a lockout or tagout device as outlined in this policy.
4. If the authorized employee was unable to be reached prior to the removal, the Supervisor shall ensure that the authorized employee is notified upon return to work.

N. Procedure Involving More than One Employee. If more than one employee is required to lockout or tagout equipment, each employee 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.

O. 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. The following procedure shall be followed:

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 shall verify that 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 shall verify that all energy sources are disconnected. Push button or other normal operating controls shall be tested to ensure the equipment will not operate. Operating control(s) shall be returned to the "off" position after the test.

P. Contractors.

a. Activities performed by contractors hired to work on County machines and equipment may create hazards which are not normally present to employees. Contractors shall be required to follow County policy and departmental procedures.

b. A mutually agreed upon procedure may be established concerning the lockout/tagout devices that will be used to protect employees and the contract workers.

Q. Periodic Inspection. (See –Lock Out Tag Out Periodic Audit Form)

a. The Supervisor or Safety Committee shall conduct periodic inspections of the Lockout/Tagout Program procedures at least annually to ensure that the requirements of Oregon OSHA rules are being followed. The periodic inspection shall be performed by an authorized employee not involved in the energy control procedure being inspected.

b. Periodic inspection shall assess the following:
   1. Whether the steps in the energy control procedure are being followed.
   2. Whether the employees involved know their responsibilities under the procedure, and
   3. Whether the procedure is adequate to provide necessary protection and if any changes are necessary.

c. The inspector shall observe and talk with the employees in order to make these determinations. Immediate action shall be taken to correct any inadequacies observed.

d. Written records of the inspection and findings shall retained by the department, with a copy provided to the Safety Officer.

R. Employee Training.

a. Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.

b. Each affected employee shall be instructed in the purpose and use of the energy control procedure.

c. All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked out or tagged out.

d. When tagout systems are used, employees shall also be trained in the following limitations of tags: Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock. When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated. Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective. Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace. Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program. Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

e. Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures.

f. Additional retraining shall also be conducted whenever a periodic inspection reveals, or whenever the employer has reason to believe, that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

g. The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

h. The employer shall certify that employee training has been accomplished and is being kept

up to date. The certification shall contain each employee's name and dates of training.

APPENDIX A
LOCKOUT/TAGOUT DEVICES

Energy isolating device. A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors and, in addition, no pole can be operated independently; a slide gate; a slip blind; a line valve; a block; and any similar device used to block or isolate energy. The term does not include a push button, selector switch, and other control circuit type devices.

Lockout device. A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

Out-of-service device. This is a tag that is placed on equipment controls or at the main disconnect to notify other personnel that the equipment or process is taken out of service because it is not functioning properly or equipment damage may occur or personnel does not want the equipment on-line for process reasons. It is never to be used as an energy control tagout. The tag states:

CAUTION

(Explanation)
Signed by:
Date:

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

DANGER
DO NOT
OPERATE

SIGNED _____ DATE_____

BACKSIDE OF THE TAG STATES: “DO NOT REMOVE THIS TAG”

APPENDIX B: TYPE OF EQUIPMENT REQUIRING LOCKOUT/TAGOUT FOR CONTROL OF HAZARDOUS ENERGY

TO BE COMPLETED BY DEPARTMENT HEAD OR SUPERVISOR

The following is an inventory of department specific equipment included in this lockout program with the specific lockout procedures.

EQUIPMENT / CONTROLS BASIC HAZARD

a. All Electrical Equipment which is hard wired with an electrical disconnect. (and disconnect is labeled)

1. Name and location of equipment
   - Shut down procedures
     1.
     2.
     3.
   - Start up procedures
     1.
     2.
     3.

b. All Hydraulic Equipment

2. Name and location of equipment
   - Shut down procedures
     1.
     2.
     3.
   - Start up procedures
     1.
     2.
     3.

c. All Pneumatic Equipment

3. Name and location of equipment
   - Shut down procedures
     1.
     2.
     3.
   - Start up procedures
     1.
     2.
     3.

d. All chemical lines

e. Heat producing equipment

APPENDIX C: LOCKOUT TAGOUT PERIODIC AUDIT FORM

This form is to be completed by Supervisor 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:

7.2 ASBESTOS MAINTENANCE

A. General Policy. The purpose of this policy is to ensure compliance with OR-OSHA Asbestos Standard. Josephine County has asbestos containing building materials which require that a basic asbestos program be maintained. The elements of a program include:

1. Inventory of asbestos-containing materials in County facilities.
2. Procedures for periodic examination of asbestos-containing materials to detect deterioration and need for repair or proper removal.
3. Written procedures for handling asbestos materials during maintenance and renovation activities.
4. Procedures for proper asbestos waste disposal.
5. Procedures for dealing with asbestos-related emergencies.
6. General asbestos awareness training shall be provided to all maintenance staff who may come into contact with asbestos or who are responsible for ensuring that the outside asbestos abatement contractors follow, OSHA, and DEQ procedures.
   Note: This program does not meet DEQ asbestos worker training certification requirements nor is it intended to meet all possible OR-OSHA Asbestos Requirements.

B. Applicable Legal Standards. Federal: 29 CFR 1926.1001

C. Procedures for Conducting Asbestos Building Inventories.

TESTING:

1. Exposed building materials that are likely to contain asbestos shall be tested. The facilities manager shall see that appropriate testing is done. The testing results shall be retained for 30 years. Sprayed on ceiling material containing asbestos and pipe insulation shall be labeled.
2. Additional sampling shall be done prior to removal, demolition, or renovation on all potential asbestos containing materials.
3. While many County building materials have been tested, not all material may have been, thus any of the following suspect building materials shall be tested prior to removal:
   a. Pipe Insulation Materials.
   b. Floor Tiles and Mastic (tiles, mastic for molding, mastic for tiles or carpeting).
   c. Sprayed on Asbestos containing ceiling materials.
   d. Asbestos Containing Pipe.
4. Asbestos material inventory results are maintained by the Facilities department and are available for review. The inventories are done individually for each building.

D. Inspection Procedures. Outside asbestos abatement and inspection contractors, with asbestos certified staff, have taken samples and either repaired or properly removed asbestos containing materials.

1. The maintenance staff is expected to note the condition of asbestos insulation and ceiling materials as part of their routine building maintenance. If upon visual inspection material is cracking, fraying, broken, or damaged they shall report this to the facilities manager.
2. Custodial staff shall immediately report broken insulated pipes and any broken or friable materials labeled as asbestos to their supervisor.
3. If necessary, an asbestos abatement/inspection contractor's certified supervisor shall determine the scale of the work. The work shall be done by outside asbestos contractor(s). Supervisors shall

discuss interim measures necessary to protect all personnel that may be exposed to the material with management.

E. Reinspection. Reinspection of all visible asbestos materials shall be done by certified asbestos contractors based on frequency noted in the initial or previous inspection report.

F. Notice to All Building Occupants. Any damage to pipe insulation or other building surfaces and materials is to be reported to management for review, in relationship to potential asbestos content. All asbestos insulation is labeled. Occupants in buildings with sprayed on asbestos containing ceiling material shall be notified by the Facilities department. The building inventories shall be available to all occupants.

G. Handling Asbestos Materials during Maintenance and Renovation Activities. Asbestos containing materials improperly handled can cause employee exposures to asbestos fibers and lead to building and surface contamination. Asbestos containing materials shall only be handled or removed by certified asbestos contractors with proper equipment, training, and controls.

H. Handling Control Measures Used To Preclude Exposure & Appropriate Work Practices.

1. Only contractors who are certified by the State of Oregon for asbestos removal shall be hired. Projects may include either small scale or large-scale removal. Examples of Class II to IV projects include:
    a. Pipe repair.
    b. Valve replacement.
    c. Installing electrical conduits.
    d. Installing or removing drywall, roofing and other general building maintenance.
    e. Renovation which is small scale.
    f. Removal of asbestos containing insulation on pipes using a glove bag.
    g. Removal of small quantities of asbestos containing insulation on beams or above ceilings.
2. Safe Methods for Removal:
    a. The methods of removal need to involve one or a combination of the following practices and engineering controls which are capable of reducing employee exposure to below the action level of 0.1 fiber/cubic centimeter.
        I. Wet method (asbestos containing pipes)
        II. Glove bag for small isolated repairs
3. Maintenance staff <u>shall not</u> use the following procedures when working with or around asbestos containing materials:
    a. Drill holes in asbestos material.
    b. Sand asbestos containing floor tiles.
    c. Dust surfaces that may contain asbestos with dry brushes or booms.
    d. Use regular vacuum cleaners to collect asbestos dust or debris.
    e. Remove material without proper respiratory protection and the proper type of clothing.
    f. Damage asbestos containing materials when moving or conducting general maintenance.
    g. Install curtains, drapes, or other dividers into asbestos containing materials.

I. Certified and Trained Asbestos Personnel. Staff or contractors selected to remove or repair asbestos containing materials shall be certified by the State of Oregon for asbestos removal and shall follow the OR-OSHA rules and Department of Environmental Quality Standards.

J. Asbestos Waste Disposal. The OR-OSHA, DEQ, and the applicable asbestos land fill requirements shall be followed. Building materials containing asbestos can be legally disposed of using a disposal

company to remove the waste bags and transport them to approved Oregon landfills. All asbestos abatement contractors shall follow our rules as well as OR-OSHA and DEQ's.

K. Potential Asbestos Emergencies.

1. **Type of Emergencies:**
    a. Damage to asbestos containing building materials due to willful activities of the occupants or the public; or maintenance activities resulting in unplanned contact with asbestos materials.
2. **Emergency Procedures:**
    a. Employees discovering an emergency shall notify their supervisor who shall notify the facilities manager.
    b. Facilities staff shall seal off area or contain the problem. Proper danger/warning signs and area security shall be implemented.
    c. All clean-up, repair or removal shall be done by an asbestos abatement contractor who is licensed and can be used on an emergency basis.
    d. All OR-OSHA and DEQ regulations shall be followed and only asbestos certified workers with approved equipment shall be allowed to contain and clean-up the emergency.

