Hillsboro
OREGON

Risk Management Manual 2022

"Creating Proactive Solutions to Empower and Protect"

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Your Safety Matters

Hi Everyone,

I'm confident you know this — and it's worth repeating:

The City of Hillsboro is committed to providing a safe and healthful work environment for all employees.

How do we walk our talk?

- **Our Human Resources Department's Risk Management Division…** leads a Safety and Loss Control Program to prevent accidents by identifying hazards and training employees.

- **Each City department…** is responsible for providing and maintaining safe equipment and materials, and for ensuring employees are trained to perform their jobs safely. Risk Management staff help departments to develop and implement rules and operational procedures to ensure safe operations.

- **Each City employee…** must follow established rules and procedures, and report unsafe conditions and accidents to their supervisor. Supervisors then relay that information to assure that appropriate corrections are made.

- **The City's Safety Committees…** play a significant role in workplace safety. Department managers and staff participate on and support the work of the committees.

Maintaining a safe work environment requires your commitment, constant attention, and continual effort. Risk Management staff are available to assist you and your department. When you are healthy, injury-free, and safe, your quality of life and your ability to perform well at work significantly increases. Let's work together to achieve this.

Robby Hammond
City Manager

P.S. Have fun at work. Just do it safely.

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Risk Management

RISK MANAGEMENT OVERVIEW

To minimize the cost of risk and maximize protection of the City's assets. It is argued that there is a "risk" component in all that is done by the City. While Risk Management participates in a variety of roles throughout the city, our main focus and responsibility is the management and administration of the City's insurance and OSHA compliance / safety programs. Risk Management provides the following services to City Departments:

- Administration and management of:
    - City's insurance program in purchasing, placement and continuous oversight
    - General liability, auto, property and workers' compensation claims
    - Special Event Insurance Program (formerly known as Tenant User Liability Insurance Program/TULIP)
    - Bonds (Finance and DEQ)
    - Third party recovery for claims paid from the City's self-insurance fund
    - ADA compliance for City facilities and services
- City-Wide safety & loss control program
- Risk and safety related program development and implementation
- Plan review for OSHA and safety requirements (for City facilities)
- Safety training
- Internal consulting services for departments on risk / safety related issues
- Review of City contracts for insurance and indemnification requirements
- Continuity of Operations Planning (COOP)
- Emergency Response Team (ERT) coordination

The City contracts with an insurance service broker **Brown & Brown Northwest** to negotiate and place insurance coverage on behalf of the City. The City's liability and auto insurance is placed with **CityCounty Insurance Services** (CIS). CIS is an insurance pool designed specifically for city and county municipalities in Oregon. Our Property coverage is placed with **Alliant Insurance Services**. The City is self-insured for its workers' compensation exposures and contracts with **TriStar Risk Management** as our Third Party Administrator (TPA) to manage claims filed by City employees.

Knowing the business of the City is essential to the development of comprehensive risk and safety programs that address the specific and unique needs of the organization. Working closely with City Departments provides Risk Management the opportunity to understand the details for effective and relevant program development.

"Creating proactive solutions to empower and protect" is the mission of Risk Management. Empowering our employees with knowledge and skills provides the necessary foundation to protect what matters most.

Risk Management Staff: *SueLing Gandee - Risk Manager, Tanya Woodson - Risk Management Analyst, David Gardner – Safety Officer, Shibuki Hanai - Risk Management Analyst*

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Risk Management
INSURANCE PROGRAM DESCRIPTION

The role of Risk Management is to successfully manage the City's various risk exposures through the purchasing of cost effective insurance, combined with the development and implementation of proven loss control programs. Risk Management partners with individual department to identify risk exposures in tort and general liability, employee safety, damage and destruction of assets, errors and omissions, and natural hazards.

Centralizing the risk management function allows for efficient compilation of information of City's programs and activities that represent a thorough and complete picture of the City's business and operations. Recommendations are made to the Executive Management Team regarding risk exposures, risk financing techniques, insurance coverage, limits and deductibles based on the understanding of City's business, historical loss information, actuarial studies, financial markets and proven best practices. At the direction of the Water Department Director, Risk Management also secures insurance for the Joint Water Commission and the Barney Reservoir Joint Owner Commission.

Public Entity Liability, Property and Other Insurance Coverage
The City procures our liability insurance through CityCounty Insurance Services (CIS) which is a membership insurance pool. CIS public entity liability insurance includes general liability, public official liability, employment practices liability and excess liability. We also procure auto liability and auto physical damage coverage with CIS. Our Property insurance is with Alliant Insurance Services which includes an all-risk coverage, earthquake and flood, loss of revenue, mobile equipment, and cyber liability. Other insurance includes surety bonds for DEQ, Finance and City Recorder exposures, and crime coverage.

Workers' Compensation
As of July 1, 2008, the City became a self-insured employer for its workers' compensation exposure as allowed under ORS 656.430. Workers' compensation insurance provides certain benefits to employees (including reserve police officers and firefighters) who are injured on the job.

Volunteers (excluding reserve police officers and firefighters) who are registered with the City and injured while performing volunteer services are covered under the City's medical only policy. This policy provides certain medical only benefits and is secondary to any other coverages the volunteer may have at the time of injury.

Insurance premiums paid by the City are budgeted and recognized in the Risk Management fund. These costs are allocated to the different funds based on exposure (operating budget or payroll) and historical loss information.

All claims are processed through the Risk Management office.

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"Creating proactive solutions to empower and protect."

CERTIFICATE OF SELF-INSURANCE

Name of Self-Insured:	City of Hillsboro
Insurer Number:	1376
Principal Address:	150 E. Main Street Hillsboro, OR 97123
Policy Period:	July 1, 2008 until cancelled

The City of Hillsboro is self-insured for its WORKERS' COMPENSATION coverage in accordance with the provisions of ORS 656.430. The City maintains an insurance fund to pay for all costs and expenses related to claims for which it is self-insured.

City of Hillsboro
Risk Management

SueLing Gandee

SueLing Gandee, ARM
Risk Manager
Phone: (503) 681-6108
Fax: (503) 681-5215

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RESOLUTION NO. 2263

A RESOLUTION AUTHORIZING THE CITY MANAGER AND RISK MANAGER TO NEGOTIATE AND EXECUTE NECESSARY INSURANCE CONTRACTS AND SETTLEMENTS INCLUDING PROPERTY, LIABILITY AND WORKERS' COMPENSATION CLAIMS.

WHEREAS, the Hillsboro City Council authorized the Risk Manager to negotiate and execute property, liability and workers' compensation insurance contracts; and

WHEREAS, the City has entered a contract for self-insurance with Tristar Risk Management to provide third party administration services to the City; and

WHEREAS, the City wishes to establish an efficient and effective self-insurance management system.

NOW, THEREFORE, THE CITY OF HILLSBORO RESOLVES AS FOLLOWS:

Section 1. The City Council delegates authority to the City Manager to act on behalf of the City on all matters related to insurance contracts and settlements critical to the City's operational goals including self-insurance for workers compensation claims.

Section 2. The City Manager may delegate authority to the Risk Manager to act on behalf of the City on all matters related to workers' compensation. This includes authority to accept, deny or defer claims; authorize payments of workers' compensation benefits in the amounts required by law; and enter settlements of workers' compensation claims on a disputed claims disposition agreement or disputed claim settlement basis.

Section 3. The City Manager is delegated authority to settle claims up to including $20,000, and may delegate authority to the Risk Manager to settle claims up to $10,000. Any settlement of claims over $20,000 must be approved by the City Council.

Introduced and passed by the Council this 15th day of July 2008.

Approved by the Mayor this 15th day of July 2008.

This resolution is effective immediately following adoption by the City Council and signature by the Mayor.

Aron Carleson
Mayor

ATTEST:
City Recorder

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LIABILITY, PROPERTY AND WORKERS' COMPENSATION CLAIMS

Risk Management oversees the handling of all property, liability and workers' compensation claims filed against the City of Hillsboro and its employees. The City is insured with CityCounty Insurance Services (CIS) for liability and Alliant Property Insurance for property exposures and maintains a budgeted fund to pay for claims under the insured deductible. The City is self-insured for workers' compensation and budgets funds to cover claims filed by city employees who are injured on the job.

Claims are investigated and evaluated, then either paid or denied based on their merits. Litigated claims are assigned to outside counsel by either CIS, the Risk Manager, or the Risk Management Analyst. The City works with the attorneys to obtain the most favorable results possible for the City. We are committed to practicing fair and reasonable claims management, while aggressively defending claims without merit.

TYPES OF LIABILITY, PROPERTY AND WORKERS' COMPENSATION CLAIMS

Liability – A claim filed against the City by a third party for damages caused by the negligent acts of the City.

Auto Liability – City employee is involved in a vehicle accident that causes damage to a third party's property or person.

Auto Physical Damage – City employee is involved in a vehicle accident that causes damages to a City vehicle.

Property – Damage and/or loss to City owned property, land or structures.

Third Party Recovery – Payment received from an insurance company or responsible party for damages caused to the City.

Workers' Compensation – Employee is injured while performing job related duties.

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Risk Management
LIABILITY CLAIMS PROCESS

If someone calls in (or appears in person) to file a claim against the City, refer them to Risk Management, or:

1. Obtain the name, address, and phone number of the person filing the claim. Complete a potential liability form for the injured person or damaged property.

2. Get a description of what happened including when, where, how, and what they are expecting from the City.

3. Ask them to submit their claim in writing and attach estimates or receipts for the repairs and any other documentation to support their claim.

4. If they have taken pictures of the damaged property, ask them to submit copies to Risk.

5. Encourage them to contact their own insurance carrier.

6. Let them know that once we have received their paperwork, we will submit it to our insurance carrier, CityCounty Insurance Services (CIS), and that an adjuster may contact them to obtain more information and may want to see the damaged property. Explain that there is no guarantee their claim will be accepted, but it will be submitted to CIS by Risk Management.

Then:

- If the incident was a vehicle accident involving a City vehicle; obtain the vehicle accident form from the department involved.

- Gather any additional information to assist the insurance company in determining whether or not the City was negligent.

- Turn in all paperwork and documentation to Risk Management. Any photos should be sent electronically, if possible.

- Risk Management will complete the process.

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Risk Management

WORKERS' COMPENSATION CLAIMS PROCESS

In the event an employee is injured on the job and seeks medical treatment:

1. Have employee complete an 801 form and submit it to Risk Management, along with an incident report form.

2. Obtain a doctor's note regarding employee's work status such as:
    - Released for full duty
    - Modified or light duty
    - No work

3. Notify the employee's supervisor of any work restrictions.

4. Submit the 801, incident report, and doctor's note to Risk Management.

5. Whenever possible, find light duty in your department if employee is released to light duty work. If light duty is not available, notify Risk Management as they may be able to find light duty in another department.

6. Continue to communicate work status updates to Risk Management.

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VOLUNTEERS AND INSURANCE

Volunteers are covered by one of the following insurance policies.

- Medical Only Policy - All volunteers (excluding reserve police officers and volunteer firefighters) are covered under the City's medical only policy. This policy provides coverage for medical treatment, and is secondary to other medical coverage the volunteer may already have in place. Time loss benefits are not available through this policy.

- Workers' Compensation - Reserve police officers and volunteer firefighters are covered under the City workers' compensation self-insurance which extends benefits for medical treatment and time loss benefits in the event the volunteer is injured and unable to return to their regular paid position.

Example: Volunteer cuts hand while volunteering and requires treatment that includes stitches. If the volunteer has insurance through their current employer, or private health insurance, that insurance would be primary. The City's insurance would pick up costs not covered by the primary coverage. If the volunteer has no health insurance, the City's insurance would be primary and cover costs for the medical treatment related to the injury. The medical only policy does not cover lost wages in the event the volunteer is unable to return to their regular paid job due to the injury.

REPORTING INJURIES AND INCIDENTS

When a volunteer is injured or a property gets damaged during the volunteer service time, it is important that all injuries and accidents, regardless of severity, are reported to Risk Management as soon as possible using the Incident Report Form - Employee.

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Injury Reporting Forms

801 Form – Complete *only* if employee is injured on the job and seeks medical treatment.

Incident Report Form – Employee - Complete if employee is injured on the job whether or employee seeks immediate medical treatment. Also accompanies 801 claim form.

First Aid Log – Complete if employee is treated using items from the first aid kit. (Cuts, burns, stings, etc.). For strain injuries, use an Incident Report Form.

For more information see the Injury Reporting Program in this manual.

Property and Liability Forms

Incident Report Form – Citizen - Use if a citizen is injured on our property or while participating in a City event. Attach any additional information or photos regarding the incident.

Vehicle Crash / Damage Form – Use if involved in a vehicle crash in a City owned vehicle. This form is also used for incidents involving fixed objects such as poles or parked vehicles. Attach photos of the vehicle, estimates, and Police reports, if applicable. Take vehicle to Fleet for inspection.

Property Damage Form – Use to report damage to City property. Attach photos, repair estimates, and Police reports, if applicable.

Property Damage (Non-City Property) Form – Use if City employee or equipment damages someone else's property. (Examples: mailbox, lawn, fence). Provide the citizen with contact information for Risk Management.

Stolen Property Form – Use if City property is stolen. Attach replacement estimate and Police report.

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NEAR MISS / HAZARD REPORT

NAME:		
DATE:	TIME:	AM/PM
LOCATION/CONDITION:		
DESCRIBE THE INCIDENT/HAZARD:		
ROOT CAUSES:		
ACTION(S) TAKEN TO CORRECT THE HAZARD OR PREVENT REOCCURRANCE:		
SUPERVISOR SIGNATURE:		DATE:
SAFETY COMMITTEE REVIEW:		DATE:
COPY TO RISK/Safety Officer	YES/NO	DATE:

NEAR MISS / HAZARD REPORT

The purpose of this form is to improve an employee's ability to notify co-workers, supervisors, managers and Risk Management of a near-miss or hazard. By participating in this process we are able to identify and resolve immediate concerns and identify long range solutions to prevent reoccurrence.

DIRECTIONS:

NAME is optional, but it is helpful in case there are any questions.

DATE and **TIME** of the incident is also helpful to keep chronological order of events. Timely reporting is also important.

LOCATION provides specific detail as to where the incident occurred or **CONDITION** provides added detail as to the circumstances or situation that poses the hazard.

DESCRIBE THE INCIDENT/HAZARD: Describe in detail:

- **Who, What, When, Where, Why, and How** the incident occurred. Again by providing as much detail as possible to describe the incident. Who was involved, how did it happen and what led up to it, where did it occur? You may need to ask these same questions several times to get beyond the surface cause to the root cause
- **Unsafe Conditions**: Poor housekeeping. Poor workstation design or set up. Lack of supervision. Improper maintenance. Slippery conditions. Inadequate guarding. Defective tools/equipment. Insufficient lighting
- **Unsafe Acts:** Lack of proper PPE, Unsafe operation equipment/tools. Improper work technique. Bypass a safety device. Failure to follow SOP or other safety procedure. Horseplay. Drugs or alcohol use

ROOT CAUSES: Describe Immediate and Underlying causes.

- **Immediate Causes:** PPE unavailable. Safe work procedures unavailable on unknown. Using defective equipment or tools. Failure to follow safe work practices. Using equipment/tool improperly. Inadequate guards/barriers. Poor housekeeping. Inadequate ventilation
- **Underlying Cause:** Lack of Knowledge/Experience/Training. Lack of skill or practice. Physical/mental stress. Inadequate supervision. Inadequate maintenance/inspection. Inadequate standard or procedure. Wear and tear. Misuse or abuse

ACTION(S) TAKEN TO CORRECT THE HAZARD OR PREVENT REOCCURRANCE: Describe what immediate actions, if any, and what preventative actions could be taken to prevent future reoccurrence.

FOLLOW-UP DATE: Some hazards may take longer to solve than others, but every incident should have a timeline to be resolve by. Otherwise it gets overlooked or forgotten.

SUPERVISOR'S SIGNATURE. The boss needs to know and be involved both in assessing the situation as well as helping to resolve it.

SAFETY COMMITTEE REVIEW: Employee involvement is critical to maintaining a safe and healthy workplace. The Safety Committee may have additional concerns, knowledge, or recommendations.

COPY TO RISK/ Safety Officer: So the information can be shared with other departments that might have similar situations and increase prevention efforts.

Hillsboro Risk Management

INCIDENT REPORT FORM
Employee's Report

1. **Employee:** Complete page 1, sign, and submit to your supervisor.

2. **Supervisor:** Complete page 2, sign, copy, and file within your department. Please forward the original to Risk Management. Note: If Form 801 is required, please send this report and Form 801 to Risk Management.