L. General Asbestos Awareness Training. General asbestos training shall include the following information:

1. Asbestos is a generic term applied to naturally occurring fibrous hydrated mineral silicates. These minerals are regarded as hydrated because they are formed by their affinity for water.
   Asbestos has been used widely in building materials and in products that needed to be fireproof. The EPA estimated in 1985 there were 31,000 schools and 733,000 commercial buildings that had asbestos products in them. Asbestos was used because the mineral is:
    a. Fire Resistant.
    b. May be woven or used to provide strength and consistency to a product.
    c. Resistant to chemicals.
2. In the United States two primary forms of asbestos were widely used:
    a. Amosite
        I. Resistant to heat and chemicals, and found extensively in pipe insulation, friction materials, roofing and flooring materials.
        II. Characteristically a rigid, brittle fiber which cannot be woven.
        III. Now banned in the U.S. due to the higher cancer health risk associated with amosite.
    b. Chrysotile
        I. A long, wavy, hair-like fiber that is easily woven. Chrysotile is used in asbestos clothing products and extensively in many forms of insulation.
        II. The shorter mill-end material is now being substituted for amosite applications.
3. Primary Health Effects
    a. The primary effects from exposure to asbestos are to the respiratory system. Asbestos exposure is also linked to effects on the gastrointestinal system.
4. Particle Size
    a. Asbestos is made up of fibers which are bundles of smaller and smaller fibers called fibrils. When asbestos material is disturbed countless numbers of very small fibrils, microns in size

(millionths of a meter), are released into the air. Fibers 75 microns in size will get trapped in the nose and, Fibers 1-5 microns in size are trapped in the bronchioles and lungs.

b. The actual particle size of the asbestos that is released is important because:
    I. Once a small particle becomes airborne it can remain suspended almost indefinitely, even in a very small environment.
    II. Particles of this size are carried into the deepest part of the lungs, past the protective mechanisms in the nose, sinuses, and larynx.
    III. The asbestos fibers are crystalline minerals and are very persistent, which means that the fibers do not degrade in biological tissue. Once breathed deep into the lungs, the fibers may remain there indefinitely.
    IV. The mechanism of damage to tissue appears to be associated with the mechanical irritation caused by the sharp ends of the fibers.

5. Diseases Associated with Asbestos Exposure
    a. **Asbestosis of the lung** - A fibrotic degeneration of the lung usually associated with chronic exposure to asbestos. The disease restricts the ability of the lungs to expand and causes scarring of the lung tissue. This causes progressive shortness of breath, respiratory failure, and cardiac decompensation, which is the heart's inability to maintain circulation because of reduced oxygen levels. The disease is progressive even in the absence of continued exposure to asbestos.
    b. **Lung Cancer** - Cancers of the lung are seen at higher incidence rates in individuals who have been exposed to asbestos. The incidence rate is 90 times greater for workers who smoked tobacco and were exposed to asbestos than workers only exposed to asbestos.
    c. **Mesothelioma of the lung pleura** - A rare form of cancer which is almost entirely related to asbestos exposure. The disease is not curable and individuals with mesothelioma rarely live more than one year after diagnosis. Mesothelioma is not associated with smoking and may occur following exposure to low levels of asbestos and a level of dust exposure defined as a "safe" level for lung cancer risks.
    d. **Gastrointestinal Cancers** - Asbestos workers exhibit higher rates of cancers of the stomach, intestines, bowel, and rectum.
    e. **Pleural Plaques** - Plaques are seen on the X-Rays of asbestos workers. These are dense strands of collagen (connective tissue proteins) showing as opaque patches on the X-Rays. These plaques can be seen with no disease and do not reflect severity of disease tissue but indicate asbestos exposure.

    There are those who contend that there is no safe limit for exposure to asbestos. The current epidemiological studies, however, do suggest a typical dose-response relationship for most of the asbestos related diseases. Thus, the higher the exposure, the higher the incidence of disease is seen. Studies have also indicated a higher incidence of disease associated with amosite-type asbestos.

6. Relationship of Smoking and Asbestos Exposure

    The 1985 Surgeon General's report on "The Health Consequences of Smoking - Cancer and the Chronic Lung Disease in the Workplace", reports on the research findings about the risk of developing lung cancer and lung diseases among asbestos exposed workers and asbestos exposed workers who smoke. The following conclusions were drawn by the report:

Asbestos exposure can increase the risk of developing lung cancer in both cigarette smokers and nonsmokers. The risk in cigarette-smoking asbestos workers is greater than the sum of the risks of the independent exposures.

a. The risk of developing lung cancer in asbestos workers increases with increasing number of cigarettes smoked per day and increasing cumulative asbestos exposure.
b. The risk of developing lung cancer declines in asbestos workers who stop smoking; however, the risk of developing lung cancer appears to remain significantly elevated even 25 years after cessation of exposure.
c. Cigarette smoking and asbestos exposure appear to have an independent and additive effect on lung function decline. Nonsmoking asbestos workers have decreased total lung capacities (restrictive disease). Cigarette-smoking asbestos workers develop both restrictive lung disease and chronic obstructive lung disease.
d. Asbestos exposure is the predominant cause of interstitial fibrosis (asbestosis) in populations with substantial asbestos exposure.
e. The promotion of smoking cessation should be an intrinsic part of efforts to control asbestos-related death and disability. For workers for whom asbestos exposure has ceased, the single most important intervention that would alter their future disease risk is the cessation of cigarette smoking.

7. Latency of Disease to Exposure
   Asbestos related diseases typically develop 30-40 years subsequent to the beginning of the exposure. Workers who have been heavily exposed have shown symptoms within 5-10 years, but this is not typical.
8. Personal Protective Equipment
   Only asbestos abatement contractors who meet the PPE and respiratory protection rules shall be used. Contact the Supervisor for more details on the program requirements.

M. Medical Surveillance. Employees are not required to be part of an asbestos medical surveillance program. Contractors shall ensure that their employees are part of a comprehensive medical program.

N. Recordkeeping.

1. **Exposure Measurements (records need to include):**
   a. Date of measurements.
   b. The operation tested.
   c. Sampling and analytical method used.
   d. Number, duration, and results of the samples.
   e. Type of protective devices worn.
   f. Name, social security number, and exposure of the employees whose exposures are represented.
   g. The records need to be maintained for 30 years.
   h. Where the records are stored.
2. **Training Records -** Training records shall be retained for one year beyond and employee's last date of employment.
   a. Availability - Records are to be made available to OR-OSHA, affected employee, former employee, and designated representatives.

7.3 LEAD COMPLIANCE PROGRAM

A. General Policy. Operations that may result in lead exposures to employees shall be contracted out to qualified service providers. Contractors shall comply with the OR-OSHA Construction Lead Regulations and 29 CFR 1926.62 and OAR 437 - Division 3 "Construction".

B. Applicable Legal Standard. Federal: 29 CFR 1926.62 and 29 CFR 1910.1025, State: OAR 437 - Division 3 "Construction Safety Rules".

C. Responsibilities. It is the direct responsibility of the facilities manager to ensure that the lead compliance program elements are implemented and that employees follow safe work practices. The facilities manager is also responsible to ensure that a lead exposure assessment is completed and specific program elements are carried out, including:

a. Identifying all potential lead based paints.
b. Providing training to employees responsible for maintenance of facilities about the hazards of lead and the safe work practices to be used in lowering the potential lead exposures.
c. Conducting training.
d. Establishing general housekeeping requirements.

D. Exposure. If lead exposures exceeding the Action Level of30 micrograms per cubic meter of air (30 µg/m3) averaged over an 8-hour period are found, employees shall be notified of protective actions required. Written compliance plans for each project/activity shall be developed if lead overexposures are found.

E. Housekeeping. Contractors shall be required to keep all surfaces free from accumulations of lead dust. Vacuuming is the preferred method of meeting this requirement, and the use of compressed air to clean floors and other surfaces is prohibited. Dry or wet sweeping, shoveling, or brushing may not be used except where vacuuming or other equally effective methods have been tried and do not work. Vacuums must be used and emptied in a manner which minimizes the reentry of lead into the workplace.

F. **Employee Training.** Training shall be provided to all employees exposed to lead above the action level. The facilities manager or a training consultant shall provide employee training. A roster of employees trained shall be maintained by the facilities department. The training program shall inform employees of the following:

1. The specific hazards associated with their work environment;
2. Protective measures which can be taken;
3. The danger of lead to their bodies (including their reproductive systems); and
4. Their rights under the OSHA standard.

A copy of the OSHA standard and its appendices shall be made readily available and must be distributed to all employees any materials provided to the employer by the Occupational Safety and Health Administration.

F. Site Compliance. If initial air samples are found to exceed 30 ug/m3 then a full lead plan will be developed for that site as per 29 CFR 1910.1025. The full plan will outline specific site requirements of further sampling, task protocol, housekeeping protocol.

7.4 FALL PROTECTION COMPLIANCE PLAN

A. General Procedure. Work shall be performed in a safe manner and appropriate fall protection shall be provided and worn. Josephine County shall comply with the most restrictive system which is found in

the Construction Code under Fall Protection (OAR Chapter 437 Division 3, 29 CFR 1926 Subpart M). Basic maintenance work, as well as construction related work, requires fall protection systems at 6 feet. This policy applies to all fall protection needs. Fall protection needs shall be evaluated by the worksite manager, supervisor, foreman or lead person. When fall protection is needed based on the construction site needs or general maintenance or repair work task, it is the worksite manager, supervisor, foreman or lead person responsibility to implement the system and train all employees in the system.

B. Definitions.

Anchorage: A secure point of attachment for lifelines, lanyards or deceleration devices.

Arresting Force: The force generated by arresting the test weight that is transmitted through the fall arresting system components to the anchorage or load cell.

Body Belt (Safety Belt): A strap that both secures around the waist and attaches to a lanyard, lifeline or deceleration device.

Body Harness: Straps that are secured about an employee in a manner that distributes the arresting forces over at least the thighs, shoulders and pelvis, with provisions for attaching a lanyard, lifeline or deceleration device.

Buckle: Any device for holding the body belt, chest harness and body harness closed around the employee's body.

Chest Harness: Straps secured only around the chest with shoulder straps to assure proper chest strap positioning.

Classification According to Use: Safety belts, harnesses and lanyards are classified according to their intended use as:

Type I: A personal fall arrest/restraint system that is used to arrest a wearer's fall from a work level. It consists of an anchorage(s), hardware, body belt or body harness, a lanyard or deceleration device and may include a lifeline, or a device that subsequently allows the employee to be lowered to the ground or lower work level.

Type II: A personal fall restraint system that is used to keep a wearer at the work level or limit any free fall to a maximum of two feet from the work level. This system consists of a body belt, a chest or body harness and anchor, as applicable.

Competent Person: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate such hazards.

Construction Activities: Work for construction, alteration or repair, including painting and decorating.

Drop Line: A vertical line from a fixed anchorage, independent of the work surface, to which the lanyard is affixed.

Fixed Anchorage: A secure point of attachment, not part of the work surface, for drop lines, lifelines or lanyards. The fixed anchorage shall be capable of supporting a minimum deadweight of 5,400 pounds per person.

Hardware: Buckles, D-rings, snap-hooks and associated hardware used to attach the components of the system together.

Lanyard: A flexible line used to secure a body belt or body harness to a lifeline or directly to a point of anchorage.

Lifeline: A horizontal line between two fixed anchorage, independent of the work surface to which the lanyard is secured either by tying off or by means of a suitable sliding connection. The lifeline shall be

capable of supporting a minimum deadweight of 5,400 pounds per person applied at the center of the lifeline.

Positioning Belt: Simple or compound straps that may be secured about the body to hold the wearer in the work position.

Positioning Device System: A body belt or body harness system rigged to support employees on elevated vertical surfaces, such as a wall or windowsill, allowing them to work with both hands free.

Qualified Person: One who by possession of a recognized degree, certificate or professional standing, or by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work or the project.

Quick Release Buckle: A multiple component buckle that can be released with one positive action and whose releasing mechanism is positively locked in normal use.

Retracting Line: An automatic tensioning system that pays out and retracts line at a certain speed and locks or brakes when the speed is exceeded.

Rope Grab: A device that attaches to a lifeline as an anchoring point to provide a means for arresting a fall.

Snap Hook: A self-closing device with a keeper, latch or other similar arrangement that shall remain closed until manually opened. This includes self-closing, single action, double action, double locking snap hooks.

Strength Factor: The ratio of the minimum strength of a personal fall arrest/restraint system to the arresting force generated by a 250 pound person free-falling the length of the lanyard.

Suspension Belts: A design of simple or compound straps that may be secured about the wearer's body as an independent work support. These are commonly referred to as saddle belts, boatswain's chairs or tree trimmers' belts.

Tie Off: When a user wearing personal fall protection equipment connects directly or indirectly to an anchorage. The term also means the condition of an employee being connected to an anchorage.

Total Fall Distance: The maximum vertical distance between a wearer's body belt or body harness attachment points before and after the fall is arrested, including lanyard extension and/or deceleration distance.

C. Fall Protection Plan Worksheet. Exception from the use of conventional fall protection equipment is only available when employees are engaged in leading edge work and it can be demonstrated that it is not feasible or it creates a greater hazard to use conventional fall protection equipment. In these cases a Fall Protection Plan worksheet (APPENDIX 1) shall be completed by the supervisor for the worksite.

1. Notice of A copy of the Fall Protection Plan worksheet is to be kept at the job site.
2. The manager, supervisor or foreman shall approve any changes to the Plan.
3. The Plan shall be implemented, and employees shall follow the plan.
4. The Plan shall outline the measures taken to reduce or eliminate the fall hazard for workers.
5. If there is an employee fall, a qualified person shall investigate the circumstances of the fall, determine if the Fall Protection Plan needs to be changed and shall implement those changes.

D. Fall Protection System. A fall protection system may be a variety of equipment, facilities, and work procedures. The fall protection used, such as a guardrail, can prevent a fall by restraining a worker from falling or safely stopping a fall by arresting the fall through the use of personal protective equipment. The systems can include:

1. Guardrail System

a. A **standard guard railing** which consists of a top rail, midrail and posts which can support an impact of 200 pounds in any direction. The top rail shall be installed at 42 inches, plus or minus three inches, from floor level. Required on all open-sided floors, ramps, balconies, walkways

and platforms elevated 4 to 6 feet or more above the floor, ground or other working surface. The midrail and toe board may be omitted where materials are regularly passed over the edge or where the railing is set back 12 inches or more from the leading edge.

b. If **wire rope** is used for top rails it shall be marked at six-foot intervals or less with high visibility material.
c. A **standard stair railing** which is constructed at a height of 30-34 inches isrequired on all fixed stairways consisting of 4 or more risers and installed on each open side.
d. A **standard handrail** which consists of a single lengthwise member 1-1/2 to 2 inches in diameter mounted on a wall or partition with brackets at a height of 30 - 34 inches from the stair tread. Required on enclosed stairways, preferably on the right side descending.
e. A **standard toe board** is at least 4 inches in vertical height and is installed no more than 1/4 inch above floor level at the perimeter of the open-sided working/walking surface. Required whenever persons pass below and there is a potential for being struck by falling objects.

2. **Safety Net Systems** are arrest systems consisting of mesh nets, including panels, connectors and other impact absorbing components. If safety nets are needed, the supervisor shall oversee the installation and performance requirements of the system to ensure compliance with specific Oregon OSHA requirements regarding performance of safety nets.
3. **Personal Fall Arrest Systems.** A safety harness and lanyard fall arrest system where the harness is worn on the body and attached to a lanyard and lifeline or structure. The lanyard consists of a rope suitable for supporting one person. One end is fastened to a safety harness and the other end is secured to a substantial object or a safety line. Required wherever a person is exposed to a fall while working from an unguarded surface more than 6 feet above a lower level or at any height above dangerous equipment.

NOTE: The Occupational Safety and Health Rules do not require compliance with the safety harness rules whenever ". . . the work is of limited duration and limited exposure and the hazards involved in rigging and installing the safety devices equal or exceed the hazards involved in the actual construction, these provisions may be temporarily suspended provided adequate risk control is exercised under competent supervision." Consequently, no point of attachment may be available at the site. Under these circumstances, the employee shall not access the unguarded area unless an alternate protection is used to prevent exposure to a fall hazard (i.e., observation from a safe area, a secured ladder, a guard railed personnel lift or scaffold.

The supervisor shall provide affected employees with a safety harness and lanyard for use at sites meeting the above requirements. Training and proper fitting shall be conducted prior to use. It is the responsibility of the person using the belt/harness and lanyard to confirm that the lifeline to which the lanyard is secured is above the point of operation and is capable of supporting a minimum dead weight of 5,000 pounds.

a. When it is not feasible to use physical barriers to protect employees from falls, personal protective equipment (PPE) shall be used.
b. PPE shall be chosen based on the following:
    I. Distance of potential fall.
    II. Impact on the body from the PPE during a sudden stop.
    III. Intended use of PPE (stopping fall as opposed to retrieval from a confined space).
    IV. Fall arresting forces on the body.

c. Type II chest harnesses shall be worn for rescue purposes only, and in no case be used to stop a vertical fall. Attachment shall be located in the center of the wearer's back near the shoulder level or above the wearer's head for fall arrest.
d. When workers enter 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.
e. Personal retrieval systems for rescue from below ground level tanks or confined spaces.
    I. 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 shall be available before work is commenced.
    II. Full body harnesses, yokes and wristlets shall be used when retrieval is through narrow openings.
f. Strength Requirements
    I. All components of 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 shall be increased by the number of workers affected (i.e., two workers, one lifeline, minimum breaking strength shall be 10,800 pounds at the center of line; three workers, one lifeline, minimum breaking strength shall be 16,200 pounds, and so forth).
    II. When tied off while working on suspended scaffolding, each worker shall use a separate line which is not connected to the scaffold.
    III. Permanent lifelines shall be a minimum one-half inch steel cable capable of supporting 5,400 pounds per person at the center of the line.
    IV. Hardware for body belts/harnesses and lanyards shall be drop forged, corrosion resistant with smooth edges, a minimum of 5,400-pound breaking strength without cracks or breaks.
    V. Knots shall not be used in components of a fall protection system since a knot shall reduce the strength by at least 50%.
    VI. Lanyards shall be kept as short as possible. In no case shall they exceed six feet to minimize the possibility and length of a free fall without contacting a lower level; and shall completely stop a free-fall and limit deceleration distance to 3.5 feet with a shock-absorbing lanyard.
    VII. Wire rope or rope-covered wire lanyards shall not be used where impact loads are anticipated or where there is an electrical hazard.
    VIII. Belts and lanyards that have been subjected to impact loading shall be removed from service and destroyed or returned to the manufacturer for recertification.
    IX. Rope lanyards shall not be stored in work pouches where they may be subject to deterioration.
    X. Where there is exposure to abrasion, spun nylon rather than filament nylon shall be used.

XI. Only safety belts/harnesses with locking snaps shall be used to prevent "rollout" or disengagement. All hardware shall be compatible with the locking snap.
XII. Only shock-absorbing lanyards shall be used to reduce the fall arresting impact on the wearer.
XIII. 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.

g. Inspection and Recordkeeping
I. The user shall inspect the fall protection prior to each use.
II. A trained and competent person shall inspect all components of each fall protection device at least once each six months. The dates of this biannual inspection shall be recorded on a permanent tag attached to the belt.
III. Every five years the fall protection system shall be returned to the manufacturer for recertification.
IV. Any defective body belt/harness or lifeline shall be destroyed or returned to the manufacturer before use.
V. Any unit subjected to impact loading shall be immediately removed from service and destroyed or sent to the manufacturer for recertification.

4. **Ladder Climbing Safety**
   a. A ladder cage is required on all fixed ladders more than 24 feet to a maximum unbroken length of 30 feet. Employees shall not ascend a fixed ladder more than 24 feet long unless a properly designed cage is installed or a ladder-climbing device is available.
   b. A ladder-climbing device may be substituted for ladder cages in certain circumstances and usually consists of a safety belt, lanyard, friction brake and sliding attachment.
   c. A floor opening cover is required whenever an opening measures 12 inches or more in its least dimension through which a person may fall. Whenever the cover is not in place, the opening shall be constantly attended by a person or temporary guardrails or other physical barricades installed.
5. **Positioning Devices**. These systems are primarily intended to protect construction workers doing form work and reinforcing steel work which would not generally apply to electrical construction work.
6. **Warning lines and safety monitoring systems** have specific applications for roofing operations on low-slope roofs. Safety monitoring systems also have applications when conventional fall protection cannot be used and when no alternative measures have been implemented. These systems do not provide a physical means of preventing or arresting falls but warn of the leading edge. An example could be a barricade is a device which physically prevents entry by a person into a danger zone.

C. When Fall Protection Systems are Required

SUMMARY OF THE REQUIREMENTS
HEIGHT BEFORE GUARDING OR FALL PROTECTION IS REQUIRED BY OSHA

ACTIVITY	HEIGHT	OSHA RULE
Construction:		
1. Guard Rails	6 feet*	29 CFR 1926.500(d)

2.	Fall Protection General	6 feet	29 CFR 1926.500-502
3.	Fixed Ladders	24 feet	29 CFR 1926.1053(a)(19)
4.	General - Wall Opening and Holes	4 feet	29 CFR 1910.23
5.	Fall Protection General	10 feet	OAR 437-003-1423, 1501

NOTE: To measure height:

1. The distance from the working/walking surface to grade or lower level.
2. The worst fall hazard shall be considered in each particular application or work/access method.

*Guardrails can be required at less than 6 feet if there is dangerous equipment below.

D. Employee Training

1. Employees are potentially exposed to fall hazards. Affected employees are required to be part of the Fall Protection Training Program. Employee training attendance shall be documented by a written certification report. (See copy of form in APPENDIX 3)
2. At least the latest training certification shall be maintained by the Supervisor or employee assigned recordkeeping.
3. The program includes the following training materials:
   a. Recognition of fall hazards due to the nature of the work area.
   b. Fall protection requirements.
   c. Correct procedures for erecting, maintaining, disassembling and inspecting the fall protection system to be used.
   d. The use and operation of the following systems as they apply to the need for fall protection at the job site:
      I. guardrail systems
      II. personal fall arrest systems
      III. safety net system
      IV. warning line system
      V. safety monitoring
      VI. controlled access zones
      VII. and other protection to be used
   e. Each employee needs to understand their role if a safety monitoring system is used.
   f. The correct procedures for the handling and storage of equipment and materials and erection of overhead protection.
   g. The role of employees in fall protection plans as applicable.
   h. Review of the OSHA fall protection standard.
4. Retraining shall be given if there are changes on the fall protection program, if the equipment changes, or if there are any inadequacies in the use of fall protection systems or equipment.

APPENDIX 1 MODEL FALL PROTECTION PLAN

The following plan was developed to ensure that Fall Protection is properly addressed, and when conventional protection is not feasible, a written plan is developed which meets Oregon OSHA requirement.
The Fall Protection Plan shall be completed, signed and posted by the supervisor at each jobsite where standard guard-railing and other conventional fall protection is not in use.