☐ **Injury (Immediate Medical Treatment Required from PLHCP)**	☐ **Injury (When No Medical Treatment or No First Aid is Required)**	☐ **Illness (Heat Stress, Chemical Exp., BBP)**

1. Worker's Name: _____ **Phone:**_____		**2. Date of Incident:** _____ **Time of Incident** _____**am☐pm☐**
3. Worker's Occupation:	**4. Specific Location of Incident**	**5. Worker was Working** ☐ Alone ☐ With Co-Workers ☐ Other
6. Job Task at Time of Incident:	**7. Any witnesses?** ☐ Yes ☐ No **Names of Witnesses:**	
8. Employment Category ☐ Regular, full-time ☐ Regular, part-time ☐ Temporary ☐ Seasonal ☐ Volunteer ☐ Other _____	**9. Experience in Occupation at Time of Incident** ☐ Less than 1 month ☐ 1 to 5 months ☐ 6 months to 1year ☐ 1 to 5 years ☐ More than 5 years	
10. Worker's Immediate Supervisor at Time of Incident:		

11. PART OF BODY INJURED OR AFFECTED						
☐ Head/Neck ☐ Back/Shoulder	☐ Chest/Abdomen ☐ Other_____	☐ Upper extremity	☐ Lower extremity	☐ Hand/Finger	☐ Knee	☐ Ankle/Foot

12. NATURE OF INJURY OR ILLNESS			
☐ Abrasion	☐ Burn	☐ Foreign Body	☐ Respiratory
☐ Amputation	☐ Chemical Exposure	☐ Muscle Sprain/Strain	☐ Puncture
☐ Laceration	☐ Fracture	☐ Cumulative Trauma Disorder	Bite ☐ Animal ☐ Insect
☐ Bruise/ Contusion	☐ Dislocation	☐ Heat/ Cold Stress	☐ Needle Stick

13. EMPLOYEE'S DESCRIPTION of INCIDENT (Please include conditions of tools, equipment, environmental conditions, etc., if applicable)

_____ _____

Employee's Signature **Date**

Hillsboro
Risk Management

INCIDENT REPORT FORM
Supervisor's Report

1. SUPERVISORS DESCRIPTION/UNDERSTANDING of ROOT CAUSE of INCIDENT

2. PREVENTIVE MEASURES (What action has been or will be taken to prevent a recurrence?)		
☐ Retrain Employees	☐ Repair/Replace Equipment	☐ Rotate Employees/Job Tasks
☐ Improve Housekeeping	☐ Improve Storage/Arrangement	☐ Task Analysis/Procedure Revision
☐ Identify/Improve PPE	☐ Install/Revise Guards/Devices	☐ Other - Please specify:
☐ Improve Design/Construction	☐ Improve/Change Work Method	

3. Preventive Actions Taken to Prevent Reoccurrence	Person Responsible	Target Date for completion	Date Completed

Supervisor's Signature _____ **Date** _____

Copies to (check all that apply)

☐ Department File

☐ Risk Management

Insert self-insured employer and insurer name, address, phone number, and service company, if any.
TRISTAR Risk Management
P.O. Box 23189
Tigard, OR 97281 -3189

Report of Job Injury or Illness

Workers' compensation claim

Worker

To make a claim for a work-related injury or illness, fill out the worker portion of this form and give it to your employer. **If you do not intend to file a workers' compensation claim with the insurance company, do not sign the signature line.** Your employer will give you a copy.

Date of injury or illness:	Date you left work:	Time you began work on day of injury: ☐ a.m. ☐ p.m.	Regularly scheduled days off: ☐☐☐☐☐☐☐ M T W T F S S	DEPT USE:
Time of injury or illness: ☐ a.m. ☐ p.m.	Time you left work: ☐ a.m. ☐ p.m.	Check here if you have more than one job: ☐		Emp
				Ins
What is your illness or injury? What part of the body? Which side? (Example: Sprained right foot) ☐ Left ☐ Right				Occ
				Nat
What caused it? What were you doing? Include vehicle, machinery, or tool used. (Example: Fell 10 feet when climbing an extension ladder carrying a 40-pound box of roofing materials)				Part
				Ev
				Src
				2src

Information ABOVE this line; date of death, if death occurred; and Oregon OSHA case log number must be released to an authorized worker representative upon request.

Your legal name:	Language preference:	Birthdate:	Gender: M ☐ F ☐
Your mailing address:			
Occupation:	Home phone:	Work phone:	
Names of witnesses:			
Name and phone number of health insurance company:	Name and address of health care provider who treated you for the injury or illness you are now reporting:		
Were you hospitalized overnight? ☐ Yes ☐ No			
Were you treated in the emergency room? ☐ Yes ☐ No			

By my signature, I am making a claim for workers' compensation benefits. The above information is true to the best of my knowledge and belief. I authorize health care providers and other custodians of claim records to release relevant medical records to the workers' compensation insurer, self-insured employer, claim administrator, and the Oregon Department of Consumer and Business Services. **Notice:** Relevant medical records include records of prior treatment for the same conditions or of injuries to the same area of the body. A HIPAA authorization is not required (45 CFR 164.512(I)). Release of HIV/AIDS records, certain drug and alcohol treatment records, and other records protected by state and federal law requires separate authorization.

Worker signature:	Completed by (please print):	Date:

Employer

Complete the rest of this form and give a copy of the form to the worker. Notify your workers' compensation insurance company within five days of knowledge of the claim. Even if the worker does not wish to file a claim, maintain a copy of this form.

Employer legal business name: **City of Hillsboro**	Phone: **503-681-6461**	FEIN: **93-6002183**
If worker leasing company, list client business name: **N/A**		Client FEIN: **N/A**
Address of principal place of business (not P.O. Box): **150 E Main Street, Hillsboro, OR 97123**		Insurance policy no.: **Self Insured**
Street address from which worker is/was supervised: ZIP:		Nature of business in which worker is/was supervised:
Address where event occurred:		
Was injury caused by failure of a machine or product, or by a person other than the injured worker? ☐ Yes ☐ No		
Were other workers injured? ☐ Yes ☐ No		OSHA 300 log case no:

Date employer knew of claim:	Date worker returned to work:	Worker's weekly wage: $	Date worker hired:	If fatal, date of death:

Employer signature:	Name and title (please print):	Date:

OSHA requirements: On-the-job fatalities and catastrophes must be reported to Oregon OSHA within eight hours. Report any accident that results in overnight hospitalization within 24 hours to Oregon OSHA. Call 800-922-2689, 503-378-3272, or Oregon Emergency Response, 800-452-0311, on nights and weekends.

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Return form to:

City of Hillsboro
Human Resources Dept.
150 E. Main Street, 2nd Floor
Hillsboro, OR 97123-4028
FAX: 503-615-3459 Phone: 503-681-6455

RETURN TO WORK INFORMATION

Name of employee	**Job title:**

Please complete the following information and return to HR at the address/fax number indicated above.

Is employee cleared to work ____8 hr shift or ____10 hr shift **Other: _____# hours per shift**

I have reviewed this individual's job requirements. **Yes** ☐ **No** ☐

1. Employee is released to:

☐ **full duty** without limitations, effective (date) _____

☐ **modified duty** from (date) _____ through (date) _____ (Modified duty - specify limitations below.)

☐ **no work until re-evaluation** on (date) _____

	No limitations	**Hours 1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
2. In an eight-hour workday, employee can stand/walk a total of	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. At one time, employee can stand/walk	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. In an eight-hour workday, employee can sit a total of	☐	☐	☐	☐	☐	☐	☐	☐	☐
5. At one time, employee can sit	☐	☐	☐	☐	☐	☐	☐	☐	☐

6. The employee is released to return to work in the following range for lifting, carrying, pushing/pulling:

Pounds	**<10**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**	**75**	**80**	**85**	**90**	**95**	**100**	**>100**
Occasionally	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Frequently	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

7. Employee can use hands for repetitive:

	Right	**Left**
a. Fine manipulation	☐ Yes ☐ No	☐ Yes ☐ No
b. Pushing and pulling	☐ Yes ☐ No	☐ Yes ☐ No
c. Simple grasping	☐ Yes ☐ No	☐ Yes ☐ No
d. Keyboarding	☐ Yes ☐ No	☐ Yes ☐ No

Dominant hand ☐ Right ☐ Left

8. Employee can use feet for repetitive raising and pushing (as in operating foot controls): ☐ Yes ☐ No

9. Employee is able to:	**Continuous 67-100% of the day**	**Frequently 34-66% of the day**	**Occasionally 6-33% of the day**	**Intermittently 1-5% of the day**	**Not at all**
a. Stoop/bend	☐	☐	☐	☐	☐
b. Crouch	☐	☐	☐	☐	☐
c. Crawl	☐	☐	☐	☐	☐
d. Kneel	☐	☐	☐	☐	☐
e. Twist	☐	☐	☐	☐	☐
f. Climb	☐	☐	☐	☐	☐
g. Balance	☐	☐	☐	☐	☐
h. Reach	☐	☐	☐	☐	☐
i. Push/pull	☐	☐	☐	☐	☐

10. Other functional limitations or modifications necessary in employee's employment (medications, vision, etc.):

11. Is a commute to the worksite within the physical capacities of the employee? Yes ☐ No ☐

Can worker commute between home and work in the following ways? Can worker 1) drive a car? Yes ☐ No ☐; OR 2) be a passenger in a car? Yes ☐ No ☐; OR 3) utilize public transportation? Yes ☐ No ☐

12. Additional comments may be written here and on back of form:

Signature of Medical Provider	**Medical Provider's typed or printed name, address, phone and fax:**	**Date**

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Frequently Asked Questions

What is an accident and a near miss?
An accident is considered an unplanned event that resulted in some form of damage, injury or illness which may or may not require immediate medical attention. A near miss is an event that occurred that could have resulted in an accident, but did not. In other words, it was a close call.

Why use the term "incident" and not "accident"?
The accident implies that they are going to happen and there is little one can do to prevent them. Almost 98% of accidents are preventable

Why is incident investigation necessary?
Not only to ensure that injured are cared for and damage repaired, but to identify surface and root causes so that prevention strategies can be put into place to prevent reoccurrence

What is the difference between a surface and root cause?
A surface cause or contributing cause might be not wearing appropriate personal protective equipment (PPE). The root cause might be lack of supplies of PPE, or inadequate supervision to ensure employee had the proper PPE and were using it.

Is it really an "investigation"?
No one likes to be investigated, a more appropriate term would be "analysis". It is a process to identify the specific events, timelines, equipment, process, personnel, condition and other specific controls that occurred allowing the incident to occur.

Will I receive training on the Incident Investigation?
Yes, you will be trained initially. Additional training is provided for supervisors, managers and Safety Committee members and retrained if program changes are made that affect the employees.

INCIDENT INVESTIGATION

Purpose

Oregon Administrative Rule 437-001-0700

The purpose of a formal Incident Investigation process is to assist and analyze the events that led up to an incident. The goal of investigating and analyzing the incident is to determine the root cause and to develop corrective actions to prevent reoccurrence.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Incident Investigation Program
- Support the supervisors and employees during an investigation
- Assist departments with investigation including developing corrective action recommendations
- Periodically audit the Program for effectiveness
- Maintain all records per the City retention schedule

Managers and Supervisors

- Control hazards in the workplace to minimize the risk of incidents
- Conduct accident/incident investigations for all medical treatment injuries and property damage
- Ensure immediate and long term corrective actions are implemented to prevent recurrence
- Ensure Report Forms are properly completed and submitted timely to Risk Management

Employees

- Follow safe work practices and procedures
- Identify and control hazards in the workplace to minimize the risk of incidents
- Report hazardous conditions, near misses, injuries and property damage to your supervisor
- Complete Report Forms
- Assist as requested in all incident investigations

DEFINITIONS

Incident: An occurrence or event that could have serious consequences: an accident, near miss, or the need for first aid.

Accident: An unexpected and undesirable event, especially one resulting in damage, injury or illness.

Near Miss: A narrowly avoided mishap that could have caused property damage, injury or illness, but did not.

First Aid Case: Basic or limited treatment for an illness or injury until definitive medical treatment can be accessed, or until the illness or injury is dealt with (as not all illnesses or injuries will require a higher level of treatment).

Injuries beyond First Aid: An injury or illness that requires a higher level of medical treatment

Property Damage: Scratch, dent, destruction, harm or damage to public or private property

Unsafe Acts: Performance of a task or other activity that is conducted in a manner that may threaten the health and/or safety of workers. For example:

- Lack of or improper use of PPE
- Failure to tag-out/lock-out
- Operating equipment at unsafe manner
- Failure to warn workers in the area of work activity
- Bypass or removal of safety devices
- Using defective equipment
- Use of tools for other than their intended purpose
- Working in hazardous locations without adequate protection or warning
- Improper repair of equipment
- Horseplay

Unsafe Conditions: A condition in the work place that is likely to cause property damage or injury. For example:

- Defective tools, equipment, or supplies
- Inadequate supports or guards
- Inadequate warning systems
- Fire and explosion hazards
- Poor housekeeping
- Uneven walking surfaces
- Excessive noise
- Poor ventilation

Deliberate: Importance of the task, production priorities, win at all costs, “get er done” efforts where completion of the task is made more important than employee safety and health.

Not Deliberate: Unintended, distractions, habits, did not recognize the danger/hazard, lacked training, lack of situational awareness, accepted work practice.

GENERAL REQUIREMENTS

Reporting

All incidents shall be reported immediately (See Reporting Injury Reporting).

Upon notification of an incident, every effort must be made to ensure employees involved have the support they need following the incident. This may include medical treatment, securing the scene, documenting the conditions with photo or notes, identifying employees involved, collect any evidence or data, develop a sequence of events, etc.

Investigation Teams
The supervisor of each department and crew leader are responsible for the investigation of each incident.

When feasible, a team approach should be used. Each team should consist of the Supervisor, a member from Risk Management, the employee(s), and any witnesses involved in the incident. Supervisors play a key role in any investigation, they know the work procedures, the workers, and the equipment involved. The team should also include the employee(s) involved, a member of the Safety Committee and anyone who could contribute to the investigation.

Conducting an Investigation
The Supervisor or team should be assembled and the investigation completed as soon as possible after the incident. Photos, diagrams, and notes made at the scene and during follow-up analysis shall all be preserved and kept with the final investigation report. Interviews with witnesses and those involved shall be conducted in a confidential setting.

In some cases, law enforcement, OSHA, and/or some other regulatory agency may be conducting investigations. The investigation team shall cooperate fully and assist when necessary. Law enforcement or other agency reports may be obtained and attached to other documentation concerning the incident.

Unless everyone keeps an opened mind, the investigation may not reveal the root cause(s) of the incident. Objectivity is a necessary element of a successful investigation. Everyone on the team, regardless of their position or title, needs to understand the importance of being objective. If not, the focus may be on fault finding and not fact finding, leaving the true cause undiscovered.

The goal of an investigation is to answer the following questions:

- Who was involved
- What happened
- Where did the incident take place
- When did the incident occur
- Why did the incident occur (root cause)
- Were the proper tools, equipment used
- Were proper procedures in place and followed
- Were employees properly trained for the task

Keep asking who, what, where, when, why and how questions until sufficient information is gathered to identify and determine surface and root causes

After the investigation is completed, the investigation team is responsible for analyzing the information and developing and implementing corrective action to prevent reoccurrence. A brief follow-up plan shall also be developed to ensure the corrective actions are effective.

Corrective Action
Corrective actions provide managers with not only the data they need to construct an effective and efficient corrective action process, but can be used as input into preventive actions. Any corrective action recommendations made shall be assigned to an individual, work group and/or manager to complete, along with a time line. Keeping in mind, that some recommendation may require additional resources to implement.

Training
Employees will be trained on the Incident Investigation Program initially at the time of hire and retrained if program changes are made that impact the employees.

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Hillsboro
Risk Management

CITY OF HILLSBORO
INCIDENT REPORT - PATRON

(Use for a patron injury not involving property damage. Example: Slip & Fall)

Date of Report**:**	Date and Time of alleged incident**:**
Date alleged incident first became known to City:	
Location of Incident:	

Name, address and phone number of person(s) injured or alleging potential liability against the City:

Name	Address	Phone
Name	Address	Phone
Name	Address	Phone

Description of incident:

If injury, who was injured:	
Nature of Injury:	
Was first aid given? Yes ☐ No ☐	If yes, by whom?
If transported to medical facility, where and how transported?	

Witnesses (Include Name(s) and Phone number):

Name	Phone Number
Name	Phone Number

Additional information:

Signed by:	Printed Name:	
Position:		Date:
Supervisor:		Date:

PLEASE FORWARD A COPY OF THIS FORM TO RISK MANAGEMENT

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Hillsboro
Risk Management

CITY OF HILLSBORO
VEHICLE CRASH / DAMAGE

Driver's Name: _____City Vehicle Number (*if applicable*)_____

Date of accident: _____Time: _____

License Plate No._____Year_____

Make: _____ Model/Style: _____ VIN #_____

Location of crash, including closest cross street: _____

Diagram of crash: (attach photos if available)

Describe what happened: _____

_____

_____

_____

Describe damage to City vehicle: _____

_____

Is City vehicle drivable? Yes ☐ No ☐ If no, was it towed? Yes ☐ No ☐

Location towed to: _____

Dollar estimate to repair City vehicle, if known: _____

If your vehicle is drivable, please take it to Fleet for inspection. Do not leave personal items or City equipment in the vehicle.