FALL PROTECTION PLAN

Job Number: _____
Job Description: _____
Foreman: _____
Crew Size: _____ Date: _____

1. Identify all fall hazards in the work area:

_____
_____

2. Describe the methods of fall arrest or fall restraint to be provided:

_____
_____

3. Describe the correct procedures for the assembly, maintenance, inspection and disassembly of the fall protection system to be used:

_____
_____

4. Describe the correct procedure for handling, storing and securing tools and materials:

_____
_____

5. Describe the method of providing overhead protection for workers who may be in or pass through the area below the work site:

_____
_____

6. Describe the method for prompt, safe removal of injured workers:

_____
_____

I (we) certify that I (we) have received proper explanation, instruction and information on the above material. I (we) have been trained in the proper use of all safety equipment being utilized on the referenced job:

Name:	Date:
_____	_____
_____	_____
_____	_____
_____	_____

GENERAL FALL PROTECTION WORK PLAN

Job Location: _____

Job Description: _____

INSTRUCTIONS:
1. Inspect the site prior to the start of the job.
2. Complete this form.
3. Post at worksite where it can be plainly seen along with the summarized plan.

FALL HAZARDS - 6 feet or more

_____ Open Beam/Truss/Frame Work
_____ Beyond Guard Rails
_____ Hanging Scaffolds/Staging
_____ Tank/Vessel/Equipment Tops
_____ Equipment Frame
_____ Other Describe: _____

_____ Standard Scaffold/Staging
_____ Roof Edge
_____ Erection/Disassembly
_____ Ripe Rack System
_____ Floor Opening

OTHER HAZARDS

____ Electrical
____ Water
____ Chemical
____ Hot Surfaces
____ Foot Traffic
____ Other: Describe _____
____ Overhead
____ Below

METHODS OF PROTECTION TO BE USED

____ Guardrail
____ Parapet Wall
____ Barrier Structure
____ Fixed Lanyard
____ Retractable Lanyard
____ Harness
____ Safety Block
____ Rope Grab
____ Life Line
____ Rope Protection
____ Sling/Runners
____ RFP w/Boatswain
____ Safety Net
____ Warning Line (low pitched roofs/floors only)
____ Other Describe: _____

METHODS OF WORK AREA ACCESS

_____ Portable Ladder
_____ Fixed Ladder
_____ Scaffolding
_____ Other: _____
_____Roof
_____ Manlift
_____ Staging
_____ Truss/Beam
_____ Framework
_____ Suspended Decent

General Fall Protection Work Plan – Page 2

METHODS OF MATERIAL/TOOL HANDLING

_____ Line
_____ Hoist
_____ Crane
_____ Tool Belt
_____ Tool Bucket
_____ Designated Lifting Zone
_____ Material stored at least 10 feet away from edge and no higher than barrier.

METHODS OF SECURING LANYARDS/LINES (Minimum 5,000 lbs Holding Force)

_____ Ladder Siderail (secured)
_____ Eye Bolts
_____ Other: _____
_____ Structural Workings
_____ Steel Pipe

LOCATION OF ANCHOR POINTS (DESCRIBE)

_____
_____

OTHER

Fall protection equipment inspected prior to use Yes ____ No _____

Equipment inspected by: _____

Name of monitor assigned (leading edge work only) _____

Has the work plan been reviewed in detail with person assigned working below
Yes ____ No _____

Barrier tape/tags set up for overhead hazards when people are working below
Yes ____ No _____

PERSON ASSIGNED

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

COMPETENT PERSON: _____ DATE: _____

APPENDIX 2 TRAINING RECORD FORMS

FALL PROTECTION

EMPLOYEE TRAINING CERTIFICATION

(Employee Name) **(Date)**

The _____ fall protection policy and procedures have been reviewed with me. This included information on the following:

1. Recognition of fall hazards due to the nature of the work area.
2. Fall protection requirements.
3. Correct procedures for erecting, maintaining, disassembling and inspecting the fall protection system to be used.
4. The use and operation of the following systems as they apply to the need for fall protection at the job site:
   a) guardrail systems
   b) personal fall arrest systems
   c) safety net system
   d) warning line system
   e) safety monitoring
   f) controlled access zones
   g) other protection to be used.
5. Each employee needs to understand their role if a safety monitoring system is used.
6. The correct procedures for the handling and storage of equipment and materials and erection of overhead protection.
7. The role of employees in fall protection plans as applicable.
8. Review of the OSHA fall protection standard.
9. The _____'s enforcement and discipline policy.

I understand the fall protection procedures and policy. My supervisor has shown me the specific equipment procedures.

_____

Employee Signature

_____

Trainer's/Supervisor's Signature **Date**

The following training has been given to ensure that the employee understands the specific fall equipment operation procedure. This includes providing the following information: (Fill in as applicable)

FALL PROTECTION
EMPLOYEE'S PAST TRAINING CERTIFICATION

_____
(Employee Name) (Date)

My previous employer _____ or other trainers provided me with fall protection training that included the following:

1. Recognition of fall hazards due to the nature of the work area.
2. Fall protection requirements.
3. Correct procedures for erecting, maintaining, disassembling and inspecting the fall protection system to be used.
4. The use and operation of the following systems as they apply to the need for fall protection at the job site:
   a) guardrail systems
   b) personal fall arrest systems
   c) safety net system
   d) warning line system
   e) safety monitoring
   f) controlled access zones
   g) other protection to be used.
5. Each employee needs to understand their role if a safety monitoring system is used.
6. The correct procedures for the handling and storage of equipment and materials and erection of overhead protection.
7. The role of employees in fall protection plans as applicable.
8. Review of the OSHA or WISHA fall protection standard.
9. The company's enforcement and discipline policy.

I understand the fall protection procedures and policy. My supervisor has shown me the specific equipment procedures.

_____
Employee Signature

_____
Trainer's/Supervisor's Signature **Date**

The following training has been given to ensure that the employee understands the specific fall equipment operation procedure. This includes providing the following information: (Fill in as applicable)
A.
B.

7.5 WELDING – FIRE & EXPOSURE CONTROL

A. Purpose. This welding safety policy is designed to ensure that employees are aware of the hazards associated with welding and to ensure proper fire protection. Welding is a hazardous operation, which shall be performed in accordance with safety standards and by qualified trained employees. This chapter is to ensure work place safety and compliance with OSHA standards.

B. Applicable Regulation.

1. OAR 437, Division 2, Subdivision Q

C. Definitions.

"Approved" means listed or approved by a nationally recognized testing laboratory.

"Welding and welding operator" means any operator of electric or gas welding and cutting equipment.

NOTE: All other welding terms used in OSHA standard are in accordance with American Welding Society - Terms & Definitions A3-0.969.

D. General Policy. The following precautions are required to be taken by employees who perform maintenance welding operations. Electric arc welders are also responsible to be trained in electrical hazards (See Electrical Safety).

E. Responsibilities. Department heads and supervisors are responsible for ensuring that only trained employees are authorized to weld. Fire watch personnel shall be trained in their duties by the facilities manager. Management is required to see that adequate maintenance services are provided and used to ensure safe operating conditions and that all Energy Control Procedures (see Lockout/Tagout) are followed as they relate to maintenance welding on equipment.

Authorized Operators: Employees who are authorized to perform welding shall follow all safety procedures as outlined in this chapter, by OSHA rules and manufacturer's recommendations. Employees are required to inspect their equipment daily prior to operation to ensure that all safeguards are on the equipment. Any problems shall be reported immediately to the employee's supervisor. All accidents shall be reported immediately to the supervisor.

Safety Officer: Responsible for assisting in providing employee training and auditing facilities for compliance with this chapter and OSHA regulations.

Safety Committee: The Safety Committee shall review welding safety as part of quarterly inspection activities.

F. Procedures.

1. **Basic Hazard Awareness**: Welding and cutting requires certain precautions and standardized operating procedures. Welding is associated with five principal hazards; it is the responsibility of the employee supervisor and/or Safety Coordinator to ensure that all welders and fire watch personnel understand these hazards.
   a. Electric shock and burns shall be guarded against when using welding equipment. The degree of risk depends on the type of welding process. Welders are to be trained in Electrical Safety.
   b. Fire Hazards:
      I. Flying sparks are the source of many industrial fires.
      II. In areas where flammable gases, vapors, and dusts are present, only a tiny spark is needed to set off a fire or explosion. Flying pieces of molten metal can fall through cracks and openings as small as nail holes and ignite combustibles that are beyond the welder's visual range.

III. Hot metal that is being welded or cut can cause fires if allowed to contact flammable or combustible material such as drip pans, oily rags or combustible materials.

IV. The torch flame used by the welder is another source of ignition and shall be handled carefully. Compressed oxygen gas used in welding is a fire hazard because it supports and intensifies the rate of combustion of other materials

c. Radiant energy hazards in welding include: ultraviolet light, infrared light and visible light.

I. Exposure to the welding arc (ultraviolet rays) may result in very painful irritation of the eyes and skin.

II. Infrared rays act upon the eyes simply as heat and can cause a burn or irritation of the tissue affected.

III. The glare of excessive visible radiation can cause headaches, eye fatigue and loss of visual efficiency.

IV. Protective eye wear shall be worn during welding to prevent harm to the eyes from light energy

d. Inhalation of Welding Fumes: Welding produces airborne exposures to a variety of potentially harmful gases and fumes. Fumes are generated from both the base metal and the wire or rod used in the process. The hazard level from metal fumes depends on the type of metal. In steel welding exposures include iron oxides, chromium, manganese, and nickel. The gases also vary with the type of shield gases used in arc welding, type of rods and fluxes used.

3. Authorized Employees: Welding shall be performed by qualified welders only.
4. Welding operations need to be performed away from flammable materials.
   a. If the object to be welded cannot be moved to a safe location, all movable hazardous materials shall be moved to a safe location.
   b. If this cannot be done, a **Hot Work Permit** shall be issued by the Supervisor. The permit shall describe the welding zone controls such as enclosing in fireproof blankets or other protective shields when materials in nearby areas can be affected by welding arcs, flames, sparks, spatter, slag or heat. (See APPENDIX 1 - Hot Work Permit).
   c. Fire protection equipment shall be kept immediately at hand and ready for use. In critical areas, the fire protection equipment shall be staffed while welding operations are being conducted.
4. Care shall be taken against allowing mixtures of fuel gas and air to accumulate.
5. Flammable and other potentially hazardous materials shall be cleaned from surfaces before welding is started.

(**Note**: The very high temperature of the welding air or flame can cause ignition of materials such as grease, oil or surface coating. These materials shall also break down under heat to hazardous gases or fumes).

6. No welding, cutting or similar work shall be undertaken on tanks, barrels, drums or other containers which have been contaminated with flammables unless the contamination is first removed so that there is no possibility of fire or emission of toxic vapors. (See Hot Work Permit).
7. Adequate ventilation shall be provided as protection against accumulations of toxic fumes and gases. If such precautions cannot be taken, the welder shall wear appropriate respiratory protection (See Personal Protective Equipment and Respiratory Protection).

8. If welding is to be done in enclosed or confined spaces, a specific "confined space" work permit shall be required to be obtained from the management staff. The permit shall detail the specific precautions that are required to perform welding in confined areas.
9. Precautions shall be taken to avoid shock from electric welding operations.
    a. The welder shall not stand in water while doing electric welding.
    b. Hot electrode holders shall not be dipped in water.
    c. Cables with damaged insulation or exposed conductors shall not be used, and shall be replaced before any such work is attempted. If necessary to join lengths of cable, it shall be done using only connectors designed specifically for the purpose.
10. Personal Protective Equipment: The face, body and hands shall be covered to prevent burns from splatter, slag, sparks, or hot metal. Flame proof; heat-insulating gloves shall be worn during welding operations. Wet or excessively worn gloves shall not be used.
11. The eyes and skin shall be protected against the glare and radiation from a welding arc or flame.
    a. Helpers and attendants shall also be provided with eye protection.
    b. Other personnel in the vicinity of welding operations shall be protected from reflections by suitable shields and barriers.
12. Respiratory equipment may be necessary if ventilation is not sufficient. Specific operation requirements shall be made by the supervisor.
13. Gas cylinders shall be handled carefully (breaking the neck from a full cylinder can turn the bottle into a missile).
14. Cylinders shall be secured to keep them from falling.
15. Acetylene cylinders shall be maintained in an upright position.
16. Oxygen cylinders shall be separated from fuel-gas cylinders or other combustible materials by at least 20 feet or by a fire-resistant barrier at least 5 feet high.
    a. Oxygen from supply cylinders shall be checked to make certain they are not leaking, especially in enclosed spaces, where it can cause ignition of materials that are not normally highly flammable.
    b. Grease and oil shall be kept away from and never used to lubricate oxygen cylinder valves or regulators.
    c. Oxygen cylinders shall not be handled with oily hands or gloves.
    d. Before connecting an oxygen bottle, first open the valve slightly for an instant, then close and attach an oxygen regulator to the valve. Always stand to one side when opening the valve.
17. Empty gas cylinders shall be marked and have their valves closed tightly. Valve protection caps shall always be in place on those cylinders designed for caps, except when the cylinder is in use or being connected/disconnected.
18. Gas cylinders shall be stored out of the direct rays of the sun and away from other sources of heat. Never strike an arc against a gas cylinder.
19. Do not use a hammer or wrench to open cylinder valves. If valves will not open by hand, notify the supplier. Always open the cylinder valve slowly.
20. Do not tamper with cylinder valves or try to repair them. Send the supplier a prompt report of the trouble, including the cylinder serial number, and follow the supplier's instructions.
21. Backflow or flashback preventers shall be installed on all oxygen/flammable gas welding and cutting units between the torch or blowpipe and the hoses.

22. Gauges shall be maintained in good condition. Cracked or missing glass shall be replaced prior to use.

APPENDIX 1 HOT WORK PERMIT PROCEDURES AND INSTRUCTIONS

A. Instructions:

1. This cutting and welding permit may be issued only by a SUPERVISOR and shall be used for all cutting and welding done outside of an approved shop.
2. Complete the checklist below before issuing the permit.
3. Display the permit in a highly visible location at the job site.
4. The permit shall be picked up by the Supervisor who issued the permit 2 to 4 hours after the work is completed. In the event of a change of shifts, it is the responsibility of the supervisor who issued the permit to notify the supervisor following that a permit was issued and will need to be picked up.
5. If a permit is issued late in the work shift and the worksite is down the following shift, the next shift supervisor shall be notified to pick up the permit.
6. If a permit is issue for an unstaffed area of the worksite, the next shift supervisor shall be notified so that he/she can check there more frequently.

CHECKLIST OF REQUIRED PRECAUTIONS:

_____ Floor swept clean of combustibles

_____ Floor wet down

_____ Flammable liquids removed; other combustible, if not removed, wet down or protected with fire-resistant tarpaulins or metal shields.

_____ Explosive atmospheres in area are eliminated.

_____ All wall and floor openings covered or provide an additional firewatch at the lower level.

_____ Firewatch shall be provided during and for at LEAST 30 minutes after work and during any coffee or lunch breaks.

_____ Firewatch is supplied with a charged fire hose.

JOB DATE: _____
LOCATION: _____

NATURE OF JOB:
_____

WELDER'S NAME:
_____

TIME STARTED: _____
TIME FINISHED: _____

FIREWATCH NAME:
_____

FINAL CHECKUP BY MAINTENANCE: Work area and all adjacent areas to which sparks and heat might have spread (i.e. floors above and below and opposite side of walls) were inspected after the work was completed and found to be fire safe.
MAINTENANCE PERSON SIGNATURE: _____

FINAL CHECKUP BY SUPERVISOR: 2 TO 4 hours after work completed
DATE & TIME: _____

SIGNATURE OF PERSON RESPONSIBLE:_____

CUTTING – WELDING HOT WORK PERMIT – PAGE 2

DATE: _____
LOCATION: _____

WORK TO BE DONE:

_____
_____
_____
_____
_____

MAINTENANCE:

_____
_____

INSTRUCTIONS TO FIRE WATCH:

_____
_____

FIRE WATCH NAMES:

_____
_____

7.6 ELECTRICAL SAFETY

A. Purpose. This Electrical Safety Program is established to provide the maximum protection to employees whenever work is performed around electrical hazards. Employees involved in the maintenance, repair, and servicing of equipment that requires electrical energy, or that work around overhead or underground electrical lines shall be required to follow these guidelines. ALSO REFER TO THE LOCKOUT/TAGOUT PROGRAM WHEN COMPLETING WORK ON EQUIPMENT AND MACHINERY.

B. Applicable Legal Standards.

State: OAR 437 Division 2, Subdivision S (Electrical)
Federal: 29 CFR 1910, Subpart S

C. General Responsibilities.

1. Direct Supervisor: The Direct Supervisor is responsible for the overall implementation of the policy working with the Safety Committee and employees. The Direct Supervisor is also responsible to see that there are periodic audits and an annual review. To protect employees from hazards when working with electrical equipment, tools and appliances the direct Supervisor shall:
    a. Inspect all electrical equipment to make sure the equipment is safe.
    b. Require that all electrical equipment is used for its approved or listed purpose.
    c. Require that all electrical equipment used or located in wet or damp locations is designed for such use.
    d. Require that electrical equipment that isn't marked by the manufacturer is not used.
    e. Identify disconnecting means (see also lockout/tagout program).
    f. Maintain electrical fittings, boxes, cabinets and outlets in good condition.
    g. Maintain all flexible cords and cables in good condition.
    h. Guard electrical equipment to prevent employees from electrical hazards.
    i. Require that all electrical equipment be effectively grounded.
    j. Require that all electrical equipment have overcurrent protection.
2. Authorized Employees: Only workers and supervisors who have received special training to recognize and understand the particular hazards involved with the tasks to be performed and the type and magnitude of electrical hazards are authorized to implement the procedure.
3. Affected Employees: An affected employee is one whose job requires him/her to perform maintenance on items powered by electrical energy, or that performs work around areas with overhead and/or underground electrical lines.
4. Training: A key component of this program is employee training. It is the supervisor's responsibility to see that all employees exposed to electrical hazards are trained on working around them. The authorized employees are to receive additional specialized training as outlined in this program. The training shall be documented by the Direct Supervisor.

D. Inspection of Electrical Equipment. All electrical equipment shall be inspected by the supervisor to make sure there are no recognized hazards likely to cause employee death or serious physical harm.

E. Temporary Use of Cords.

1. Temporary electrical power and lighting installations that operate at 600 volts or less shall be used only:

a. During and for remodeling, maintenance, repair or demolition of buildings and similar activities.
b. Experimental or development work.
c. For no more than 90 days for;
    I. Christmas decorative lighting
    II. Carnivals
    III. Other similar purposes

2. Flexible cords and electrical cords used on a temporary basis shall be protected from accidental damage by avoiding sharp corners and projections, especially where they pass through doorways and other pinch points.

F. Working Around Buried Electrical Lines.

1. When workers are required to start any in-ground work like digging or driving objects, OR-OSHA standard 29 CFR 1926.651(b)(1) requires locating utilities before digging.
2. Employees shall call the Oregon Utility Notification Center (OUNC) before starting work that involves digging or driving objects.
3. OUNC will locate and mark all utilities in the area where the work will be performed.
4. Employees shall ensure that power to any electrical lines in the area of work shall be de-energized to ensure employee safety.
5. If a worker contacts an underground line or pipe, the contact could be fatal.

G. PPE.

1. Employees shall wear appropriate Personal Protective Equipment (PPE) when working around electrical sources. (see 29 CFR 1910.137, Electrical Protective Equipment). Electrical protective equipment is subject to regular electrical tests to ensure they are still providing protection to employees.
2. Electrical protective equipment shall be maintained in a safe, reliable condition.
3. Insulating equipment shall be inspected for damage before each day's use and immediately following any incident that can reasonably be suspected of having caused damage. Insulating gloves shall be given an air test, along with the inspection.
5. Insulating equipment shall be stored in such a location and in such a manner as to protect it from light, temperature extremes, excessive humidity, ozone, and other injurious substances and conditions.
6. Insulating equipment with any of the following defects shall not be used:
    a. A hole, tear, puncture, or cut;
    b. Ozone cutting or ozone checking (the cutting action produced by ozone on rubber under mechanical stress into a series of interlacing cracks);
    a. An embedded foreign object;
    b. Any of the following texture changes: swelling, softening, hardening, or becoming sticky or inelastic.
    c. Any other defect that damages the insulating properties

7.7 LADDER SAFETY

A. General Policy. Proper ladder selection and use shall be utilized to reduce risk of injury.

B. Applicable Legal Standard.

29 CFR 1926.1053(b)(1)
29 CFR 1926.1053(b)(4)
29 CFR 1926.1053(b) (13)
General Requirements: OAR 437-002-0026(5)(a-h)
Portable Ladders: OAR 437-002-0026
Securing Ladders: OAR 437-002-0026(7)(h)(A-C)

C. Definitions.

"Cleat" A rectangular ladder crosspiece placed on edge, upon which a person may step while ascending or descending.
"Competent person" A supervisor or lead worker who can identify existing and predictable hazards where employees work and who can take prompt corrective measures to eliminate the hazards.
"Fastening" A device that attaches a ladder to a structure, building, or equipment.
"Rungs" Ladder crosspieces on which a person steps when ascending or descending.
"Single" (or straight) A single section non-self-supporting portable ladder, nonadjustable in length. Length is measured along a side rail.
"Steps" The flat crosspieces of a ladder on which a person steps when ascending or descending.
"Tread" The horizontal member of a step.
"Tread width" The horizontal distance from front to back of the tread, including nosing.