INJURIES: Any injuries to occupants (including driver) of City vehicle: Yes ☐ No ☐

If yes, name of injured Person(s) and description of injury: _____

_____

Was injured person treated at crash scene? Yes ☐ No ☐ By whom? _____

Was injured person transported to a medical facility Yes ☐ No ☐

Transportation provided by: _____

Medical Facility Transport to: _____

Oregon law requires **you** to file an Accident and Insurance Report with **DMV** if:

+Damage to vehicle you were driving is over $2,500
+Damage to property other than a vehicle is over $2,500
+Damage to any vehicle is greater than $2,500 and any vehicle is towed from the scene of the crash;
+There is injury or death resulting from the crash; or,
+You are the owner of a vehicle involved in a reportable crash and the driver fails to report the crash.

You must make the report within 72 hours. If you do not report a crash when required to do so, your driving privileges may be suspended by Oregon DMV. Oregon Driver Manual 2019

Other vehicle involved:

(Driver's Name) (Address) (City) (State) (Zip) (Phone)

(Description of Vehicle) (License Plate Number)

(Insurance Company) (Policy Number)

Is driver also owner of vehicle? Yes ☐ No ☐ If No:

(Owner's Name) (Phone) (Address) (City) (State) (Zip)

(Insurance Company) (Policy Number)

Describe damage to vehicle: _____

Vehicle drivable? Yes ☐ No ☐ If no, towed? Yes ☐ No ☐

Location towed to: _____

Dollar estimate to repair vehicle, if known: _____

INJURIES: Any injuries to occupants (including driver) of other vehicle: Yes ☐ No ☐
If yes, name of injured Person(s) and description of injury: _____

Was injured person treated at crash scene? Yes ☐ No ☐ By whom? _____
Was injured person transported to a medical facility Yes ☐ No ☐
Transportation provided by: _____
Medical Facility Transport to: _____

WITNESSES: _____

Additional Comments: _____

Signed By: _____ Printed Name: _____

Position: _____ Date: _____

SUPERVISOR REVIEW

Comments including any Preventative Measures

_____

_____

_____

_____

Supervisor Signature: Date:

Please forward this form to Risk Management
Attach all available information, photos, and correspondence

Hillsboro
Risk Management

CITY OF HILLSBORO
PROPERTY DAMAGE
Not To Be Used For Vehicle Accidents

Date of Incident:	Time of incident:
Location of incident:	

Damage Caused By: Fire ☐ Wind ☐ Theft ☐ Vandalism ☐ Water ☐
Other:

City property damaged:
What happened:

Police or Fire Department Notified? Yes ☐ No ☐
If yes, name of contact person:

Was damage accidentally caused by City employee? Yes ☐ No ☐

If no, provide any known information on party causing damage:

			Arrested: Yes ☐ No ☐
Name	Address	Phone	
			Arrested: Yes ☐ No ☐
Name	Address	Phone	

Is damaged area safe to occupy? Yes ☐ No ☐	If no, Why?
Could damage release any potential contamination from pollution, asbestos or other toxins? Yes ☐ No ☐	
If yes, describe:	
Who discovered damage?	

Witness name and phone #

Signed By:	Print Name:
Position:	Date:
Supervisor:	Date:

PLEASE FORWARD A COPY OF THIS FORM TO RISK MANAGEMENT
ATTACH ALL AVAILABLE INFORMATION AND CORRESPONDENCE

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Hillsboro
Risk Management

CITY OF HILLSBORO
PROPERTY DAMAGE
(NON CITY PROPERTY)

Use this form if a city employee or equipment damaged someone else's property.
DO NOT USE FOR VEHICLE ACCIDENTS OR DAMAGE

Date of Incident:	Time of incident:
Location of incident:	

Damage Caused By: Fire ☐ Wind ☐ Theft ☐ Vandalism ☐ Water ☐
Other:

Property OWNER:
Property damaged:

Police or Fire Department Notified? Yes ☐ No ☐
If yes, name of contact person:

Was damage accidentally caused by City employee? Yes ☐ No ☐

City employees involved in incident:

Name	Work Phone	Describe what happened
Name	Work Phone	Describe what happened

Is damaged area safe to occupy? Yes ☐ No ☐	If no, Why?

Could damage release any potential contamination from pollution, asbestos or other toxins? Yes ☐ No ☐
If yes, describe:
Who discovered damage?

Witnesses:			
Name	Phone	Name	Phone
Name	Phone	Name	Phone

Signed By:	Print Name:
Position:	Date:
Supervisor:	Date:

PLEASE FORWARD A COPY OF THIS FORM TO RISK MANAGEMENTATTACH ALL AVAILABLE INFORMATION AND CORRESPONDENCE

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Hillsboro
Risk Management

CITY OF HILLSBORO
STOLEN PROPERTY

Date of Incident:	Time of incident:
Location of incident:	

Description of city property stolen:
Model #:
Serial #:

Police Department Notified? Yes ☐ No ☐
If yes, name of contact person:

Provide any known information on witnesses and/or others involved:

			Arrested: Yes ☐ No ☐
Name	Address	Phone	
			Arrested: Yes ☐ No ☐
Name	Address	Phone	

Who discovered the missing item(s)?:	

Witnesses:			
Name	Phone	Name	Phone

Signed By:	Printed Name:
Position:	Date:
Supervisor:	Date:

PLEASE FORWARD A COPY OF THIS FORM TO RISK MANAGEMENT ATTACH ALL AVAILABLE INFORMATION AND CORRESPONDENCE

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ADDING / DELETING PROPERTY

To add a vehicle (or licensed trailer) to our insurance policy, please provide the following:

- Date of the purchase.
- Year, make, and model of the vehicle.
- For trucks: 2WD or 4WD, tonnage.
- Value of the vehicle.
- The license plate # when available
- If there is special equipment on the vehicle or trailer, please describe the equipment and its value, if separate from the cost of the vehicle.

The more information we provide on the insurance schedule, the more likely we are to get reimbursed for the full value of a damaged vehicle.

Contact the Facilities and Fleet Department for licensing, as well as to obtain fuel cards.

To add mobile equipment, please provide the following:

- Date of the purchase.
- Year, make, model, and serial number of the equipment.
- Description of the equipment.
- Value of the equipment.

Our deductible for mobile equipment is $5,000.

Mobile equipment is defined as various types of land vehicles and the equipment attached to them. (Unlicensed equipment, tractors, forklifts, excavators, aerators, generators, etc.)

ADDING / DELETING PROPERTY

To add property, structures/buildings; we need:

- Date of the purchase.
- Physical address of the property.
- Building value
  - total square feet,
  - content value,
  - type of construction,
  - year built,
  - number of stories,
  - sprinkler system,
  - alarm system,
  - fencing,
  - generator,
  - additions you feel are important for insurance purposes.
- Appraisal, if one is available.
- If land only and no structure(s),
  - total area of land,
  - the purchase price,
  - address or property coordinates

Risk Management
CERTIFICATE OF INSURANCE

When the City enters into an agreement or contract with another public entity or private company, we are often asked to provide a certificate of insurance. This certificate is issued by the City's insurance broker and provides information about the City's insurance coverage. It will list the effective date of the policy, type of insurance coverage and the dollar limit for the coverage. The certificate does not confer any right to coverage but rather provides information only.

INFORMATION NEEDED FOR CITY TO ISSUE A CERTIFICATE OF INSURANCE

Example: City is planning to rent a space for a training on October 10, 2020. Owner of building requires a certificate.

To request a certificate, email the following information to Risk Management:

- Certificate Holder: Name and address of company requesting the certificate
- Reason for request: City is entering into an agreement or contract
- Brief description of agreement or contract: Classroom rental for training.

CITY REQUIREMENTS FOR CERTIFICATE OF INSURANCE

The City will require a certificate of insurance from all contractors, permit requests for special event, general and public right-of-way etc. Contractors and permit applicants are also required to name ***the City, its elected and appointed officials, officers, employees, agents and volunteers*** as additional insureds. Along with the certificate, a copy of the **additional insured endorsement** must be provided. This endorsement modifies the contractor's/applicant's insurance policy to extend coverage to the City.

Coverage types and limits requirement:

General Liability:	$1,000,000 Per Occurrence / $2,000,000 Aggregate
Auto Liability:	$1,000,000 Combined Single Limit for All Auto, Owned, Hired and Non-owned Vehicles
Workers' Compensation:	Statutory Limits
Employers' Liability:	$1,000,000/$1,000,000/$1,000,000 for Each Accident / Each Bodily Injury Disease / Aggregate Bodily Injury Disease
Professional Liability:	$1,000,000 Per Occurrence (if applicable)

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CONTINUITY OF OPERATIONS (COOP) PLANNING

Frequently Asked Questions

What is Continuity of Operations (COOP)?
Oregon Emergency Management defines Continuity of Operations (COOP) as an effort to ensure the stability of critical government business functions during and after a wide range of potential emergencies and events.

What is the goal of COOP plans?
The ultimate goal of a COOP plan is the continuation of City Departments' essential services. To achieve this goal, the objective for the City is to identify its essential functions and ensure that those functions can continue throughout the disruption or resume rapidly after a disruption to normal activities.

Under what conditions will the COOP Plan be activated?
The plan could be activated in response to a wide range of events or situations such as a major fire, natural disaster, threat or actual terrorist attack. The Continuity Plan is activated as a result of a disruption to the normal business operations with no or minimal warning to ensure the City's operations continue on.

What's the difference between Emergency Action Plan (EAP) and COOP?
In general, EAP are actions or functions taken immediately during or following an emergency such as rescue and recovery after a fire or earthquake, while COOP plans capture daily business functions of an organization.

Where can I learn more about COOP?
Risk Management staff and your Department's Point of Contact (POC) will be able to assist you. POC is the individual responsible for coordinating your Department's COOP-related activities and is the principal liaison between Risk Management and the Department. Another source of information is the Independent Study series on COOP (IS 546a and IS 547a) and is offered online by FEMA's Emergency Management Institute.

Continuity of Operations (COOP) Planning

Purpose

The Continuity of Operations (COOP) plan identifies the City's essential functions/services that must continue rapidly after a disruption as well as the resources necessary to perform those functions. It is defined as an effort to ensure the stability of critical government operations during a wide range of potential emergencies and incidents.

RESPONSIBILITIES

COOP planning is a team effort. An effective COOP planning team requires a good mix of Department's employees including members from all levels of management and staff. City of Hillsboro's COOP planning model relies on three critical planning roles:

Risk Management

- Responsible for the City's overall COOP planning process
- Manage the account for the BOLD Planning application
- Design, develop, implement, test, training and exercise of COOP plans

City Departments

- Identify Point of Contact (POC) who works with Risk Management as a communication liaison
- Communicate with Risk Management when there's a change that impacts the COOP planning process in the Department
- Ensure that the department is capable of carrying out each respective function related to COOP, including planning, activation and reconstitution

Department Point of Contacts (COOP Coordinator)

- Responsible for maintaining and updating Departments' COOP plan
- Develop Department-specific COOP plan using the BOLD Planning application
- Update information annually and maintenance of current department plans
- Attend training and exercise, and provide feedback on the Department current plan

SCOPE OF COOP

The COOP plans act as a framework to maintain and resume the City's mission and essential functions during events when normal operations are disrupted or threatened. The development of a COOP plan start at department-level. Although there are multiple functions in the City that require coordination between two or more Departments or external partners, typically each Department COOP plan only applies to personnel and facilities of the specific Department (for example: Public Works COOP plan only considers Public Works facilities and Public Works staff). The COOP plans provides the foundation for continuity of critical services and functions for the department.

PLANNING OBJECTIVES

Risk Management supports the City Departments in developing their COOP plan in order to achieve the following objectives:

- Ensure the continuous performance of essential functions during an emergency
- Achieve orderly recovery from emergency operations
- Minimize damage, losses and disruptions to operations
- Protect essential equipment, records and other City assets
- Identify vital resources to accommodate operational and managerial requirements
- Develop orders of succession for key positions and identify delegations of authority

PLANNING CONSIDERATIONS

These are the situations and assumptions to describe the current operating conditions and establishes the parameters under which the City's COOP plans may be activated.

The three most important planning considerations are:

1. Loss of City facility
2. A significant decrease in available staffing, or
3. The loss of utilities and resources including systems, equipment and records.

These types of loss can directly and significantly impact the City's ability to carry on its critical functions and services. The COOP identifies and supports key operational functions, and define the employees' roles in the City's continuity activities.

An emergency condition may require the relocation of the City Departments to the pre-planned continuity (alternate) facility with the following requirements:

- Able to activate COOP and capable of implementing the department COOP plans with or without warning
- Operational no later than 12 hours after activation
- Capable of maintaining sustained operations for up to 30 days
- Able to conduct regular scheduled testing, training and exercising of personnel, equipment, systems, processes, and procedures used to support the organization during a COOP event
- Provide for a regular risk analysis of current alternate operating facilities
- Alternate facilities should be located in areas where the ability to initiate, maintain, and terminate COOP is optimal, and the distance of the alternate facility from the primary facility should be considered.

ELEMENTS OF COOP

A viable COOP consists of ten critical elements and these elements are interconnected, and dependent upon one another. These elements are vital for the plan to be effectively implemented during an emergency. When these COOP elements are properly identified, a COOP plan provides an easy transition back to normal operations at the primary facility.

- Essential Functions
- Delegations of Authority
- Orders of Succession
- Continuity (alternate) Facilities
- Continuity (interoperable) Communications
- Vital Records Management
- Human Capital
- Testing, Training and Exercises (TTE)
- Devolution of Control and Direction
- Reconstitution

PLANNING PROCESS

The COOP planning process is broken down into five different stages.

1. ***Initiation***
   The first step is selecting a Department Point of Contact (POC) as known as a COOP Coordinator for each Department. The COOP Coordinator need to be familiar with the Department's operations. The Department has the discretion to determine who and how many employees should be in the Department COOP Team. Once COOP Team is selected, Departments should coordinate a meeting with Risk Management to discuss the following topics:
   - COOP Project Team organization
   - Roles and responsibilities of individual members and the team as a whole
   - COOP's team objectives and deliverables to ensure the work taken is relevant to the requirements of the project
   - Project milestones to track progress against the approved schedule
   - Coordination with external response agencies
   - Review and approval process
   - Reporting process to be issued by COOP Coordinator to senior management

2. ***Essential Business Functions***
   Essential functions are the foundation for COOP plans. This is the beginning stage of COOP planning for the department. Identifying essential functions must be completed before moving to any other area. In order to arrive at a list of prioritized essential functions, a Department must start with all organizational business functions and progress logically through to the most critical with the following steps:
   - Identify all functions
   - Identify essential functions
   - Determine essential function resource requirements
   - Prioritize essential functions

   Each essential function has associated key personnel and positions that are necessary to the continuity of operations. They represent strategically vital points in management and authority. If these positions are left unattended, the Department will not be able to meet customer needs or fulfill its critical functions. Therefore, these are crucial:

- ***Delegations of Authority*** – specify who is authorized to make decisions or act on behalf of the Department Director and other key individuals if they are not available. In COOP planning, delegations of authority ensures rapid response to an emergency situation that requires COOP activation.
- ***Orders of Succession*** – are provisions for the succession of Department's senior leadership positions during an emergency when the incumbents are unable or unavailable to execute their duties. This will allow for an orderly and predefined transition of leadership. Developing order of succession for key positions is intertwined with determining delegation of authority in an emergency.
- ***Continuity (Alternate) Facilities*** – In the event that an emergency forces a facility or work area (i.e. Civic Center) to be evacuated, key personnel should relocate to an alternate work site that allows the organization to carry out its essential functions and meet the needs of emergency personnel.
- ***Vital Records Management*** – Vital Records are those records that regardless of type, if damaged or destroyed would disrupt organization operations and information flow, cause considerable inconvenience and require replacement or recreation at a substantial expense.

3. Design and Build the Plan

A COOP plan can be activated in part or in whole, depending on the disruption or threat. An effective COOP will outline an executive decision process for the quick and accurate assessment of the situation and determination of the best course of action for response and recovery.

- ***BOLD Planning*** – City of Hillsboro uses the *BOLD Planning* online software. It is a web-based application that allows the City to organize and maintain its COOP information. Risk Management is the administrator of this application and Department COOP coordinators has access to the software and COOP information.

4. Test, Train, and Exercise

The test, train and exercise (TT&E) phase of the planning process is extremely important to create employees' awareness and readiness. It ensures the Departments' COOP plan and all personnel are capable of supporting the continued execution of its essential functions throughout the duration of an emergency situation.

- ***Test*** – Testing is an evaluation of a capability against an established and measurable standard. Tests are conducted to evaluate *capabilities*, not personnel.
- ***Training*** – Training familiarizes Department personnel with the essential functions that they may have to perform in a COOP situation. A minimal, baseline training should include an exercise.
- ***Exercise*** – Exercises are events that allow participants to apply their skills and knowledge to improve operational readiness. They primary purpose of an exercise is to identify areas that require additional training, planning, or other resources.

The objectives of the COOP TT&E includes:

- Assess and validate COOPs' policies and procedures
- Ensure that Department personnel are familiar with COOP procedures
- Ensure that COOP personnel are sufficiently trained to carry out essential functions in a COOP situation
- Test and validate equipment to ensure both internal and external interoperability

5. ***Maintain the Plan***
   To ensure that COOP plans always reflect current conditions, they should be reviewed as part of the training and exercise program. Changes to the Department structure, essential functions, or mission statement should be made to the plan as they occur.

ACTIVATION & RELOCATION

COOP can be activated in part or in whole depending on the disruption or threat. Departments must be prepared to activate their COOPs for all emergencies, with or without warning. Departments must also plan to activate their COOPs during business and non-business hours.

IDENTITY THEFT PREVENTION PROGRAM

Purpose

This policy is intended to establish an Identity Theft Prevention Program ("the Program"). The Program is designed to detect, prevent and mitigate Identity Theft in relation to all sensitive and confidential information entrusted with the City, and all business transactions where the City acts as a creditor as defined under the definitions section of this policy. This policy is two-fold, it sets in policy our responsibility and obligation as owners and custodians. The City is to safeguard all personal information obtained during the course of doing business. The policy also requires the City to set in place red flags or warning signs to help mitigate and detect identify theft for our day to day operations. This relates specifically to City accounts, programs or procedures which allow a person or entity to make multiple payments on personal, family or household accounts monthly or otherwise; or presents a "reasonably foreseeable risk" of Identity Theft.

As a general guideline, this policy will apply to any City account, program, or procedure which allows multiple household payments, personal payments, collects, transfers, stores or records a person's personally identifiable information.

This policy is in compliance with appropriate sections of the Fair and Accurate Credit Transactions Act (FACTA) of 2003 and, complies with the Oregon Identity Theft Act as well as The Red Flags Rule.

After consideration of the size and complexity of the City's operations and the nature and scope of the City's activities, the City's governing body determined that the Program is appropriate for the City and approved the Program on September 8, 2009. In addition to this policy, the City has established guidelines under the Oregon Identity Theft Act to deal with a breach in security. These guidelines are attached as an exhibit to this policy and program.

DEFINITIONS

Fair and Accurate Credit Transactions Act of 2003 is a United States federal law, passed by the United States Congress on November 22, 2003, and signed by President George W. Bush on December 4, 2003, as an amendment to the Fair Credit Reporting Act. The act allows consumers to request and obtain a free credit report once every twelve months from each of the three nationwide consumer credit reporting companies (Equifax, Experian and TransUnion). In cooperation with the Federal Trade Commission, the three major credit reporting agencies set up the website, annualcreditreport.com, to provide free access to annual credit reports. The act also contains provisions to help reduce identity theft, such as the ability for individuals to place alerts on their credit histories if identity theft is suspected, or if deploying overseas in the military, thereby making fraudulent applications for credit more difficult. Further, it

requires secure disposal of consumer information. For the complete Act see http://www.ftc.gov/os/statutes/fcrajump.shtm.

Oregon Identity Theft Act is a requirement to develop safeguards for personal information. Persons that own, maintain or otherwise possess data that includes a consumer's personal information that is used in the course of the person's business, vocation, occupation or volunteer activities must develop, implement and maintain reasonable safeguards to protect the security, confidentiality and integrity of the personal information, including disposal of the data. Any breach of security is dealt with as described by the Act. For the complete Act see http://www.cbs.state.or.us/dfcs/id_theft.html.

The Red Flag Rule was created by the Federal Trade Commission to help prevent identity theft. This act was passed in January 2008, and was to be in place by November 1, 2008. Due to push backs by opposition; the deadline was extended to January 1, 2009. The Red Flags Rule defines who is required to have a adopted identify theft program and for those required to have such a program sets out how certain businesses and organizations must develop, implement, and administer their Identity Theft Prevention Programs. Your Program must include four basic elements, which together create a framework to address the threat of identity theft. The four basic elements to the program are: Identify Relevant Red Flags; Detect Red Flags; Prevent and Mitigate Identity Theft; Update your Program. For the complete Act see http://www.ftc.gov/bcp/edu/pubs/business/alerts/alt050.shtm.

Covered Account, under the Red Flag Rule is defined as and includes:

1. An account offered and maintained primarily for personal, family, or household purposes that involves or is designed to permit multiple payments or transactions. Covered accounts may include credit card accounts, LID loans, margin accounts, cell phone accounts, utility accounts, checking and/or savings accounts; and
2. Any other account offered and maintained for which there is a reasonably foreseeable risk of Identity Theft to customers or a risk to the safety and soundness of the City's utility of Identity Theft, including financial, operational, compliance, reputation or litigation risks.

Identity Theft means fraud committed or attempted using the Identifying Information of another person without authority.

Red Flag means a pattern, practice or specific activity that indicates the possible existence of Identity Theft.

Identifying Information means any name or number that may be used, alone or in conjunction with any other information, to identify a specific person, including: name, address, telephone number, Social Security number, date of birth, government-issued driver's license or identification number, alien registration number, government passport number, employer or taxpayer identification number, or unique electronic identification number.

Security Information is defined as government data the disclosure of which would be likely to substantially jeopardize the security of Identifying Information for individuals and/or businesses.

PROGRAM

The Program is intended to cover the following areas:
For purposes of compliance with "The Red Flag Rule", City staff has identified the following as covered accounts as defined by the rule:

1. Utility Billing Accounts established for payment of Sewer, Water, Surface Water Management and Transportation Utility Fees
2. Lien Accounts established for purposes of payment of System Development Charges over time

For purposes of compliance with the Oregon Identity Theft Act, staff has identified the following as areas where information is obtained from employees and customers that requires security measures to ensure the safety of the information against potential security breaches:

1. Payroll records
2. Lien records
3. Accounts payable vendor records
4. Utility Billing customer account records
5. Human Resources records
6. Police Records
7. And any other records that may contain personal information

The City hereby establishes an Identity Theft Prevention Program to detect, prevent, and mitigate Identity Theft. This Program enables the City to protect existing external customers and internal employees, reducing risk from identity fraud, and minimize potential damage to the City from fraudulent new accounts. The Program will help the City:

1. Identify Red Flags for covered accounts and incorporate those Red Flags into the Program;
2. Detect Red Flags that have been incorporated into the Program;
3. Respond appropriately to a detected Red Flag to prevent and mitigate Identity Theft; and
4. Update the Program periodically to reflect changes in risks to customers and to ensure the safety and soundness of the utility from Identity Theft.

PROGRAM ADMINISTRATION

Involvement of management

Operational responsibility for developing, implementing and updating this Program lies with the Identity Theft Prevention Committee (the "Committee"), which consists of the following members:

1. Finance Director

2. Human Resources Director
3. Accounting Manager
4. Information Systems Division Manager
5. Risk Manager
6. Utility Billing Supervisor
7. Police Department representative

The Identity Theft Prevention Committee will be responsible to:

1. Evaluate City operations and activities to identify and report greatest areas of risk
2. Develop and deliver training on identifying Red Flags on covered accounts
3. Establish systems to adequately detect and report Red Flags for covered accounts
4. Evaluate identified Red Flags and initiate adequate responses to occurrences
5. Update the Program and systems as needed to reflect changes in risks
6. Meet regularly to receive reports of Identity Theft and/or occurrences of Red Flags and assess the need for Program updates

Staff training and Reports

Staff responsible for implementing the Program will be trained by or under the direction of the Identity Theft Prevention Committee. Staff will provide timely reports to the Committee on all incidents of Identity Theft or occurrences of Red Flags.

Department Heads are responsible for familiarizing themselves with the Program. Department Heads shall meet with their staff annually to assess current compliance.

Program Updates

The Committee will review and update this Program at least once a year to reflect changes in risks to customers and the soundness of City programs from Identity Theft. In doing so, the Committee will consider the City's experience with Identity Theft situations, changes in Identity Theft methods, changes in Identity Theft detection and prevention methods, and changes in the City's business arrangements with other entities. After considering these factors, including the degree of Identity Theft risk posed, the Committee will determine whether changes to the Program, including the listing of new Red Flags, are warranted. If warranted, the Committee will update the Program or present the City's governing body with recommended changes and the governing body will make a determination of whether to accept, modify or reject those changes to the Program.

IDENTIFICATION OF RED FLAGS

In order to identify Red Flags, the City considers the types of accounts or programs it offers and maintains, the methods it uses to open and access accounts, and its previous experiences with Identity Theft. The City has identified the following Red Flags in each of the listed categories:

Notifications and Warnings from Credit Reporting Agencies or Others

Red Flags

- Report of fraud accompanying a credit report;
- Notice or report from a credit agency of a credit freeze on a customer or applicant;
- Notice or report from a credit agency of an active duty alert for an applicant; and
- Indication from a credit report of activity that is inconsistent with a customer's usual pattern or activity.
- Notice from a customer, Identity Theft victim, law enforcement or other person that the City has opened or is maintaining a fraudulent account for a person engaged in Identity Theft.

Suspicious Documents

Red Flags

- Documents provided for identification that appear to be inauthentic, altered or forged.
- The photograph or physical description on the identification is not consistent with the appearance of the customer presenting the identification.
- Other information on the identification is not consistent with information provided by the person or already on file with the City (such as a signature).

Suspicious Personal Identifying Information

Red Flags

- Identifying Information presented is inconsistent with other information the customer provides (ex. inconsistent birth dates)
- The address is fictitious, a mail drop, or a prison; or
- The phone number is invalid or is associated with a pager or answering service.
- The address or telephone number provided is the same as or similar to the address or telephone number submitted by an unusually large number of other customers or other persons opening accounts, or other know fraudulent accounts.
- The customer or the person opening the covered account fails to provide all required personal identifying information
- Personal identifying information provided is not consistent with personal identifying information that is on file with the City.

Unusual use of, or suspicious activity related to, the covered account

Red Flags

- Shortly following the notice of a change of address for a covered account, the City receives a request for the addition of authorized users on the account or a change to the account holder's name.
- Previous patterns of account use change (example: payments stop on an otherwise consistently current account or a change activity level)

- A new account is used in a manner commonly associated with known patterns of fraud patterns. For example, the customer fails to make the first payment or makes an initial payment but no subsequent payments
- A covered account that has been inactive for a reasonably lengthy period of time is used (taking into consideration the type of account, the expected pattern of usage and other relevant factors).
- Mail sent to the customer is returned repeatedly as undeliverable although transactions continue to be conducted in connection with the customer's covered account.
- The City is notified that the customer is not receiving paper account statements.
- The City is notified of unauthorized charges or transactions in connection with a customer's covered account.
- The City receives notice from customers, victims of identity theft, law enforcement authorities, or other persons regarding possible identity theft in connection with covered accounts held by the City
- The City is notified by a customer, a victim of identity theft, a law enforcement authority, or any other person that it has opened a fraudulent account for a person engaged in identity theft.

DETECTING RED FLAGS

New Accounts

In order to detect any of the Red Flags identified above associated with the opening of a new account or program which pertains to household or personal matters (such as a utility account) or which presents a foreseeable risk of Identity Theft, City personnel will take the following steps to obtain and verify the identity of the person or business opening the account:

1. Require certain Identifying Information, including:
   a. Full name;
   b. Date of birth (for individual);
   c. Previous and current residential or business address;
   d. Principal place of business (for an entity); and
   e. Identification (for in-person transactions), which may include:
      - Taxpayer Identification Number or Social Security number
      - Photo-bearing documents (driver's license, ID card, etc.)
      - Passport
      - Alien Identification Number

2. Review all documentation for Red Flags; and/or independently contact the customer.

Existing Accounts

In order to detect any of the Red Flags identified above for an **existing account or program**, personnel will take the below steps to monitor transactions with an account. City personnel have the discretion to determine the degree of risk posed and to act accordingly.

1. Verify customer's Identifying Information if a customer requests any information on the account (this can be done in person, via telephone, via facsimile, or via email);
2. Verify the validity of requests to change billing addresses; and
3. Verify changes in banking information given for payment purposes.

PREVENTING AND MITIGATING IDENTITY THEFT

Ongoing Operations to Prevent Identity Theft

In order to further prevent the likelihood of Identity Theft, personnel will take the below steps, commensurate with the degree of risk posed, regarding ongoing internal operating procedures. City personnel have the discretion to determine the degree of risk posed and to act accordingly.

- Ensure that its website is secure or provide clear notice that the website is not secure;
- Ensure complete and secure destruction of paper documents and computer files containing Identifying Information;
- Ensure that office computers are password protected;
- Keep offices clear of papers containing customer information;
- Ensure computer virus protection is up-to-date;
- Require and keep only information necessary for business purposes;
- Transmit Identifying Information using only approved methods and include the following statement on any transmitted Identifying Information:

  "This message may contain confidential and/or proprietary information, and is intended for the person/entity to which it was originally addressed. If you have received this email by error, please contact the City and then shred the original document. Any use by others is strictly prohibited."
- Do not use or post customer's Social Security number as an account identifier or on any other documents unless requested by customer or required by federal law (such as W-2 forms).

RESPONDING TO RED FLAGS

In the event City personnel detect Red Flags, they will take one or more of the below steps, commensurate with the degree of risk posed, to prevent and mitigate risk of Identity Theft. City personnel have the discretion to determine the degree of risk posed and to act accordingly.

- Continue to monitor an account for evidence of Identity Theft;

- Contact the customer either by written notice or telephone;
- Refuse to open a new account;
- Close an existing account;
- Reopen an account with a new number;
- Notify the appropriate Committee member for determination of the appropriate step(s) to take;
- Notify law enforcement; or
- Determine that no response is warranted under the particular circumstances.

SERVICE PROVIDER AGREEMENTS

It is the responsibility of the City to ensure that the activities of all service providers related to covered accounts are conducted in accordance with reasonable policies and procedures designed to detect, prevent, and mitigate the risk of identity theft.

A service provider that maintains its own identity theft prevention program, consistent with the guidance of the red flag rules and validated by appropriate due diligence, may be considered to be meeting these requirements.

Any specific requirements should be specifically addressed in the appropriate contract arrangements.

Risk Management
IDENTITY THEFT PROTECTION GUIDELINES

The City of Hillsboro is entrusted with many varieties of sensitive and confidential information. This includes the personal information of consumer including clients, customers, licensees and employees. As owners and custodians of that information, we are responsible for protecting those assets from loss or misuse.

The Oregon Identity Theft Act (SB 583) was passed in 2007 and contains standards to shield social security numbers, notify consumers in case of a security breach, and safeguard personal identifying information.

- Protection of personal identifying information
- Safe keeping of sensitive information
- Notification and security freeze options in the event of a security breach

A security breach is defined as an inadvertent release or the theft of personal information that is protected under this act.

SAFEGUARDING OF PERSONAL IDENTIFYING INFORMATION

Each department within the City of Hillsboro shall implement reasonable safeguards to protect the security and confidentiality of personal information obtained from employees and/or customers. These safeguards pertain to personal information during the process when it is received, stored in an electronic system, archived and destroyed.

“Personal Identifying Information” (PII) includes someone’s name (such as an employee or customer) **in combination** with:

- Social Security number,
- Driver’s license or identification card number,
- Passport number,
- Financial account number, credit or debit card number **along with** required security code, access code or password.

Safeguarding PII can be accomplished by using one or all the following controls:

1. **Administrative controls**: Includes implementation of department-level information security policies, employees training and awareness, risk assessments, and managing vendors.

2. **Technical Controls**: Includes managing access to sensitive information, establishing good password practices, encryption, and ongoing monitoring to assess threats and vulnerabilities.
3. **Physical Controls**: Includes establishing physical access controls, managing physical access and securing facilities.

The law specifically outlines as follows how Social Security Numbers are to be protected in order to prevent theft.

- No posting or displaying
- No printing on materials sent through the mail if not requested, unless redacted
- No printing of an individual's SSN on a card used by that person that is then required to access products or services.

Exceptions are for records that are required by state or federal law, including statute, to be made available to the public, that are used for internal verification or administrative processes, or that are used to enforce a judgment or court order. Other exceptions include rules adopted by the courts and copies of records possessed by a Court, the State Court Administrator, or the Secretary of State.

SECURITY BREACH NOTIFICATION

If computerized PII that is maintained by the City is stolen, the City is required to notify the individuals as soon as possible or upon instruction by law enforcement.

In the event that PII has been subject to a security breach, the City will provide notification of the breach to the customer or employee as soon as possible in writing, electronically (if this is the customary means of communication), or via telephone provided that the City is able to make direct contact with the affected customer or employee. Risk Management is to be notified immediately in the event of a security breach.

SUBSTITUTE NOTIFICATION

If the breach is to the degree of significance that:

- the cost of notifying would exceed $250,000 and that the number of those who need to be contacted is over 350,000
- or, if the City does not have the means to sufficiently contact those effected, substitute notice may be given as follows:
    1. Conspicuous posting of the notice or a link to the notice on the City's Web site and,
    2. Notifying a major statewide Oregon television and newspaper media.

ASSESSMENT

Each department should take inventory of the PII that is collected. Risk Management is available to assist in this assessment and should consist of identifying the following:

WHAT? What protected information is collected?