D. Ladder Type and Selection.

1. **Extension ladders (non-self-supporting).** Extension ladders offer the greatest length in a general purpose ladder. The ladder consists of two or more sections that travel in guides or brackets, allowing adjustable lengths. The sections shall be assembled so that the sliding upper section is on top of the lower section. Each section shall overlap its adjacent section a minimum distance, based on the ladder's overall length. The overall length is determined by the lengths of the individual sections, measured along the side rails. The table below shows the minimum overlap for two-section ladders up to 60 feet long.

Ladder length	Overlap
Up to 36 feet	3 feet
36 to 48 feet	4 feet
48 to 60 feet	5 feet

Most extension ladders are made of wood, aluminum, or reinforced fiberglass. Wood ladders can't have more than two sections and shall not exceed 60 feet. Aluminum and fiberglass ladders can have as many as three sections; however, the overall length shall not exceed 72 feet. Individual sections of any extension ladder shall not be longer than 30 feet. Extension ladders can be used only by one person at a time.

a. **Is it necessary to "tie off" an extension ladder to prevent it from slipping?** You don't have to tie off the ladder but you do have to ensure that the ladder cannot be accidentally moved or displaced. Tying off the top or bottom of a ladder is one way to ensure that it cannot be accidentally moved or displaced.

2. **Standard stepladders (self-supporting).** The standard stepladder has flat steps and a hinged back. It is self-supporting and nonadjustable. Standard stepladders shall be used only on surfaces that have a firm, level footing such as floors, platforms, and slabs. They're available in aluminum, wood, or reinforced fiberglass and are intended to support only one worker at a time. Remember not to stand on the top step. Stepladders shall have metal spreaders or locking arms and can't be longer than 20 feet, measured along the front edge of the side rails.
    a. **Can I use a standard stepladder like a straight ladder? No.** Using a standard stepladder in a closed position is not a safe practice because it's more likely to slip on surfaces such as concrete and wood than a straight ladder. Standard stepladders are designed to be used only when the spreader arms are open and locked. If a standard stepladder doesn't meet your needs, choose an appropriate straight ladder or a combination ladder.
3. **Other types of stepladders include:**
    a. **Two-way stepladder.** The two-way stepladder is similar to the standard stepladder; however, each side of this ladder has a set of steps. One person can work from either side or two people can work from the ladder at the same time — one on each side.
    b. **Platform ladder.** The platform ladder is a special-purpose ladder that has a large, stable work platform. The ladder's length is determined by the length of the front edge of the side rail from the bottom of the ladder to the base of the platform; it can't exceed 20 feet.
    c. **Orchard ladder.** The orchard ladder is a special-purpose ladder for pruning and harvest work. It has a flared base and a single back leg that offers support on soft, uneven ground. Orchard ladders are intended for use by only one person at a time and can't be longer than 16 feet. Wood, aluminum, and reinforced fiberglass versions are available. A more rigid orchard ladder, the so-called double base version, incorporates a triangular box brace with stub rails attached to the bottom step. The ladder is available in wood or with a combination wood or fiberglass rail and metal step. Maximum length is 16 feet and it is intended for use by one person. Do not stand on the top step of an orchard ladder.
    Can orchard ladders be used on construction sites? Yes. In fact, orchard ladders are often safer on uneven or sloped ground than conventional stepladders. An orchard ladder is designed to be used on soil or turf so that each leg slightly penetrates the ground. Orchard ladders shall never be used on concrete or hard surfaces.
    d. **Tripod ladders** that have spreader braces — also called electrician's ladders — are common on construction sites.
    e. **Trestle ladder.** A trestle ladder is a self-supporting portable ladder that has two sections hinged at the top, forming equal angles with the base. A variation of the trestle ladder, the extension trestle ladder includes a vertically adjustable single ladder that can be locked in place. (The single extension section shall lap at least 3 feet into the base section.) Trestle ladders are used in pairs to support planks or staging. The rungs are not intended to be used as steps. The angle of spread between open front and back legs shall be 5½ inches per foot of length. The length shall not be more than 20 feet, measured along the front edge of the side rails. Rails shall be beveled at the top and have metal hinges to prevent spreading. Metal spreaders or locking devices are required to keep the rails in place.
    f. **Combination ladders and multipurpose ladders.** These ladders share many of the features of stepladders and extension ladders. Most quickly convert from standard stepladders to

extension ladders, and many can be used in three or more variations — such as a stairway ladder, two-way stepladder, or a self-supporting scaffold base.

4. **Determine the proper length.**
    a. **Standard stepladders.** You should be able to reach about 4 feet above the top of the ladder when you're standing two steps down from the top. For example, you should be able to reach an 8-foot ceiling on a 4-foot ladder. Never use the top of a stepladder as a step.
    b. **Extension ladders.** The total length of an extension ladder should be 7-10 feet longer than the vertical distance to the upper contact point on the structure — a wall or roofline, for example. Never stand on the ladder rungs that extend above a roofline.
5. **Determine the railing duty.**
    Manufacturers give ladders duty ratings, based on the maximum weight they can safely support. The worker's weight plus the weight of any tools and materials that are carried onto the ladder shall be less than the duty rating. Before you use a ladder consider the maximum weight it will support. Don't subject it to a load greater than its duty rating. Duty ratings for portable ladders:
    a. Special duty (IAA) 375 pounds
    b. Extra heavy duty (I-A) 300 pounds
    c. Heavy duty (I) 250 pounds
    d. Medium duty (II) 225 pounds
    e. Light duty (III) 200 pounds

E. How to set up your ladder.

1. Setting up the ladder.
    a. Move the ladder near your work. Get help if the ladder is too heavy to handle alone.
    b. Lock the spreaders on a stepladder. Secure the lock assembly on extension ladders.
    c. Make sure there are no electrical wires overhead.
    d. Use traffic cones or other barriers to protect the base of the ladder if vehicles or pedestrians could strike it.
    e. Make sure that a non-self-supporting ladder extends at least 3 feet above the top support point for access to a roof or other work level. Do not step on rungs above the upper support.
    f. Angle non-self-supporting ladders properly. The length of the side rails from the ladder's base to the top support points (the working length) should be four times the distance from ladder's base to the structure (the set-back distance). Done correctly, this results in a 4:1 set-up angle.
2. Achieving a 4:1 set-up angle.
    a. A non-self-supporting ladder should have a set-up angle of about 75 degrees — a 4:1 ratio of the ladder's working length to set-back distance.
        I. Here's how to achieve it: Stand at the base of the ladder with your toes touching the rails. Extend your arms straight out in front of you. If the tips of your fingers just touch the rung nearest your shoulder level, the angle of your ladder has a 4:1 ratio.
3. Five steps for setting up an extension ladder.
    a. The ladder should be closed. Position the ladder with the base section on top of the fly section. Block the bottom of the ladder against the base of the structure.
    b. Make sure there is clearance and no electrical lines are overhead. Carefully "walk" the ladder up until it is vertical. Keep your knees bent slightly and your back straight.

c. Firmly grip the ladder, keep it vertical, and carefully move back from the structure about one quarter the distance of the ladder's working length. This allows you to place it at the correct angle against the structure.
d. Raise the fly section. After the bottom rung of the fly section clears the bottom rung of the base section, place one foot on the base rung for secure footing.
e. Lean the ladder against the structure. The distance from the base of the ladder to the structure should be one quarter the distance of the ladder's working length. Make sure the ladder extends 3 feet above the top support points for access to a roof or other work level. Both rails should rest firmly and securely against the structure.

F. How to work safely on your ladder.

1. Wear shoes that have non-slip soles; make sure they are free of mud, oil, or anything else slippery.
2. Climb facing the ladder. Center your body between the rails and keep your hips square to the rungs. Hold the side rails with both hands; you have a better chance of avoiding a fall if a rung or step fails.
3. Hold the ladder with one hand and work with the other hand whenever possible.
4. Attach light, compact tools or materials to the ladder or to yourself.
5. Raise and lower heavy, awkward loads with a hand line or a hoist.
6. Use extreme caution when you're pushing or pulling materials.

G. How to inspect your ladder.

Neglected ladders quickly become unsafe ladders. Step bolts loosen, sockets and other joints work loose, and eventually the ladder becomes unstable. Periodic maintenance extends a ladder's life and saves replacement costs. Maintenance includes regular inspection, repairing damage, and tightening step bolts and other fastenings.

1. Inspect your ladder each time you use it. (A competent person shall periodically inspect ladders for defects and after any occurrence that could make them unsafe.)
2. Replace lower steps on wooden ladders when one-fourth of the step surface is worn away. Typically, the center of a step receives the most wear. Mineral abrasive or other skid-resistant material reduces wear.
3. Don't paint wood ladders; paint conceals defects.
4. Clean and lightly lubricate moving parts such as spreader bars, hinges, locks, and pulleys.
5. Inspect and replace damaged or worn components and labels according to the manufacturer's instructions.
6. Inspect the rails of fiberglass ladders for weathering, fiber bloom, and cracks.
7. Keep the ladder away from heat sources and corrosive materials

H. How to store your ladder.

1. You'll extend a ladder's life by storing it properly:

a. Use a well-ventilated storage area.
b. Store wood and fiberglass away from excessive moisture, heat, and sunlight.
c. Keep them away from stoves, steam pipes, or radiators.
d. Store non-self-supporting ladders in flat racks or on wall brackets that will prevent them from sagging.
e. Secure them so that they won't tip over if they are struck.
f. Keep material off ladders while they are stored.

I. How to transport your ladder.

1. When you carry a ladder, keep the front end elevated, especially around blind corners, in aisles, and through doorways. You'll reduce the chance of striking another person with the front of the ladder.
2. When you transport a ladder in a truck or a trailer, make sure that it's properly supported parallel to the bed. Pad the support points with soft, nonabrasive material such as rubber or carpeting and tie the ladder securely to eliminate chafing and road shock.

J. Safe practices checklist.

1. When portable ladders are used for access to an upper landing, the side rails must extend at least 3 feet above the upper landing. When this is not possible, the ladder must be secured to a rigid support at its top and a grab rail must be available to help employees get off the ladder.
2. Ladders must be free of oil, grease, and other hazards that could cause slips.
3. Ladders must be not loaded beyond the manufacturer's duty rating.
4. Ladders must be used only for the purpose for which they were designed.
5. Extension ladders must be placed so that the working length of the ladder is four times the horizontal distance from the ladder's base to the structure — a 4:1 ratio.
6. Ladders must be used on stable, level surfaces or secured so that they cannot be displaced.
7. Ladders must not be used on slippery surfaces unless they are secured or they have slip-resistant feet.
8. All ladders, except stepladders, must have non-slip safety feet.
9. Employees are prohibited from placing ladders on boxes, barrels, and other unstable objects.
10. Ladders used near passageways, doorways, or driveways must be protected so that vehicles or pedestrians do not strike them.
11. The area around the top and bottom of a ladder must be free from slipping and tripping hazards.
12. The top of a non-self-supporting ladder must be placed so that both rails are supported equally.
13. Ladders must not be moved, shifted, or extended when they are occupied.
14. Ladders that could contact exposed energized electrical equipment must have nonconductive side rails.
15. Portable aluminum ladders must have legible signs reading "CAUTION: Do Not Use Around Electrical Equipment" or equivalent wording.
16. The top step of a stepladder must not be used as a step.
17. Cross bracing on the rear section of a stepladder must not be used for climbing unless the ladder is designed for that purpose.
18. Employees are prohibited from using ladders that are missing steps, rungs, cleats, or have broken side rails or other faulty parts.
19. Competent persons shall inspects ladders periodically for defects and after any occurrence that could damage them.
20. Defective ladders must be marked as defective, or tagged "Do Not Use" and removed from service until they are repaired.
21. Repaired ladders must meet original design criteria before they are returned to service.
22. Employees shall face ladders while climbing or descending.
23. Employees shall use at least one hand to grasp the ladder when they are climbing and descending.
24. Employees shall not carry objects or loads that could cause them to lose their balance.
25. Employees who use ladders must receive training by a Competent Person in proper use, placement, and handling.