- SSN
- Drivers License
- Passport
- Credit Card along with PIN number

HOW? How is the information

- Collected - paper form, computer, phone
- Stored – on top of desk, filing cabinet, computer system
- Archived – secured or non-secured area, who has access
- Destroyed – recycling box, shredded in house, shredded by contractor

WHY? Evaluate if the information collected is essential to the needs of the organization.

Once this assessment has been completed, it is then necessary to develop and implement procedures that will ensure the protection of this information while it is in the care, custody and control of the department.

PROTECT

The best defense in securing paper documents, as well as CDs, floppy disk, zip drives, tapes, and backups, is locking them in a file cabinet or placing them in a locked room with limited access. Develop a plan for your employees outlining how sensitive information is to be securely stored.

REDUCE

If during your assessment you determine that there is no business need for certain personal indentifying or sensitive information, don't keep it. Refer to the Oregon Records Retention Schedule for retention and destruction. Make sure information no longer needed is destroyed to protect against any unauthorized use or access. Information should be shredded, burned, or pulverized. Any records that are electronic should be erased in such a way that it cannot be read or reconstructed.

TRAIN

Make sure employees know what personal identifying information is, the importance of safeguards and know the security program practices and procedures for your department.

INFORMATION SERVICES DEPARTMENT

The City's Information Services Department will have the responsibility of developing, implementing and maintaining safeguards for information that is contained on the citywide server as it relates to outside attacks or intrusions. **This does not include information that is stored on desktops, cellphones, laptops, thumb drives, other mobile technology, or other information systems for which IS does not administer the functions that control access to the personal information.** If personal information is being maintained on the above units, it will be the responsibility of the Department to identify, assess and implement protections as outlined in this guideline.

Frequently Asked Questions

What is a Mandatory Reporter?
Mandatory reporters are persons who are required by law to report child abuse. All City of Hillsboro employees are mandatory reporters.

When do I make a report?
You are required to report abuse or suspected child abuse or neglect to Child Protective Services (CPS) or law enforcement wherever and whenever you encounter it, even if you are not at work.

Do I need proof of abuse to make a report?
No, you do not have to prove abuse. The law clearly states you must report any reasonable suspicion of child abuse who you came in contact with.

Am I legally liable if it is determined that there was no abuse or neglect?
No, you will not be legally liable. ORS 419.025 provides that anyone who reports in good faith is immune from civil liability.

Am I a mandatory reporter if I don't work with children or families?
Yes. All City of Hillsboro employees are mandatory reporters. You are still required to make a report when encountering child abuse or neglect even if you don't work with children directly.

Mandatory Reporting

Purpose

Oregon Revised Statute Chapter 419B

The state legislature revised Oregon's Mandatory Child Abuse Reporting law, expanding the definition of who is a mandatory reporter of child abuse to include any employee of a public or private organization providing child-related services or activities. The City of Hillsboro provides services for children which makes all City employees mandatory reporters. Mandatory reporters are a crucial link to protect Oregon's most vulnerable citizens.

RESPONSIBILITIES

Employees

- All City of Hillsboro employees are required by law to report child abuse or reasonable suspicion of child abuse or neglect.
- You must report suspected abuse or neglect of a child regardless of whether the knowledge of the abuse was gained in your official capacity at work. Your obligations as a mandatory reporter are specific to you as an individual, not a time period, location, role or duty.
- Informing a supervisor of the child abuse does not fulfill the employee's responsibility under the law. The employee who witnessed the abuse or neglect must make the call to CPS or law enforcement.

HOW TO MAKE A REPORT

Generally, reports are made by phone because the state law requires an oral report. If you suspect a child has been abused, call Child Protective Services (CPS) which is a service of the Department of Human Services (DHS), to discuss your concern. Be ready to provide identifying information such as name and age of the child, and the whereabouts of the child if known.

- Child Protective Services (CPS) | M-F, 8 am – 5pm | 503-648-8951
- DHS Child Welfare Screener | M-F, 8 am – 5 pm | 1-855-503-SAFE (7233)
- CPS After-Hours Emergency | 503-681-6917
- Police Non-Emergency Number | 503-629-0111

When a report is made, DHS will share it with appropriate law enforcement agencies. You should report any reasonable suspicion of abuse, you are not required to prove abuse. If you believe a child is being hurt or is in danger, call 9-1-1 immediately.

DEFINITION OF A CHILD

A child is defined as "a person, married or unmarried, under the age of 18". "Child" also includes an 18, 19, or 20-year-old who lives in a child-caring agency (CCA) or receives

care of services from a CCA. A CCA refers to a private agency or private organization licensed by DHS and includes:

- Psychiatric day treatment for children
- Adoption placements services
- Residential care, including proctor foster care or residential treatment
- Boarding schools
- Outdoor youth programs, or
- Other similar care or services for children

For a complete definition, see ORS 418.205

CATEGORIES OF ABUSE

- Physical Abuse
- Mental injury
- Sexual Abuse
- Neglect
- Threatened harm
- Buying or selling a child
- Permitting a person younger than 18 years of age to enter or remain in or upon premises where methamphetamines are being manufactured
- Unlawful exposure to a controlled substance, as defined in ORD 475.005, that subjects a child to a substantial risk of harm to the child's health or safety

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PERSONAL SAFETY

Compliments of the Hillsboro Police Department

OUT AND ABOUT

- Be aware of your surroundings as you walk. *Keep your head up*!
    - DON'T WALK LIKE A VICTIM
    - WALK WITH CONFIDENCE
- Refrain from using cell phones and headphones.
- Avoid wearing hoods / hats that diminish your view of the surrounding area.
- Don't take short cuts. Stay in high visibility areas.
- Change your route. Don't establish patterns.
- Keep your distance from cars, pillars, buildings, and large, dense shrubbery.
- Working late? Move your vehicle closer before it gets dark.
- Are you wearing comfortable shoes?
- Don't attract attention to yourself. *Examples…like displaying cash / credit cards and wearing expensive jewelry.*
- Is what you're carrying manageable?
- Call a friend or loved one – I'm leaving…
- Have *keys and cell phone* out before leaving and be ready to unlock your door.
- Use the buddy system.

PARKING LOTS

- Resist the temptation to get into confrontations with other drivers over parking spaces.
- If you work or shop at night (or early morning hours), park in a well-lit area.
- ALWAYS lock your vehicle doors, even if you're going to be gone for a few minutes.
- Lock your door, even if you remain in your vehicle.
- Utilize security guard escorts at shopping malls, and other public places.
- Pay attention to where you park.
    - Numbered / colored parking areas or store entrances
    - Don't rely on memory – write it down!

IF YOU FIND YOURSELF IN UNSAFE CIRCUMSTANCES…

- Remember, *YOU* are *MORE IMPORTANT* than *ANY* personal property. *LET IT GO!*
- *FIGHT* to keep yourself from being isolated!
    - Search your surroundings for what you could use as a "weapon."
- *DRAW ATTENTION*
    - Use your voice or break a window.
    - Push the panic button on your car alarm or utilize a personal safety device.
- If someone assaults you, or attempts to assault you, ***REPORT IT – CALL 9-1-1!***

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Risk Management

RULES FOR SERVICE ANIMALS IN CITY BUILDINGS AND PARKS

The City welcomes people with disabilities to bring their service animals into all areas of facilities where members of the public and individuals using City services are normally allowed to go including no pet zones. Under Title II of the ADA law, a “service animal” is any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual or other mental disability. The rule states that other animals, whether wild or domestic, do not qualify as service animals. The rule permits the use of trained miniature horses as alternatives to dogs, subject to certain limitations. The miniature horse is not included in the definition of service animal. However, the new ADA regulations contain a specific provision which covers miniature horses. The City permits the use of a miniature horse if the miniature horse has been individually trained to do work or perform tasks for the benefit of the individual with a disability. Service animals are working animals, not pets. Service animals do not need to have any sort of identifier showing them to be service animals, nor do handlers of service animals need to provide any documentation that the animal is a service animal.

Common service animal tasks include guiding people who are blind, alerting people who are deaf, pulling a wheelchair, alerting and protecting a person who is having a seizure, reminding a person with mental illness to take prescribed medications, calming a person with Post Traumatic Stress Disorder (PTSD) during an anxiety attack, or performing other duties.

The City of Hillsboro does not allow animals into its buildings EXCEPT for the following circumstances:

1. The animal is part of a City pre-approved event,
2. The animal is trained to assist persons with recognized disabilities under the law (i.e. a service animal as defined above),
3. The animal is a service animal in training accompanied by the trainer, or
4. The animal is assisting public officials and their agents, such as law enforcement, fire service or search and rescue, and is accompanied by its handler.

Each department will determine who at each of their sites will have the decision-making authority regarding service animals in the building. This person can be the person-in-charge, officer-of-the-day, or department designee.

Only City employees trained to respond in these circumstances should approach an individual entering a City facility with an animal.

Individuals with animals may **only** be asked **two** questions:

1. Is your animal a service animal? **and**
2. What service is your animal individually trained to provide you?

- ✓ Individuals may not be asked for proof of their disability.
- ✓ Proof or certification of training should not be asked for or required.
- ✓ An animal called a "companion," "therapy," or "social" animal may be a "service animal." In these cases, follow up with the question #2 above regarding individual training.
- ✓ When in doubt, err on the side of admitting the animal, provided the individual makes a reasonable explanation of the service the animal is trained to provide and the animal does not present a health, safety or disruptive risk to other individuals in the City facility.

The rule provides that service animals must be harnessed, leashed, tethered or other source of affirmative means and under the control of their handlers.

If a service animal becomes disruptive and its owner/handler cannot regain control of the animal, or if the animal is directly threatening the health and safety of staff or others, a City employee trained to approach people with animals in City facilities may ask the handler to remove the service animal from the building. Be clear that the <u>animal</u> is being excluded, not the individual.

1. Notify your supervisor if you have asked a person with a service animal to remove it from the facility or a no pet zone.
2. A manager from the site where the service animal was asked to leave should contact Risk Management as soon as possible and inform them of the incident.
3. The manager should complete and forward to Risk Management the <u>Incident Report Form</u> with the name of the individual confronted and explain the situation leading to the animal exclusion.
4. Any individual asked to remove a service animal from a City facility should be offered contact information for the City ADA Compliance Officer (Risk Manager) who will advise them of their right to appeal.

The care and supervision of a service animal is the sole responsibility of the owner/handler. This includes cleanliness of the animal; and maintenance of the animal while in a City facility (i.e., equipment and bags sufficient to clean up and properly dispose of the animal's waste). However, persons with disabilities who cannot clean up after their service animal, may request assistance, should the animal relieve itself. Your department will need to decide who should assist the owner with cleanup.

Emergency Situations. In there is an emergency, emergency and public safety personnel should be made aware that there is a service animal on the premises. Every effort should be made to keep the animal with its owner/handler.

Conflicting Disabilities. In situations where conflicting disabilities may occur due to allergic reaction to animals on City premises, such condition(s) shall be made known to the decision-making authority; action will be taken to consider the needs of both the employee/complaining party and the partner/handler to resolve the problem as efficiently and expeditiously as possible. Risk Management and Human Resources should be contacted to assist with this situation.

Injuries to or caused by the animal while on the City's premises must be reported to the Risk Management as soon as possible regarding the incident. An Incident Report Form should be completed and forwarded to Risk Management.

INTERPRETATION

Any questions about this procedure should be directed to the Risk Manager who is responsible for interpreting and implementing this procedure, and who responds to appeals.

The Questions and Answers below are provided to help City employees respond appropriately to individuals with animals inside City facilities.

Q: Why does the City allow service animals into its buildings?

A. The City welcomes people with disabilities into our buildings with their service animals. We are also required by law to modify our rules regarding no animals in City buildings. This is to allow individuals who need service animals to bring the animals into City facilities. Think of a service animal in the same way you would a wheelchair for someone who cannot walk—the service animal is needed so the person can access City services.

Q. An individual entered the Civic Center building with a pit bull and claimed it is her service animal dog. Can a pit bull be a service animal?

A. Yes. Any dog that has been individually trained to perform a task for the individual is considered a "service animal." Anyone inquiring about an animal should focus on the animal's training and tasks it performs for the individual.

Q: What should I do if an individual refuses to answer the questions I may legally ask about an animal?

A: If an individual refuses to answer the following questions: (1) Is your animal a service animal? and (2) What service is your animal individually trained to provide you? You may exclude the animal from the City facility. Be clear that the animal is being excluded, not the individual. In addition, an individual with an animal should never be asked questions about their disabilities.

There are times when an individual may not be able to answer the two questions you may legally ask. For example, the individual has low cognitive function and cannot formulate reasonable answers. Or, an individual may not be able to articulate a reasonable answer for other reasons. It is always best to err on the side of allowing someone with an animal into a City facility, rather than to disallow an animal in when its owner/partner is incapable of answering the two questions.

Q: I asked the questions and the individual responded that the animal is a service animal for someone else, or that it makes other people in its presence feel calm. Should I let the animal into the City facility?

A: No. A service animal is only allowed to accompany its owner/partner/handler—the person it is serving—or its trainer inside a City facility. While certain animals may make other people feel good or calm or happy, those animals do not fit the definition of a "service animal" that may accompany its owner/partner/handler into a City facility.

Q: An individual with a dog wearing a vest that says "service animal" came into my building. When I asked if it were a service animal, he pointed to the vest and said yes. When I asked him about the service the dog provides him, he pointed to the vest again. Was the dog a service animal?

A: Maybe. A service animal is NOT required to wear a special vest, harness, or other notification. In fact, such vests, harnesses, etc. are available on the internet to anyone who wants to purchase one. In such a case, the individual should still be asked the two legal questions. The animal should be allowed into City facilities if the individual can provide a reasonable answer to the questions.

Q: A woman who entered a City building with a dog tried to show me a doctor's note that she said explains that her dog is a service animal. What should I have done?

A: Some health care providers write notes for their patients prescribing animals for health reasons. You should never ask to see this type of note. If an individual tries to show you this type of note, you may state that such a note is not necessary, and ask the individual to answer the two questions (1) Is your animal a service animal? and (2) What service is your animal individually trained to provide you?

Again, there are times when an individual may not be able to answer the two questions. For example, the individual has low cognitive function and cannot formulate reasonable answers. Or, an individual may not be able to articulate a reasonable answer. It is always best to err on the side of allowing someone in with an animal, rather than to disallow an animal in when its owner/partner is incapable of answering the two legal questions.

However, if a person seems capable of answering the questions but refuses to answer them, you may exclude the <u>animal</u> from the City facility. Some individuals mistakenly believe that you may not legally ask them these two questions.

Q. A person who frequents the Library is tired of being asked about their dog, which the Library has determined is a service animal. The person says they feel harassed. Should the Library keep a note on file about the service animal so that the person does not feel "harassed"?

A. This type of circumstance should be handled on a case-by-case basis and with consultation from Risk Management and the City Attorney's Office. If the Library chooses to keep a note on file or give the person a letter so that they may show that the dog is a service animal, the Library should also explain that they may still be asked the two questions because: (1) the Library may not be able to maintain a file for everyone using a service animal in its City facilities; (2) on any given day different staff may be working who are not familiar with the patron or service animal.

Q: An individual inside a City building complained that another individual's service animal was causing them to have an allergic reaction. In these circumstances, may I ask the individual with the service animal to remove the animal from the facility?

A. No. Courts have ruled that allergies alone should not be a basis for excluding a service animal from a facility. However, if an individual's allergies are so serious that rises to the level of a disability, you may need to consider the affected individual's needs. In this circumstance, contact the person in charge or your direct supervisor, Risk Management, and/or Human Resources.

Q: A person using City services complained about a service dog's presence, stating that according to his religious beliefs, dogs are unclean and should not be allowed into buildings. Should I have asked the individual with the service dog to take their dog out of the City building?

A. No. Courts have ruled that an individual's religious beliefs about animals should not lead to a service animal's exclusion from a facility.

Q: Yesterday in the Cultural Art Center an individual with a dog could not get the dog to stop barking. They stated that the dog was a service animal that let them know when they were going to have a seizure. What should I have done?

A. An individual with a service animal must keep his or her animal under control. If the barking is a disruption to other patrons or employees and cannot be controlled, the individual may be asked to remove the dog until it is under control. This kind of disruption should not lead the facility to exclude the dog permanently. The individual may be allowed back inside the facility with the service animal once the animal is under control.

Q: This morning in the Library, a person's service animal lunged aggressively at another patron. The person was able to get her dog under control so that it did not pose further problems. I did not exclude the dog. Did I do the right thing?

A. Yes—if a service animal owner can get her animal under control, the animal need not be excluded. However, had the dog continued lunging aggressively at other patrons, the dog now has become a direct threat to other patron's safety, the dog could be lawfully excluded.

Q: This morning, an individual came in with a small dog. I asked the person if the dog was a service animal and they said the dog was a "therapy" animal. What should I have done?

A. "Therapy" animals are sometimes, but not always, service animals. In these circumstances, ask the individual with the animal about the service the animal is individually trained to provide them. If the individual can describe a reasonable service the animals have been trained to provide them, then the animal should be allowed into the City building.

Q: What about "companion" animals?

A. Some health care practitioners write "prescriptions" for "companion" animals for individuals. Housing laws require landlords with pet prohibitions to allow individuals with these "prescriptions" to keep their companion animals inside their homes. In addition, "companion" animals are sometimes, but not always, service animals which must be allowed inside City facilities. Individuals with companion animals may state that the animal "keeps me calm" or "makes me happy." In these cases, the animal is probably not a service animal. If the individual with the animal can describe a service the animal has been trained to provide him or her, the animal may be described as a "companion" animal and a "service animal."

Q: A person came into the Tyson Rec Center with a dog, and when I asked about the dog, they stated that the animal is training to be a service animal. I let the dog in—what should I have done?

A. You did the right thing. A trainer has the right to have an assistance animal or assistance animal trainee with the trainer, in any place of public accommodation or on any mode of transportation so long as the person or trainer controls the behavior of the animal.

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Risk Management

SERVICE OF LAWSUITS AND SUBPOENAS

(Excluding Hillsboro Police Department)

City employees must exercise care when presented with any documents concerning legal actions in which the City or its employees are involved.

Oregon Rules of Civil Procedures states:

ORCP 7D(3)(d) *requires that personal or office service for a Public Body be on "an officer, director, managing agent, or attorney thereof." If done by office service on one of these people, then there has to be a follow up mailing by First Class mail to the City with the service information (time, date, and place where service was made). It is only upon the subsequent mailing of this information that service is complete.*

Only the City Manager's Office may accept service of a Summon or Complaint or Subpoena in which the City is named as a party. No other City office is authorized to accept service of process on the City's behalf. Subpoenas for City records, regardless of the location of those records, must also be directed to the City Manager's Office.

When both the City and an employee are named as parties in a Summons and Complaint or Subpoena, the City Manager's Office can only accept service on behalf of the City. If a process server attempts to serve an employee who is also personally named in a Summons and Complaint or Subpoena along with the City, the employee may accept service on his or her behalf only. After accepting service, the employee must immediately notify Human Resources.

When only an employee is named as a party in a Summons and Complaint, Subpoena or any other legal proceeding, a process server may asking how he/she can locate the employee. In these situations, please direct the process server to Human Resources so they can assist.

For City Manager's Office only:

Upon acceptance of service, the City Manager's Office staff should attach a note to the documents served that includes the following information:

- Date and time served
- Who served the documents (Process Server, Sheriff, Attorney Firm) Ask if the process server can provide a business card

After attaching the note to the served documents, please hand deliver the documents to Human Resources.

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SAFETY AND LOSS CONTROL PROGRAM

Purpose

Providing a safe and healthy work environment is a cooperative effort and the responsibility of all Departments.

The Safety and Loss Control Program has been developed to provide standards and policies that will assist Departments in the prevention of accidents and injuries, while maintaining compliance with federal, state, and local governing agencies.

Working together to identify workplace hazards and develop innovative training programs is the key to a successful and accepted program. As with any program, outlining responsibilities is a necessary and important component.

RESPONSIBILITIES

Risk Management

- Develop and maintain the Safety and Loss Control Program
- Coordinate and administer the City safety efforts following the guidelines described in this program
- Assist departments with hazard identification and provide recommendations for reducing or eliminating potential hazards
- Design, develop, and conduct safety training programs
- Attend and participate in all departmental Safety Committee meetings including quarterly inspections upon request
- Act as a liaison between the City and OR-OSHA, or other regulatory agencies relating to safety
- Monitor the selection, testing, and evaluation of personal protective equipment
- Research technical developments and government regulations as they relate to applicable safety issues
- Communicate safety and compliance information to departments
- Maintain knowledge of facilities, equipment, processes, and material handling within each facility
- Conduct periodic safety compliance audits and made recommendations as needed

Managers and Supervisors

- Adopt, support, and enforce the programs within the Safety and Loss Control Program
- Establish departmental safety rules, procedures, and policies that are not identified in this program
- Work at identifying, reducing or eliminating hazards through regular inspections and accident investigation
- Allocate time for employee safety training
- Utilize the services of Risk Management as needed
- Support the efforts of the departmental safety committee by encouraging participation
- Discuss safety issues regularly during employee and management meetings
- Instill, by action and example, a sincere safety attitude throughout all levels of the department
- Become familiar with OSHA regulations that govern the jobs and tasks being performed by your employees
- Work with Risk Management during the compliance audits. Assist in implementing changes, corrections, or improvements as necessary

Employees

- Report all injures and accidents to your supervisor immediately. Obtain first aid or medical treatment when necessary
- Be familiar with the Safety and Loss Control Program as well as departmental rules, policies, and procedures
- Ask questions if there is any concern or lack of understanding regarding safety protection, procedures, and/or policy
- Report unsafe acts, conditions, or concerns to your supervisor
- Do not perform any job assignment or use any heavy equipment without proper training or authorization
- Participate in safety meetings and provide suggestions/recommendations whenever possible
- Operate equipment in the manner in which it was intended
- Inspect all equipment including tools, machinery, vehicles, and personal protective equipment prior to use
- Report damaged or unsafe tools or equipment immediately. Do not attempt to repair equipment without authorization
- Use machine guards and maintain them in good condition. Machines without adequate guards or guards in questionable condition must not be used and are to be reported to your supervisor
- Wear personal protective equipment (PPE) when required
- Report to your supervisor the use of medication whenever a caution or warning is provided by a pharmacist, physician, or in writing. Employees are to ensure that the use of any medication does not interfere with their ability to perform their job safely

Hillsboro Fire Department

AUTOMATED EXTERNAL DEFIBRILLATOR (AED)

Frequently Asked Questions

Who is responsible for the City Facility AED's?
Fire Department has overall responsibility for this program.

Who can use the AED in the event of an emergency?
Any individual that is CPR / AED trained.

How often do I need to be CPR / AED Certified?
The CPR / AED certification must be renewed every two years.

Can I be held personally liable if I administer the AED to a victim?
As long as your certification is current and you do not render care that exceeds your certified skill level, you are protected under ORS 30.802. (Attachment A)

Who will be responsible for maintaining the AED units?
AED(s) shall be inspected biannually by the Fire Department. Any maintenance necessary will be carried out at that time. Any concerns noticed between the regular inspections shall be forwarded to the Fire Department for action.

What other equipment is stored in the AED case?
There is a ready aid kit in the AED case as well as a bleeding control kit in every City AED. The Fire Department now includes wound packing and tourniquet training in coordination with all AED / CPR and First Aid Training.

AUTOMATED EXTERNAL DEFIBRILLATOR (AED)

Purpose

Oregon Revised Statute 431.680 and
Oregon Revised Statute 431.690

The purpose of this document is to outline the requirements, responsibilities, and usage of the facility mounted Automated External Defibrillator's (AED's).

RESPONSIBILITIES

Fire Department

- Supervise the AED maintenance and resupply
- Assist departments in purchasing and locating AED equipment

Managers, Supervisors, and Employees

- Know where the AED systems are located in their department
- Know who is trained to use the AED systems
- If the AED is deployed, notify the Fire Department for resupply and incident follow up

SCOPE

The scope of this program will include AED plan responsibilities, training requirements, product location, EMS notification, medical supervision, and all the necessary activities to conform to the following:

- Oregon Senate Bill 313, effective 6/4/99
- American College of Emergency Physicians Guidelines, policy number 400274
- Current Recommendations of the American Heart Association
- Oregon Revised Statute 30.802

AED REQUIREMENTS

Only an approved medical device that is capable of the following will be utilized:

- Recognizing the presence or absence of ventricular fibrillation and rapid ventricular tachycardia
- Capable of determining, without intervention by an operator, whether defibrillation should be performed
- Automatically charges and allows delivery of an electrical impulse

PRODUCT LOCATION AND MAINTENANCE

AED(s) will be located as outlined in Appendix A. All systems will be clearly identified and visible, and must have a direct, unobstructed path.

EMPLOYEE TRAINING

Only employees who have been properly trained in the most current American Heart Association (AHA) guidelines for CPR with the use of an AED will be eligible to deploy the device.

Training will teach you the following:

- How to recognize the warning signs of a heart attack
- Why and how to activate the emergency medical services (EMS) system
- How to buy time for the victim by performing one-rescuer adult CPR until the AED arrives
- How to assess the patient and determine if using an AED is necessary.
- How to attach the AED pads if needed and ensure the device is used properly
- How to follow safety protocols to protect the user and bystanders
- How to deal with unusual situations (such as a victim with an implanted defibrillator or using an AED on a victim lying in water)

The American Heart Association recommends formal retraining every two years.

AED EQUIPMENT

Located in each AED case is a ready kit and a bleeding control kit. The bleeding control kit contains a tourniquet and a wound packing kit. Training on use of the bleeding control kit is provided by the Fire Department during AED / CPR and First Aid Training.

INCIDENT REVIEW

The Fire Department must be notified of any incident involving the use of a city provided AED. The incident will be flagged for review by the Fire Department internal Quality Improvement committee and the Fire Department Supervising Physician. Follow up with the individuals and or Departments involved with the incident in question will occur on a case by case basis when appropriate.

COORDINATION WITH LOCAL EMERGENCY MEDICAL SERVICES (EMS)

EMS will be immediately notified (via activation of the local 911 emergency system) of any event whereby the AED device is *utilized* and a copy of the AED utilization record (see Appendix B) will be provided as required.

Appendix A

LOCATIONS WITH AED

Police and Fire Not Included

	Building	Specific Locations within Building	Number of Units
1	Parks- SHARC Pool	Aquatic Center First Aid Room	1
2	Parks- Admin	Hallway Near restroom	1
3	Parks- Admin-Mobile	Kevin Zuercher Desk	1
4	Parks- Senior Center	Hallway Near restroom	1
5	Parks- Tyson Rec.	Lobby Near Reception	1
6	Parks – Griffin Oaks	Hallway Near Exit	
7	Parks- Maintenance	Near Front Desk	1
8	Parks- Outdoors In	Wall Behind Desk	1
9	Parks- River House	Hallway Near Kitchen	1
10	Parks- Cultural Arts	Hallway Near Office	1
11	Parks – Hidden Creek CC	Lobby Behind Front Desk	1
12	Parks – Hidden Creek CC	2nd Floor Workout Area	1
13	Hillsboro Stadium #1	Football Lower Tunnel	1
14	Hillsboro Stadium #2	Softball Concession Stand	1
15	Hillsboro Stadium #3	Stadium Breezeway	1
16	Hillsboro Stadium #4	Baseball Eastside Press Box	1
17	Hillsboro Stadium #5	Football Announcer box	1
18	Jackson Bottom Wetlands	Hall Near Lunch Room	1
19	Water Operations	Near Lunch Room	1
20	Water Treatment #1	Water Pump Station #2	1
21	Water Treatment #2	Hallway Outside Control Room	1
22	Library-Brookwood # 1	Front Door Entrance	1
23	Library-Brookwood # 2	2nd Floor Next to Restroom	1
24	Library-Shute Park	Near Public Meeting Room	1
25	Civic Center # 1	1st Floor Hallway	1
26	Civic Center # 2	2nd Floor Near Risk and HR	1
27	Civic Center # 3	3rd Floor near Elevator	1
28	Civic Center # 4	4th Floor near Elevator	1
29	Civic Center # 5	5th Floor near Elevator	1
30	Public Works Main	Front Lobby	1
31	Public Works BLDG- A	Garage Entrance	1
32	Public Works BLDG- A	Near Restrooms	1
33	Public Works Fleet Shop	Front Lobby	1

Appendix B

AED USE REPORT

AED USE REPORT

To be filled out each time AED is attached to a patient

_____ _____

Entity Responsible for AED Date of incident

Patient Age: _____ Patient Sex: M ____ F ____

Location of Cardiac Arrest: _____

_____

Estimated Time of Cardiac Arrest: _____ (use 24 hour time)

CPR Initiated Prior to Application of AED: Yes ____ No ____

Cardiac Arrest Witnessed? Yes ____ No ____

Time First Shock Delivered: _____ (use 24 hour time)

Total number of Shocks and Joules Delivered: _____/_____ _____/_____
_____/_____ _____/_____
_____/_____ _____/_____

_____/_____ _____/_____
_____/_____ _____/_____
_____/_____ _____/_____

Name of AED Operator _____

Pulse Restored? Yes ____ No ____ Was pulse sustained? Yes ____ No ____

EMS notified: _____EMS arrival_____

Patient Transported: Yes ____ No ____ Where and by who?

Oregon Revised Statute 30.802

SECTION 1.
(1) As used in this section:
(a) "Automated external defibrillator" means an automated external defibrillator approved for sale by the Food and Drug Administration.
(b) "Public setting" means a location that is:
(A) Accessible to members of the general public, employees, visitors and guests, but that is not a private residence;
(B) A public school facility as defined in section 4 of this 2005 Act; or
(C) A health club as defined in section 6 of this 2005 Act.
(2) A person may not bring a cause of action against another person for damages for injury, death or loss that result from acts or omissions involving the use, attempted use or nonuse of an automated external defibrillator when the other person:
(a) Used or attempted to use an automated external defibrillator;
(b) Was present when an automated external defibrillator was used or should have been used;
(c) Provided training in the use of an automated external defibrillator;
(d) Is a physician and provided services related to the placement or use of an automated external defibrillator; or
(e) Possesses or controls one or more automated external defibrillators placed in a public setting and reasonably complied with the following:
(A) Maintained, inspected and serviced the automated external defibrillator, the battery for the automated external defibrillator and the electrodes for the automated external defibrillator in accordance with guidelines set forth by the manufacturer.
(B) Ensured that a sufficient number of employees received training in the use of an automated external defibrillator so that at least one trained employee may be reasonably expected to be present at the public setting during regular business hours.
(C) Stored in a location from which the automated external defibrillator can be quickly retrieved during regular business hours.
(D) Clearly indicated the presence and location of each automated external defibrillator.
(E) Established policy to call 9-1-1 to activate emergency medical services system as soon as practicable after the need recognized.
(3) The immunity provided by this section does not apply if:
(a) The person against whom the action is brought acted with gross negligence or with reckless, wanton or intentional misconduct;
(b) The use, attempted use or nonuse of an automated external defibrillator occurred at a location where emergency medical care is regularly available; or
(c) Person against whom the action is brought possesses or controls one or more automated external defibrillators in a public setting and the person's failure to reasonably comply with the requirements described in subsection (2)(e) of this section caused the alleged injury or death.
(4) Nothing in this section affects the liability of a manufacturer, designer, developer, distributor or supplier of an automated external defibrillator, or an accessory for an automated external defibrillator, under the provisions of ORS 30.900 to 30.920 or any other applicable state or federal law.

SECTION 2. Section 1 of this 2005 Act applies to causes of action arising on or after the effective date of this 2005 Act.
SECTION 3. Section 4 of this 2005 Act shall be known as the Graeme Jones and Eddie Barnett Memorial Act.
SECTION 4.
(1) As used in this section, "public school facility" means a building or premanufactured structure used by a school district or public charter school to provide educational services to children.
(2) In addition to those moneys distributed through the State School Fund, the Department of Education may award grants to school districts and public charter schools to provide automated external defibrillators in public school facilities.
(3) The goal of the grant program is to provide automated external defibrillators in at least two public school facilities in each school district.
(4) Each school district and public charter school may apply for a grant under this section. The amount of any grant received by a school district or charter school under this section may not exceed 60 percent of the actual costs for which grant funds may be used under subsection (5) of this section.
(5) Any school district or public charter school that receives grant funds under this section shall use the funds for:
(a) Purchasing or leasing automated external defibrillators to be placed in public school facilities;
(b) Providing training to school district and charter school employees and volunteers on the use of automated external defibrillators; and
(c) Other expense related to providing automated external defibrillators in school facilities if the expense is approved by Dept. of Education.
(6) The State Board of Education may adopt rules:
(a) To establish criteria for awarding grants based on the goal set forth in subsection (3) of this section;
(b) To determine the amount of each grant pursuant to subsection (4) of this section; and
(c) That are necessary for the administration of this section.
(7) The Department of Education shall seek federal grant funds for the purposes of the grant program.
(8) For purposes of the grant program, the Department of Education may accept contributions of funds and assistance from the United States Government and its agencies or from any other source, public or private, and agree to conditions placed on the funds not inconsistent with the purposes of the grant program.
(9) All funds received by the Department of Education under this section shall be paid into the Department of Education Account established in ORS 326.115 to the credit of the grant program.
SECTION 5. Section 6 of this 2005 Act shall be known as the Kirk Spencer Memorial Act.
SECTION 6.
(1) As used in this section, "health club" means an indoor facility:
(a) With the primary purpose of offering exercise or athletic activities that patrons or members may participate in for a fee; and
(b) That typically has at the facility on a regular business day 100 or more persons who are employees, patrons or members participating in the exercise or athletic activities offered at the facility.
(2) The owner of a health club shall have on the premises at all times at least one automated external defibrillator.
(3) Subsection (2) of this section does not apply to:
(a) Any facility owned by an education service district, public charter school or school district; or
(b) Any facility owned by a hotel as defined in ORS 699.005.
SECTION 7. Section 6 of this 2005 Act becomes operative on July 1, 2006.
SECTION 8. ORS 30.801 is repealed.
SECTION 9. The repeal of ORS 30.801 by section 8 of this 2005 Act does not affect any causes of action arising before effective date of this 2005 Act.
SECTION 10. This 2005 Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this 2005 Act takes effect on its passage.
Approved by the Governor July 20, 2005
Filed in the office of Secretary of State July 20, 2005
Effective date July 20, 2005

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Risk Management

EMPLOYEE C.E.R.T
(COMMUNITY EMERGENCY RESPONSE TEAM)

Frequently Asked Questions

What is CERT?
CERT stands for Community Emergency Response Team. The Employee CERT is trained to respond to emergencies in the event that Emergency Medical Services are overwhelmed due to a large scale event or need in the community.