26. Employees must know the hazards associated with ladder use and follow procedures that minimize the hazards.
27. Retraining shall be provided periodically to ensure that employees maintain their knowledge of proper ladder use, placement, and handling.

7.8 FORKLIFT SAFETY – USE OF POWERED INDUSTRIAL VEHICLES

A. General Policy. This Forklift Safety policy is designed to ensure that employees are protected from unsafe conditions and operations that may occur while operating a forklift. In addition, this policy ensures compliance with OR-OSHA regulations dealing with the use of powered industrial vehicles. Only authorized employees who have completed a certified training are permitted to drive or operate industrial vehicles, including forklifts. All operators are required to follow the procedures in this policy, and any manufacturer recommendations, regarding vehicle usage and safety. All industrial vehicles are to be maintained in safe operating condition.

B. Applicable Legal Standards.

State: OAR 437-002-0223Federal: 29 CFR 1910.178 “Powered Industrial Vehicles"

C. Definitions.

“Authorized Operator” is an employee who has received the required training as specified in this policy, and who has been authorized by their supervisor to operate various types of industrial vehicles.

D. General Responsibilities.

1. Managers and Supervisors: Managers and supervisors are responsible for ensuring that employees are trained by an authorized trainer, and that only licensed, trained employees are authorized to operate industrial vehicles. Responsibilities include identifying and designating qualified trainers and requiring adequate maintenance services are performed to ensure safe vehicle operating conditions. Supervisors are responsible for maintaining training records and copies of licenses, and auditing day-to-day operations for compliance with this policy and OR-OSHA regulations.
2. Authorized Operators: Employees who are authorized to operate industrial vehicles shall follow all safety procedures as outlined in this policy, OR-OSHA rules, and manufacturer’s recommendations. Employees are required to complete daily operating safety checks and ensure all unsafe equipment is taken out of service and repaired prior to use. All authorized operators shall immediately report any accidents to the supervisor.
3. Safety Committee: The Safety Committee shall include a review of industrial vehicle safety in their quarterly inspection activities.

E. **Safety Training for Authorized Operators.** Only authorized operators shall operate forklifts. Authorized Operators shall be trained and authorized by their supervisor to operate various types of industrial vehicles. The training shall consist of:

a) Instruction in proper inspection and safe operating procedures as outlined in this program.
b) A hands-on demonstration observed by an authorized trainer.
c) A written examination on inspection and safe operating procedures (Appendix C).

This training shall occur upon initial assignment, every three (3) years, and whenever the supervisor deems training necessary.

F. **Inspections and Fueling**. Prior to vehicle operation, a visual inspection shall be made to determine that the horn, lights, brakes, tires, gas supply, hydraulic lines, etc. are in safe working condition. Note: Any

defects shall be reported immediately to the supervisor. The vehicle shall be out of service until proper repairs are made. The authorized operator shall not operate an unsafe forklift at any time. Authorized operators shall not make any repairs or adjustments to a vehicle unless trained and authorized to do so. For electric powered vehicles, battery charging shall be done only in a well-ventilated area. No smoking or open flame are permitted in battery charging areas. Fueling of vehicles shall be performed by authorized personnel only.

G. **Determining Load Capacity.** Authorized **o**perators shall not exceed the safe load capacity of a vehicle at any time. Double tiered loads shall not be handled unless the vehicle is designed to accommodate the load. The load capacity is shown on the "Forklift Nameplate". The load center is determined by the center of gravity which is listed as the horizontal distance from the front of the face of the forks, or the load face of an attachment, to the center of gravity of the load. The center of gravity of lift truck moves because it has moving parts. The center of gravity moves forward and back as the upright is tilted forward and back. The center of gravity moves up and down as the upright moves up and down. Factors in determining the center of gravity:

a. Size of load
b. Weight of the load
c. Shape of the load
d. Position of the load
e. Lift height
f. Amount of tilt
g. Tire pressure
h. Dynamic forces created when the truck is moving (acceleration, braking, turning, and operating on uneven surfaces or incline)

Operators shall not counterweight a forklift to increase lifting capacity, rather the load shall be broken down or a forklift with a higher rating shall be used.

H. **General Operating Safety Rules.**

1. Any modification to an industrial vehicle is prohibited unless approved by the manufacturer.
2. The operator shall be in control of the forklift steering at all times.
3. No person shall ride as a passenger on a forklift, the forks of the forklift, or on the load being carried.
4. A forklift shall not be used to elevate a platform or pallet with persons on it, except work platforms specifically designed for this purpose. Work platforms shall have standard guardrails, and shall be securely fastened to the forks. Additional requirements include:
    a. The hydraulic system shall be designed to ensure that the lift mechanism will not drop faster than 135 feet per minute in the event of a failure in any part of the system.
    b. The authorized operator shall stay in attendance at the forklift while workers are on the platform.
    c. The authorized operator shall be in the normal operating position while raising or lowering the platform.
    d. The vehicle shall not travel from point to point with the work platform elevated at a height greater than 4 feet while workers are on the platform.
5. The area between workers on the platform and the mast shall be guarded to prevent contact with chains or other shear points.

6. Authorized operators shall not put their fingers, arms, or legs between the uprights of the mast, or beyond the contour of the forklift.
7. Authorized Operators shall look in the direction of travel.
8. Authorized Operators shall avoid making jerky starts, quick turns, or sudden stops.
9. Authorized Operators shall travel slowly when turning. Forklifts may tip over at very slow speeds. A forklift is less stable when the forks are elevated, with or without a load.
   In the event that the forklift tips over, authorized operators shall not jump off and shall hold firmly to the steering wheel, brace feet and lean forward and away from the point of impact.
10. Authorized Operators shall not use reverse as a brake.
11. Forklifts shall be driven on the right side of the aisleway/roadway.
12. Authorized Operators shall cross railroad tracks diagonally whenever possible.
13. All vehicles shall be operated at a safe speed with due regard for traffic and conditions. Maximum allowed speeds:
    Inside buildings - 5 mph
    Outside buildings and not in work areas - 7 mph
    On roads outside - 10 mph
14. Authorized Operators shall slow down on wet and slippery surfaces.
15. Authorized Operators shall slow down at cross walks and locations where vision is obstructed.
16. Authorized Operators entering a building or nearing a blind corner shall make their approach at reduced speed, sound horn, and proceed carefully. (Exception: blind corners equipped with mirrors providing a full view in all directions.)
17. Authorized Operators shall give pedestrians the right-of-way at all times.
18. Authorized Operators shall not drive toward any person who is in front of a fixed object or wall.
19. Authorized Operators shall not overtake and pass another forklift traveling in the same direction at intersections, blind spots, or hazardous locations.
20. No person shall stand or walk under elevated forks or any load.
21. When a forklift is not carrying a load the authorized operator shall travel with the forks low.
22. The load shall be carried as low as possible (consistent with safe operations, 2 to 6 inches above the surface).
23. Forks shall be placed under the load as far as possible.
24. Generally, do not lift a load with one fork.
25. No load shall be moved unless it is safe and secure. To maintain balance, the load should be centered and the forks properly spaced to be near the outside edges. Before traveling, the load shall be tilted back until it rests securely. A load backrest shall be used to prevent spilling of the load.
26. Each fork shall be positioned the same distance from the center of the carriage, and forks shall be set as far apart as possible for maximum support of the load, with the weight of the load centered between the forks.
27. The Authorized Operator's view shall not be obstructed by the load. In the event of a high and or wide load the forklift shall be driven backward in low gear.
28. Operators shall watch overhead clearance.
29. On a downgrade, the load shall be last.
30. On an upgrade, the load shall be first.

31. Bridge plates shall be properly in place and secured. Wheels of trucks and railroad cars shall be blocked to prevent movement during loading.
32. Authorized operators shall come to a complete stop before reversing direction of travel.
33. Unstable loads shall be restacked or banded.
34. Hazardous materials shall not be moved unless they are in approved containers.
35. Compressed gas cylinders shall be moved only in special pallets designed for this purpose.
36. When unloading trucks or trailers, the brakes on the vehicle shall be set (locked) and the wheels choked.
37. Authorized Operators shall never attempt to turn sideways on an incline. Do not run on an incline to reduce the possibility of a tip over.
38. All vehicles shall be equipped with audible warning signals and where practical shall have spark arrestors.
39. All vehicles operated at night in dark buildup or in poorly lighted areas shall be equipped with head and taillights.
40. All vehicles operated in areas where overhead hazards exist shall be equipped with an approved overhead guard.
41. Vehicle flywheels, gears, sprockets, chains, shear points and other exposed parts constituting a hazard to the operator or other employees shall be guarded.
42. Vehicles powered by internal combustion engines shall not operate in buildings unless the buildings are adequately ventilated.
43. Vehicles shall be safely parked when not in use. The controls shall be neutralized, power shut off, brakes set, and the forks left in a down position flat on the surface, and not obstructing walkways or aisles. These procedures must be used whenever the operator leaves the forklift unattended (i.e. when the driver is 25 feet or more away or the vehicle is out of the operator's view).
44. A forklift shall not be left on an incline unless it is safely parked and the wheels blocked.
    a. No forklift shall be parked within 10 feet of a railroad track.
    b. Forklifts shall not be parked or left unattended in aisles, by exits or doors.

I. **LPG Tank Filling Procedure.** Employees shall comply with OR-OSHA requirements pertaining to LPG tank filling procedures when applicable.

a. Industrial trucks (including lift trucks) equipped with permanently mounted fuel containers shall be charged outdoors.
b. The dispensing of LP gas into the fuel container of a vehicle shall be performed by a competent attendant who shall remain at the LP gas dispenser during the entire transfer operation.
c. Engines on vehicles shall be turned off while fueling if the fueling operation involves venting to the atmosphere.
d. There shall be no smoking on the driveway of the (fueling area), in the dispensing areas or transport truck unloading areas.
e. Signs prohibiting smoking shall be posted within sight of the person refueling. Letters on such signs shall be not less than 4 inches high. The motors of all vehicles being fueled shall be shut off during the fueling operations.
f. When filling forklift tanks, the employee must wear eye, face and hand protection.
g. No more than two LP Gas containers shall be used on an industrial truck for motor fuel purposes.

h. Industrial trucks shall not be parked and left unattended in areas of possible excessive heat or sources of ignition.
i. All sources of ignition should be eliminated to the extent possible. Conspicuous signs must be posted in the storage area forbidding smoking.
j. For outside tank areas, all readily ignitable material such as weeds and long dry grass shall be removed within 10 feet of any container.
k. Container valves and container accessories:
    i. Valves, fittings, and accessories connected directly to the container including primary shutoff valves, shall have rated working pressure of at least 250 p.s.i.g. and shall be of material and design suitable for LP Gas service. Cast iron shall not be used.
    ii. Shutoff valves shall be located as close to the container as practicable.