Will I receive training?
Yes! Training is required and you will receive training provided by the Fire Department and Emergency Management. Once you are trained, Emergency Management will manage the Employee CERT program.

What are some of the skills I will learn?
You will be trained in emergency preparedness, fire safety and suppression, triage, medical treatment, damage assessment, light search and rescue, cribbing, drags and carries, disaster psychology, and team organization including the Incident Command Structure (ICS).

What are my responsibilities in an emergency?
Your first responsibility in any emergency is to your family at home. With the CERT training you will have in emergency preparedness you and your family should be better prepared to handle any emergency situation. Once you know your family is safe, you may be required to report to work. If not, you may choose to volunteer along with the community CERT members. If you are already at work and you know your family is safe, you may be needed in some capacity to aid your co-workers as a CERT member until help arrives.

Am I making a commitment if I take a CERT class?
No. You can choose whether or not you want to continue to take training or volunteer your time or service as a CERT volunteer.

EMPLOYEE C.E.R.T
(COMMUNITY EMERGENCY RESPONSE TEAM)

Purpose

The CERT program is designed to educate employees in emergency preparedness and teach them skills that will enable them to assist their co-workers, families, friends, neighbors, and communities in the event of a natural or man-made disaster.

RESPONSIBILITIES

Risk Management

- Work with Emergency Management to offer training to employees

Emergency Management

- Manage the Employee CERT Program offering continued education and training

Managers and Supervisors

- Understand the premise and benefits of the Community Emergency Response Team
- Ensure your office and field staff are prepared to handle emergencies

Employees

- Educate and prepare for emergency situations that may arise at work

WHAT IS CERT?

CERT stands for Community Emergency Response Team. CERT members are trained to respond to emergencies in the event that Emergency Services are overwhelmed due to a large scale event or need in the community. CERT members are trained in emergency preparedness and are able to assist their families, friends, neighbors, co-workers, and communities.

TRAINING

Initially, you will be trained by staff in the Hillsboro Fire Department and Emergency Management. Once you are trained, Emergency Management will manage the Employee CERT program and will meet with you on a quarterly basis to provide additional training opportunities. You will also be offered opportunities to volunteer in the community for local events and training exercises through Emergency Management.

If your family is interested in attending CERT training, they can attend training offered by Emergency Management and the Hillsboro Fire Department in the evenings for community members. This training is open to people ages 16 and up.

You will be trained in several key areas to help you prepare for disasters:

- Emergency preparedness
- Fire safety and suppression
- Light search and rescue
- Damage assessment
- Triage
- Medical treatment
- Cribbing
- Drags and carries
- Disaster Psychology
- Team Organization (The Incident Command Structure or ICS)

There are several reasons people take CERT training. Some people want to be better prepared to take care of their own home and family in the event of an emergency. This may be the extent of their commitment to CERT.

Others may want to be equipped to care for their neighbors, friends, families, and co-workers if a major disaster were to occur. CERT training is good for both scenarios and can provide life saving educational tools in the absence of Emergency Medical Services.

Understand that by taking CERT training, you are not committing your services to your co-workers or your community. You will serve during an emergency on a volunteer basis, after your family is safe and secure, only if you choose to do so.

Once you have completed the initial CERT training program you will have the opportunity to meet and train on a quarterly basis with the Employee CERT. Various training topics will be provided to the group along with occasional table top exercises. You may be asked to serve on a committee to help organize a training event for the group.

The Employee CERT group has committed its services to the Hillsboro Police Department and Hillsboro School District if there were an Active Shooter event at a Hillsboro School. If a parent reunification site is activated, Employee CERT members would play a vital role in assisting the Police Department and School District with this process. Members have been trained on this process and will continue to receive updates from HPD if this process evolves.

Currently CERT member’s roles would be to direct traffic into the parking lot to keep vehicles moving and be runners for school district officials. Basically providing anything they need to make the situation more manageable.

The CERT program provides basic life skills that can be used in many emergency situations that may arise in an employee’s personal or professional life.

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Frequently Asked Questions

What kind of emergencies could happen at work?
A variety of manmade or natural emergencies could occur while in the workplace. Such natural events could include inclement weather, fire, or earthquakes. Other events could include a hazardous material spill, suspicious objects, bomb threats, or threats of violence.

Is there an emergency evacuation plan?
Yes, each department is responsible to have an evacuation map posted in conspicuous locations throughout the facility. Also, as part of the Emergency Action Plan, each area is responsible to assign Floor Monitors (and in some departments, Disability Assistance Team Members) to ensure all employees, visitors and community members are evacuated from the building.

When we evacuate, where do we meet?
Each department has a designated assembly area or reunification area. When arriving at the area, check in with the person designated to take roll call. Do not re-enter the facility until directed by a supervisor, emergency services personnel, or any other higher official.

What do I do if I see a suspicious package or object in my work area?
If you observe a suspicious object, clear everyone out of the area, call 9-1-1 immediately report it to your supervisor and Emergency Response Team (ERT) (if your department has a team). Do not attempt to touch, move, or disarm anything. Trained Public Safety personnel will take care of it.

Will I receive training on emergency procedures?
Yes, training is offered within your first 30 days of employment.

EMERGENCY ACTION PLAN

Purpose

OSHA Standard 437-002-0042

The Emergency Action Plan outlines the personal security and emergency response procedures necessary to protect City of Hillsboro employees. Such emergency may include earthquakes, terrorist activity, or other natural or man-made disasters.

RESPONSIBILITIES

Risk Management

- Provide or coordinate training on evacuation procedures and other aspects of this program
- Participate in EOC training sessions and exercises
- Review and revise this program to reflect applicable regulations and industry best practices
- Coordinate inception and training of Department's Emergency Response Team (ERT)

Managers and Supervisors

- Ensure compliance with City-wide Emergency Action Plan
- To the extent it is practicable; ensure that facilities and furnishings are protected from earthquake damage and hazardous shifting or falling
- Ensure all employees and volunteers are trained on the Emergency Action Plan for your department

Employees

- Attend trainings regarding fire safety, earthquake preparedness, and other emergency response
- Adhere to the EAP procedures during any emergency situation that may arise
- Attend additional training if the employee is assigned to be a Floor Monitor or Disability Assistance Team Member

EMERGENCY ACTION PLAN

The Emergency Action Plan covers the following events:

- Building Evacuations
- Fire
- Hazardous Material Incidents
- Earthquakes
- Bomb Threats
- Suspicious Packages or Objects
- Lockdown Procedures

- Lockout Procedures
- Shelter-In-Place
- Active Shooter
- CERT (Community Emergency Response Team) See CERT Program
- ERT (Emergency Response Team for Departments) See ERT Program

GENERAL INFORMATION FOR ALL DEPARTMENTS

***Emergency Exits* -** All emergency exit routes shall be mapped out and posted in conspicuous locations throughout the department. All emergency routes and exits shall be free of obstructions, clearly marked, and visible. Exits and access to exits shall be marked with a distinctive sign reading, “EXIT” and adequately lit by electrical illumination or ambient light levels.

There must be two or more exit routes depending on the size and layout of the work area and the number of people involved. A single exit route is acceptable only if all workers can get out through it safely during an emergency.

Any doorway or passageway which is not an exit or access to an exit but which may be mistaken for an exit shall be identified by a sign reading "Not an Exit" or a sign indicating its actual use (i.e., "Storeroom"). Exits must open from the inside without keys, tools or special knowledge. Devices that lock only from the outside are acceptable. There must be nothing on an exit door that could hinder its use during an emergency. An exit must lead directly outside or to a street, walkway, refuge area, or to an open space with access to the outside.

Floor Monitors/Disability Assistants – Each department shall assign Floor Monitors and Disability Assistant Team (DAT) Members. The Civic Center is the only facility with both Floor Monitors and Disability Assistance Team Members. Most facilities only use Floor Monitors who function as Disability Team Members as well. The number of members is dependent on the size of the facility, rooms, floors, etc.

Floor Monitors shall:

- Visually and verbally check all rooms in their area of responsibility to ensure that everyone has left the building. This includes all employees, volunteers, visitors and community members.
- Close the doors of each area after the sweep has been completed.
- Evacuate to the designated assembly area and report to the designated reporting person or assembly point monitor.

The Disability Assistants shall:

- Ensure any disabled, including the blind or visually impaired, or injured employees or visitors or community members are assisted out of the danger area and evacuated to the nearest stairwell for rescue by emergency personnel.
- If trained, injured or disabled persons can be evacuated using evacuation chairs.
- Evacuate to assembly location area and report to designated reporting person or assembly point monitor.

Once outside, both the Floor Monitors and DAT’s shall direct the employees to the designated assembly areas. If, due to personal danger, the Floor Monitor or Disability Assistant is unable to check or assist in any part of their assigned area, they must notify an

ERT member or the responding fire or other emergency crew immediately. The Floor Monitors may also act as the Disability Assistants.

Assembly Point Monitors – Each department shall assign an Assembly Point Monitor. The prime responsibility of the Assembly Point Monitor is to establish their department's assembly area and take roll call during emergency evacuation.

Assembly Areas also known as Reunification site – Upon evacuating the building, each individual shall proceed to the predetermined assembly area and check in with the Assembly Point Monitor including Floor Monitors and Disability Team Members. The Assembly Point Monitor will have a roster of all employees and will check off names as each employee checks in. At the first opportunity, supervisors or lead workers must indicate to the Assembly Point Monitor which employees are in the field or otherwise not in the building at the time of evacuation. This notation will be made on the roster.

Emergency Notification
Employees shall be notified of an emergency situation by:

- A fire alarm system
- An announcement over intercom system
- A departmental supervisors or other authority including an ERT member

BUILDING EVACUATION

Upon notification of an evacuation, employees shall stay calm, take only essential items with them, and depart the building using the nearest exit. While evacuating the building, and if it is safe to do so, assist individual or any others who are unable to navigate the stairways efficiently.

When outside, employees shall go directly to their designated assembly area and wait for roll call and further instructions. The emergency personnel or ERT Leader or Department Director will determine when it is safe to re-enter the building and will give the All Clear notice.

FIRE

If you discover a fire or smell smoke, dial 9-1-1 immediately. If necessary, evacuate first, and then call 9-1-1. After the 9-1-1 call, pull the fire alarm if applicable or notify an ERT member or supervisors or other employees via word of mouth or other means. If possible, close the doors to contain the fire and smoke for as long as possible.

Note: See the *Fire Extinguisher Program* for specific information on extinguisher use.

HAZARDOUS MATERIALS INCIDENT

If there is a hazardous materials incident in your work area or in the general vicinity, you shall evacuate the building and call 9-1-1-. Follow the instruction given by emergency personnel and safety officials. Stay away at a safe distance, keep others away from the spill, and notify an ERT member, and your supervisor.

EARTHQUAKE

If an earthquake occurs, all building occupants shall duck under a desk or sturdy table; cover your head and neck with your arms, and hold on until the shaking stops. Do not attempt to evacuate the building while the earth is trembling. After the shaking stops if and only if you are ordered to do so, evacuate the building and report to your designated assembly area. Not all earthquakes will require evacuation and you may be safer remaining inside the building.

If you are outside during an earthquake, drop to the ground, stay clear from surrounding hazards, and stay there until the shaking stops.

If you are in a vehicle, pull over to the side of the road, stay clear from surrounding hazards, and remain in your vehicle, with your seatbelt on until the shaking stops. If safe to do so, proceed with caution to your destination, avoiding overpasses, bridges, and ramps.

BOMB THREATS

If a City employee receives a bomb threat call, they should remain calm and write down as much information as possible about the threat and the caller. Then, as soon as possible:

- Call 9-1-1
- Notify your supervisor and ERT member of the bomb threat
- Create and maintain a written time table of the incident
- Evacuate area when ordered to do so

SUSPICIOUS PACKAGES OR OBJECTS

If any City of Hillsboro employees identify a suspicious package or object in their work areas, they shall notify their supervisor immediately and/or dial 9-1-1. Do not touch the suspicious item. Employees shall evacuate the building immediately if notified by an alarm or announcement, or when notified by a supervisor or other authority including an ERT member.

If any City of Hillsboro employees encounter suspicious looking or unlabeled letters or mail packages, they shall notify their supervisor immediately. Such items may include:

- Unopened letter that appear empty
- Envelopes that contain or are leaking powder
- Any mailing marked with threatening messages such as “Anthrax”
- Or any other mailing that is aerosolizing, exploding, or contains a letter with a threatening message

If any of the above items are found, employees shall contain the area and notify their immediate supervisor and/or 9-1-1, and notify an ERT member.

Other suspicious mail characteristics may include:

Excessive postage
No return address
Handwritten or poorly typed address
Incorrect titles or titles without a name
Oily stains, discolorations, odor
Excessive tape, string, or packaging
Excessive weight
Lopsided or uneven envelope

Misspellings of common words
Not addressed to a specific person
Postmark not matching return address
Protruding wires or aluminum foil
Unusual sounds (i.e.: ticking)
Visual distractions

Note: Legitimate mail commonly has some of the aforementioned characteristics. Each case of "suspicious" mail should be evaluated based on the information and circumstances at hand.

<u>If you encounter a suspicious package or letter:</u>

- Do not shake or empty the contents
- Do not carry the package, show it to others or allow others to examine it
- Put the package down on a stable surface; do not sniff, touch, taste or look closely at it
- Call 9-1-1
- Notify your supervisor and ERT member
- Clear and secure a reasonable area around the item, closing doors if possible
- Contact Facilities to shut off the HVAC system

<u>If powder spills out (or other exposure is suspected):</u>

- Call 9-1-1
- DO NOT try to clean up the powder. Cover the spilled contents with anything available and do not remove it
- Leave the room and close the door if possible, or evacuate the immediate area
- Isolate yourself from others
- Remove contaminated clothing ASAP and place in a plastic bag or other container that can be sealed. Give this bag to emergency responders.
- Wash exposed body parts with soap and water
- Make a list of people who had contact with the contaminate and provide this list to emergency responders
- Emergency Responders will determine if further action or evacuation is needed

LOCKDOWN PROCEDURES

The lockdown of a building or group of buildings is an emergency procedure intended to secure and protect occupants who are in the proximity of an immediate threat. This procedure is used when it may be more dangerous to evacuate a building than stay inside. A lockdown notification to occupants may be ordered by emergency personnel, facility management or ERT member.

It is essential for the safety of occupants and emergency responders that the individuals comply with instruction provided by emergency personnel at all times.

If you are ordered to lockdown:

- Remain inside your building
- If outside, move to the nearest building
- Close windows and doors and stay away from them
- Lock doors, if possible, or barricade the doors and windows
- Close curtains or blinds where possible
- Turn off lights

- Remain quiet and in place until notified by emergency personnel
- Stay low to the ground
- Silence cell phones and do not use them unless you are in contact with emergency personnel
- Do not open the door or allow anyone to leave until you have been advised that it is “all clear”

During a lockdown:

- Do not unlock or open the doors
- Do not use or hide in restrooms
- Do not travel down long corridors
- Do not assemble in large areas
- Do not call 9-1-1 unless you have immediate concern for your safety, the safety of others, or feel you have critical information that will assist emergency personnel in the response

Following a lockdown:

- Cooperate with emergency personnel to assist in an orderly evacuation
- Proceed to the designated assembly area, if advised
- If you leave the scene, notify a supervisor or co-worker
- Police may require individuals to remain available for questioning following a lockdown

LOCKOUT PROCEDURES

Lockout procedures are to be activated when there is a threat or hazard outside the building. The threat could be due to violence or criminal activity in the immediate neighborhood, or any other threats outside the building. This procedure uses the physical building as security and protection, and it has been deemed safer to stay inside the building than to evacuate. Examples include:

- Dangerous animal on the grounds
- Criminal activity in the area
- Threat of domestic violence
- Civil disobedience
- Information provided from a reverse 911 call

The notification to occupants for a Lockout may be ordered by emergency personnel, facility management or ERT member. It is essential for the safety of occupants and emergency responders that all individuals comply with instruction provided by emergency personnel at all times.

The Lockout procedures include bringing people into the building and locking all exterior access points. Where possible, daily operations would continue uninterrupted. There may be occasions where occupants want/expect to leave the building. Depending on the situation, this should be prevented if possible. Occupants may be inconvenienced by this restrictions but their cooperation is important to their safety. We cannot force occupants to remain in the building. However, occupants need to be informed if they leave the building they may not be able to return until the event has concluded.