J. Changing Vehicle Tire Procedures.

1. All vehicle tire changes must meet the Federal OSHA standard 29 CFR 1910.177 "Servicing Multi-piece and Single Piece Rim Wheels".
2. Additional tire changing procedures apply to all heavy equipment which include:
    a. The tire shall be deflated to 7 pounds pressure or less (both tires, if they are dual wheels) before any other procedure is started to remove the tire and wheel from a piece of heavy equipment.
    b. An air hose extension shall be provided so that this hose can be attached to the valve to inflate the tire and extend out from the tire so the person inflating a tire can be off to one side of the tire and not directly over or in front of the tire and wheel as it is inflated.

K. **Inspection Forms and Training Records.** Appendix A, B, C and D of this policy shall be used to document inspection, training and certification.

APPENDIX A:

FORKLIFT Training Checklist Record

Assigned Employee: _____

Type of Vehicle: _____

Supervisor/Instructor: _____

Date: _____

Part 1: Forklift Safety Policy

— The "Basic Forklift Safety Policy was reviewed with the employee and the written forklift test part 1 and 2 was given and reviewed.

Part 2: Machine Operator Pre-Shift Checklist

— The pre-shift vehicle checklist was reviewed and the employee was shown and demonstrated the visual inspection procedures per form (see attached).

Part 3: Driver Skill Demonstration

— The vehicle operation and controls were demonstrated. The employee was observed during operation of the vehicle which included the following driving skill test:

— Handling of the vehicle including: forward, backwards driving while unloaded

— Handling the vehicle with a banded or bundled load and rearranging a stack of boxes or other materials on pallet

— Hauling unbanded material.

— Demonstrates the ability to keep the load under control and follows vehicle driving procedures as outlined in the OR-OSHA rules and basic safety procedures.

— Demonstrates proper method for parking the vehicle.

Comments: Observations - Driving Ability:

APPENDIX B

Lift Truck Operator Inspection Checklist

A. Inspection before Operations - Checks with Engine Stopped

Vehicle Element	Initial if OK, note any concerns
1. Fuel level	
2. Oil level in the engine, and hydraulic tank	
3. Coolant levels and condition of the drive belts	
4. Condition of the radiator	
5. Condition of the forks, carriage, chains, upright & overhead guard	
6. Leads from the engine, transmission, hydraulic system & fuel system	
7. Condition of wheels, tires, and air pressure of pneumatic tires	
8. Seat belt latches properly	
9. Seat is secure & latched to the hood	
10. Hood is securely latched.	

B. Check with Engine Running

(Note: make sure that the area around the lift truck is clear before starting the engine or making any operational checks).

1. Vehicle Element	Check if OK, note any problems
2. Check the operation of the horn, gauges and indicator lights	
3. Check the oil level in the powershift transmission or oil clutch system when the engine is running at idle.	
4. Operate the LIFT, TILT, and auxiliary functions to check for correct operations.	
5. Check the operation of manual transmission and clutch.	
6. Check the operation of the powershift transmission, MONOTROL pedal or the direction control lever and accelerator pedal.	
7. Check the operation of the service brakes and parking brakes	
8. Check the operation of the steering system. Driving and Direction Changes.	

APPENDIX C

Forklift & Vehicle Operator Test

CIRCLE THE CORRECT ANSWER

Part 1: Inspection, Maintenance & Vehicle Care

1. The operator shall make an operational test or check of all parts which are vital to safe operation:
    a) Annually
    b) Monthly
    c) At the start of each shift or prior to use for the day
    d) When the maintenance staff has time

2. Any necessary repairs or adjustments must be made:
    a) Before the vehicle is put into operation
    b) At the end of the shift
    c) Whenever the vehicle is scheduled for routine maintenance
    d) By maintenance staff when it seems really serious

3. If during operation the driver notices a problem with the vehicle they should:
    a) Attempt to make repairs themselves
    b) Take the vehicle out of service immediately and notify his/her supervisor of the malfunction or unsafe condition
    c) Use the vehicle to complete the job and then report it at the end of shift
    d) Not worry about it

4. Operator's cab area must be kept clear of tools and other materials.
    a) True
    b) False

5. When vehicles are being fueled, the motor must be turned off and no smoking allowed in the vicinity.
    a) True
    b) False

6. Hands, soles of shoes, steering wheels and control pedals must be kept free of slippery substances such as oil and grease.
    a) True
    b) False

7. Which of the following defects discovered by the operator during a routine check would qualify the vehicle to be "taken out of service":

a) Missing guard on the mast
b) Oil leak
c) Deformed overhead protection
d) Exposed exhaust pipe
e) All of the above

Part 2: Safe Operation of the Forklift

8. Passenger may be allowed on a forklift if:
    a) He or she is the manager
    b) He or she only wants to ride a short way
    c) Never

9. Forklifts are steered by the:
    a) Front wheels
    b) Back wheels

10. To keep loads from sliding off the forks, always place the forks under the load as far as possible, at the center of its weight and lift with the mast vertical or slightly tilted back.
    a) True
    b) False

11. Forklifts are so stable that bumps, holes and slick spots cannot upset them or cause loads to spill.
    a) True
    b) False

12. Forklifts are open to allow the driver easy access; therefore, it is permissible to have arms, legs or head outside of the canopy when traveling or operating the vehicle.
    a) True
    b) False

13. A forklift is considered unattended when:
    a) The driver is 25 feet or more away
    b) The vehicle is out of view of the operator
    c) The supervisors said it is OK
    d) Both a & b

14. Whenever the vehicle is unattended, the engine must be shut off, the controls neutralized, the parking brake set and the forks fully lowered.
    a) True
    b) False

15. Many forklift accidents have occurred due to:

a) Masts colliding with overhead beams or pipes
b) The operator not watching the direction of travel
c) Traveling with forks in the raised position
d) All of the above

16. When going down inclines, drive in reverse. Drive forward when climbing inclines.
    a) True
    b) False

17. Forklifts may be used as heavy-duty jacks.
    a) True
    b) False

18. When traveling with a load, it doesn't matter what level the forks are as long as the operator can see:
    a) True
    b) False

19. Loads may be lifted while traveling.
    a) True
    b) False

Forklift Instruction's Answer Sheet

Question	Answer	Explanation
Part I.		
1.	c.	Each operator must visually inspect the vehicle for leaks or deformities, missing guards or parts as well as doing an operational check on controls, brakes, horns and other warning devices.
2.	a.	No vehicle may be operated until all defects are repaired.
3.	b.	Until repaired, any defective vehicle must be removed from service and only authorized personnel allowed to work on forklifts.
4.	a. True	Loose articles may interfere with safe operations of the vehicle or may strike the operator or pedestrians should the vehicle stop suddenly or make a sharp turn.
5.	a. True	This should be standard operating procedure for all fuels to prevent fire and explosion.
6.	a. True	Oily hands and feet may cause the operator to lose control of the vehicle.
7.	e.	Chains/sprockets which can be contacted by the operator must be guarded; all leaks must be repaired; canopies must maintain strength integrity to protect the operator from falling objects, hot surfaces which can be contacted by the operator must be insulted or guarded.
PART II.		
8.	c.	Riders are never permitted on forklifts unless proper seats are provided within the canopy.
9.	b.	Because they are steered with the rear wheels, the rear end swings can injury workers on the floor. The operator must always be aware of the rear swing hazard.
10.	a. True	The load should be tilted only enough so the load rests against the heel of the forks or the back load rest.
11.	b. False	Any of these conditions can cause the vehicle to upset. Surfaces should be leveled and holes filled in. All slick spots should be cleaned up or neutralized.
12.	b. False	No part of the body is allowed outside of the canopy when traveling or operating the vehicle.
13.	d.	Unattended vehicle occurs when the operator is 25 feet or more away even if the vehicle is still in sight or whenever the operator cannot see the vehicle no matter what the distance.
14.	a. True	In both instances cited in 6 above, the vehicle must be rendered harmless when "unattended".
15.	d.	It is essential that the operator by aware of overhead clearance

		restrictions, that the direction of travel be watched and that the forks be kept as low as possible at all times when traveling.
16.	a. True	In order to keep the load against the heel of the forks, drive in reverse when going down inclines, forward when climbing inclines.
17.	b. False	Forklifts, as well as all other equipment, must be used for the purpose they were designed for. Using the vehicle as a heavy duty jack can easily exceed its capacity.
18.	b. False	Loads should be carried close to the ground. Usually 6 inches or just high enough to clear rises and bumps on the driving surface. When they are carried too high the stability of the truck is affected. There is also the possibility that the load or a part of it can fall on someone. If visibility is the problem, turn around, travel in reverse and face the direction of travel.
19.	b. False	Lifting the load while traveling may seem the natural thing to do but the stability of the truck is affected by this practice. Do not lift the load while traveling.

APPENDIX D:

FORKLIFT TRAINING CERTIFICATION

The forklift training regulations require that employees be trained and certified with a valid license before they are allowed to drive.

This is to certify that _____ has satisfactorily completed a basic lift truck operator training program that has included the following material:

1. Safety Equipment
2. Visual Checks
3. Load Handling Equipment
4. Hydraulic System
5. Fluid Leaks
6. Fluid Levels
7. Operational Checks
8. Safe Refueling Procedures
9. Knowing the Truck
10. Handling Loads
11. Safe Driving
12. Parking Your Forklift
13. Staying Alert
14. What to Do in an Emergency
15. Safety Rules

I have had my responsibilities relating to the handling and care and safe operation of basic lift truck operation explained to me. I understand that I can be held accountable for any deliberate act or negligence that pertains to my duties in operating a lift truck.

Employee Signature: _____ Date: _____

The above employee has passed/not passed the written test.

Instructor Signature: _____ Date: _____

The above employee has passed/note passed the driving portion of the forklift testing.

Instructor Signature: : _____ Date: _____

7.9 CONTRACTOR SAFETY AND HEALTH HAZARD CONTROL NOTIFICATION POLICY

A. General Policy. The County shall assign a Project Manager to each work project. The Project Manager shall be responsible for coordinating the work project and for notifying Contractors of safety and health hazards. Such notification does not reduce the contractor's safety responsibilities to his or her employees.

B. Applicable Legal Standards.

State: OAR 437 Division 2

Federal: 29 CFR 1910.1200

C. **Informing Contractors of Hazard Communication Program.** When outside contractors perform work in County properties the Project Manager shall ensure that the contractor is informed of any hazardous chemicals and necessary controls. The Project Manager shall provide the contractor with access to the Material Safety Data Sheets as necessary.