There may be physical attributes to the location that mandate special handling of Lockout. An example would be exterior buildings or equipment yard. It may be best for employees in these areas to relocate to the main building during the Lockout if possible. Decisions must be made based on the situation.

During a Lockout:

- Secure the perimeter
- Instruct everyone to return inside of the building
- Conduct business as usual if possible
- Lock all exterior doors
- Do a roll call to account for staff

SHELTER-IN-PLACE

Shelter-in-place is activated during spontaneous events such as a weather related, earthquake, or hazardous materials event.

During a Shelter-in-place, specific actions include:

- For weather related event – move away from windows and non-secured fixtures. It may also include a drop, cover, and hold scenario.
- For Hazardous Materials – Close all windows and doors. This may also include sealing all door/window and openings/gaps, and shutting down HVAC equipment.

ACTIVE SHOOTER – HOW TO RESPOND WHEN AN ACTIVE SHOOTER IS IN YOUR VICINITY

Quickly determine the most reasonable way to protect your own life. Remember that visitors, customers and community members are likely to follow the lead of employees and managers during an active shooter situation.

1. Run or Evacuate - If there is an accessible escape path, attempt to evacuate the premises. Be sure to:
    - Have an escape route and plan in mind
    - Run with purpose and access the escape route
    - Evacuate regardless of whether others agree to follow
    - Leave your belongings behind
    - Help others escape, if possible,
    - Prevent individuals from entering an area where the active shooter may be
    - Keep your hands visible
    - Follow instructions of any police officers
    - Do not attempt to move wounded people
    - Call 9-1-1 when you are safe

2. Hide or Barricade – If evacuation is not possible, find a place to hide and barricade where the active shooter is less likely to find you.

    Your hiding place should:
    - Be out of the active shooter’s view
    - Provide protection if shots are fired in your direction
    - Not trap you or restrict your options for movement

To prevent an active shooter from entering your hiding place:

- Lock the door
- Blockade the door with heavy furniture
- Use a wedge or belt to secure the door

If the active shooter is nearby:

- Lock the door
- Silence your cell phone and/or pager
- Turn off any source of noise
- Hide behind large items
- Remain quiet

If evacuation and hiding out are not possible:

- Remain calm
- Dial 9-1-1, if possible, leave the line open and allow the dispatcher to listen
- If you cannot speak, leave the line open and allow the dispatcher to listen

3. Fight or take decisive action against the active shooter - As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter by:
    - Acting as aggressively as possible against the shooter
    - Throwing heavy items and improvising weapons
    - Yelling
    - Committing to your actions

COMMUNITY EMERGENCY RESPONSE TEAM (CERT)

Employee CERT is a program offered through Emergency Management and Hillsboro Fire and Rescue where employees learn skills to prepare and assist their families, neighbors, co-workers and community in the event of a disaster.

EMERGENCY RESPONSE TEAM (ERT)

The Emergency Response Team (ERT) is a group of employees who worked in the same facility and have been trained to manage and respond to incidents that disrupt the operations and threaten the safety of City employees and visitors of the City facility. The goals of ERT during an emergency situation are:

- Safety of City employees, visitors and community members, and preservation of City assets and property
- Secure necessary emergency resources to navigate through the incident and/or event stabilization
- Establish an organizational structure to coordinate operational direction to employees
- Establish effective communication management and information distribution methods during an emergency incident
- Provide information analysis to support decision-making and creating an action plan for the emergency or incident

EMPLOYEE TRAINING

All new hire employees shall be instructed as to the evacuation routes, locations of the diagrams, evacuation assembly points, and specific evacuation procedures. All employees shall be trained on the EAP initially and as the plan or employee responsibilities change.

Appendix A: Emergency Assistants by Department *(Use of this form is optional)*

Department:_____

Assembly Area Location:_____

Floor Monitor(s)	Disability Assistant Team Member(s)	Assembly Point Monitor(s)

Questions regarding the Emergency Action Plan can be directed to Risk Management staff.

EMERGENCY RESPONSE TEAM (ERT)

Frequently Asked Questions

What is the ERT?
ERT stands for Emergency Response Team. This is a group of employees who work for the same facility and who have volunteered to participate on a team and respond in the event of an emergency. The ERT commits to attend training and monthly meetings.

What is the main difference between ERT and Safety Committee?
The ERT is a group of employees who have been trained to manage and respond to incidents that disrupt the operations and threaten the safety of City employees and visitors of a specific City facility. The Safety Committee is to promote workplace safety and health for their department.

Is Employee CERT different from ERT?
Employee CERT is a team of City employees trained in basic disaster response to aid others for the first 72 hours following an emergency event when first responders are unable to reach community members. ERT is a team of individuals who are trained to respond and lead during an incident and/or emergency for their facility.

What are ERT members trained to do in an emergency situation?
ERT members will assess the emergency situation and has the ability to evacuate, lock down and deploy any necessary measures to ensure the safety and well-being of our employees during the emergency. They work in coordination with Police, Fire and Rescue, Department Directors and the City's Executive Team.

EMERGENCY RESPOSE TEAM (ERT)

Purpose

The Emergency Response Team (ERT) is a group of employees who have been trained to manage and respond to incidents that disrupt the operations at a City facility and business, and threaten the safety of the City employees and visitors. ERT members are trained to respond to various types of emergency situations at their facility by taking the lead on an incident and working in coordination with Police, Fire and Rescue, Department Directors and City's Executive Team. ERT plays a role in the City's overall emergency preparedness and Emergency Action Plan (EAP) and work collaboratively with Safety Committee (SC) and Employee CERT members, and in coordination with Police and Fire personnel.

The goals of ERT are:

- Safety of City employees, visitors and community members, and preservation of City assets and property
- Secure necessary emergency resources to navigate through the incident and/or event stabilization
- Establish an organizational structure to coordinate operational direction to employees
- Establish effective communication management and information distribution methods during an emergency incident
- Provide information analysis to support decision-making and creating an action plan for the emergency or incident

SCOPE

The scope is to develop an organizational structure and procedures to respond to emergencies and for the management of actions and operations needed to address the incidents. The ERT is a facility-specific preparedness effort that coordinates personnel and resources during an emergency. The planning and development activities for each ERT must differ from others to accommodate facility-specific requirements. Using the Incident Command System (ISC) model, roles and responsibilities are assigned to ERT members during an emergency. It addresses all types of potential emergencies affecting the City's facilities in a coordinated and systematic manner.

PLANNING CONSIDERATIONS

In order to effectively plan for the Department's ERT, these operational conditions for the ERT protocols, procedures and activation should be considered.

- Department directors or managers may not be present at their facility at the time of an emergency. Consider having several managers/supervisors on the Team as ERT Leaders

- ERT planning must consider the attributes of each facility and the nature of work employees' perform at each location.
- Designated Assembly Area/Reunification site may not be available during emergencies due to the impact of hazard or incident. Consider a secondary location for assembly/reunification
- An incident or disaster may occur with little or no warning, and may escalate rapidly beyond the Department's capabilities, and may require outside assistance. Consider communication strategies to request external assistance
- Floor Monitors (FM) and Disability Assistance Team (DAT) members may be activated during certain emergencies to work in conjunction with ERT members
- Safety Committee and Employee Community Emergency Response Team (Employee CERT) members may be activated to provide support to ERT
- Emergency incidents do not always require the same level of response and are dictated by the severity of the event and its effect on the health and safety of employees, volunteers and community members. Consider the various types emergencies and train regularly on how to respond under those varying conditions

ACTIVATION

ERT activation begins when notification is received of an emergency. ERT should be activated whenever emergency conditions exists, in which normal operations cannot be performed and immediate action is required to:

- Save and protect lives
- Evacuate to escape from threats
- Coordinate mass communications with employees in the facility

ROLES & RESPONSIBILITIES

The selection process of team members should vary depending on several factors. Each ERT role is unique and different from the others and are traditionally tied to their roles within the Department. The following points must be considered when selecting personnel as ERT members:

- Single or multi Department facility
- Communication with field workers
- Facility location
- Facility-specific hazards/concerns
- Specialized training

General Roles

ERT Leaders – are typically Department managers or supervisors who have the ability to make decisions for the department. Three to five managers (depending on the size of the facility/department) should be trained as ERT Leaders and how to assess the severity level of the emergency, and deploy appropriate measures to respond to the incident. The ERT Leader in charge is tasked to lead the emergency response for the facility and coordinate ERT members to communicate immediately

with Fire & Rescue and Police personnel, and with Department Directors and the City Manager when possible.

Safety Personnel – Coordinates response with ERT Lead, Police and Fire & Rescue for emergencies involving any hazards including hazardous materials, chemical, biological, or radiological incidents. This position should have the necessary and required training to identify hazards

Safety Committee Chair – Communicates with Safety Committee members and coordinates members to respond when additional support is required to facilitate smooth and effective emergency operations

Employee CERT Coordinator – Communicates with trained employees who are certified CERT member and coordinates members to response when additional support is required to facilitate smooth and effective emergency operations

Assembly Point Monitors – Communicate with Floor Monitors (FMs) and Disability Assistance Teams (DATs) to track employee headcounts and identify missing personnel during the evacuation and regrouping process. This position coordinates information sharing with the ERT Leader

Support Team – Provides flexible operational support and resources during an emergency to ensure response/evacuation activities are smooth.

City facilities/department should develop their team based on their needs and planning considerations identified earlier. Below are a couple of recommended roles specific to single-Department facilities with field employees:

Communication Liaison(s) – Departments/facilities should inform the City Leadership as soon as possible. Departments/Facilities appointed Safety Personnel should coordinate communication with the City's Safety Officer

Field Worker Liaison(s) – Communicates with field employees to notify them of the ongoing emergency situation at their facility. This position is fundamental to information sharing between field employees and their base facility. Best served by field employees' supervisor(s).

ERT Collaborators

- Floor Monitor (FM) & Disability Assistance Team (DAT)
- Employee CERT
- Safety Committee Members
- Fire & Rescue
- Police
- Public Information Officer (PIO)
- City Manager's Office
- City's Facility Team

INCIDENT RESPONSE

Emergency Communication - Timely warnings of an emergency situation are fundamental to preserve the safety and security of the City personnel and facilities, and are critical to an effective response and recovery. Communication and notification methods must be able to accommodate various unique demands the facility during an emergency. For example: notification contents and warning messages may be prepared prior to emergencies, and sent out by ERT members during the specific event. The facility intercom system is another key notification method and ERT members should practice using the system. Two-way radios are an effective way for ERT members to communicate among each other to coordinate response.

ERT Leader – A system should be established in advance who should be the ERT Leader for the emergency/incident response. For example: Weekly rotation among ERT leaders and coordinated secondary Leader if assigned Leader is out of the office.

Responsibilities of the first ERT member on-scene:

- Call 9-1-1 if necessary
- Notify ERT Leader and members of the incident using two-way radio (if available) or other chosen method
- Advise personnel in the area of any potential threat
- Initiate measures that are appropriate for the emergency
- Coordinate actions and support ERT Leader during the incident response

Confidential Medical Information – Information obtained by ERT members during an emergency situation involving a medical situation must be kept confidential, including employee's name and their medical situation. Notification should only be given to employee's direct supervisor and Human Resources for notification to employee's emergency contact person. When writing reports or incident worksheet, the subject employee and/or public member's personal information must not be disclosed.

Incident Worksheet – After responding to an incident, ERT member who responded first to the emergency is required to fill out the incident worksheet for record and evaluation purposes. The worksheet must be completed as soon as possible to capture accurate details of the incident. After-action review based on the incident worksheet can yield valuable feedback to the emergency planning process and enable the Department and City to improve future emergency responses.

WEEKLY CHECK-IN AND MONTHLY TRAINING

Successful activation and implementation of ERT response to an emergency require immediate coordination of accurate information sharing. Therefore, ERT members should communicate weekly through established communication method or tool. For example: if two-way radios are available, weekly radio check in is important for ERT response activities. ERT members can have weekly check in through emails and phones. Weekly Check-in serves as an opportunity for members to proactively check the availability of ERT members for the week. ERT members should meet monthly for training.

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Frequently Asked Questions

What is Ergonomics?
Ergonomics is the study of the relationship between people, their work and their physical work environment. The major goal of ergonomics is to fit the job to the individual and promote healthy and safe work practices.

What should I do if I am feeling pain or discomfort in my upper extremities?
If at any time you are feeling pain or discomfort from performing a job task, you should notify your supervisor immediately and contact any member of Risk Management for an on-site assessment.

Will I receive training on office ergonomics?
Yes, ergonomics training will be offered by Risk Management periodically, either at Hillsboro U, as a guest speaker, or at the specific request of a city department.

Can I do my own assessment of my work space?
Yes, we have provided an *Office Ergonomic Self-Assessment* link in this program that will allow employees to conduct their own assessments. If necessary all employees may contact any member of Risk Management for assistance.

What are some common ergonomic related injuries?
Common soft tissue injuries include: Carpal tunnel syndrome, lateral or medial epicondylitis, thoracic outlet syndrome, or trigger finger.

ERGONOMICS

Purpose

OSHA Section 5 (a) (1)-General Duty Clause

The purpose of the City of Hillsboro Ergonomics Program is to keep the employees safe, comfortable, and productive. The goal is to educate and to assist employees in identifying potential ergonomic risk factors that lead to the onset of ergonomic related injuries. The program consists of workplace training, workstation evaluation, and ergonomic control strategies.

RESPONSIBILITIES

Risk Management

- Administer and maintain the City of Hillsboro Ergonomics Program
- Assist employees who request an Ergonomic Assessment and provide corrective action recommendations
- Coordinate Ergonomic training

Managers and Supervisors

- Support the Ergonomics Program and recommend employee training as needed
- Implement corrective action recommendations as necessary

Employees

- Immediately report pain or discomfort to your supervisor
- Perform a self-assessment or contact Risk Management for an on-site visit

General Information

Ergonomics is the study of the relationship between people and their work environment. The goal of ergonomics is to better fit the job to the individual by identifying and reducing ergonomic risk factors and promoting healthy and safe work practices.

Poor workstation design can present ergonomic risk factors to potential users. Common risk factors include overexertion, force, repetitive motion, contact stress, awkward postures, vibration, or cold stress. Each individual risk factor is capable of causing injury, while multiple risk factors greatly increase the risk of Musculoskeletal Disorders (MSD).

Musculoskeletal Disorders (MSD’s) are injuries or illnesses of the soft tissues. Common areas affected include the upper extremities, shoulders, neck, and lower back, or the lower extremities. Examples of MSD’s include tendonitis, lateral/medial epicondylitis, rotator cuff syndrome, low-back pain, or carpal tunnel syndrome.

EVALUATION COMPONENTS

Ergonomic evaluations assist managers, supervisors, and employees in identifying potential workplace hazards, improper postures, or highly repetitive job tasks. Ergonomic evaluations for City of Hillsboro employees may be completed two ways. Employees can either perform a self-evaluation using the links below or contact Risk Management for an on-site assessment. A combination of both may also be used if necessary.

Self Evaluations

This link provides information in a simple, user friendly format with illustrations and corrective action recommendations.

1. Office Ergonomic Self Evaluation - This link provides information and illustrations Of "Good Working Postures". (http://www.osha.gov/SLTC/etools/computerworkstations/positions.html)

On-site Ergonomic Evaluations

City of Hillsboro employees may request an ergonomic assessment of their work area(s) by contacting any member of Risk Management. Risk Management will conduct an ergonomic evaluation based on observations including:

- Specific tasks or job processes
- Equipment used and work station alignment
- Work environment including workspace, access, lighting, and glare
- Keyboard height, tilt and distance from employee
- Mouse placement
- Monitor height, tilt, and distance from employee
- Chair height, back support, and adjustability
- Document placement and reach distances,
- Other employee practices that may be a contributing factor

WRITTEN RECOMMENDATIONS

Risk Management will provide written recommendations to the employee and departmental supervisor. In addition, Risk Management will support and assist with research and development of any controls necessary to reduce or eliminate potential risk factors.

CONTROLLING ERGONOMICS RISK FACTORS

There are two general approaches to controlling ergonomics risks:

- Engineering Controls – Physical changes made to the workstation, tools, and/or machinery that reduces or eliminates the hazard or increases the distance between the hazard and the employee.
- Administrative or Work Practice Controls – Changes made to reduce or eliminate exposure without making physical changes to the area or process. Examples include job rotation, frequent breaks, developing safe work procedures or stretching exercises.

EMPLOYEE TRAINING

Risk Management will coordinate ergonomic training periodically, either at Hillsboro U or at the specific request of any city department. The training curriculum may include:

- Risk factors that cause MSD
- Common MSD
- How to recognize and report symptoms
- How to prevent MSD

Employee training records will be maintained by Risk Management for at least 5 years.

Frequently Asked Questions

What kind of fire extinguishers do we have?
The most commonly supplied extinguisher throughout city facilities is a multipurpose ABC Fire Extinguisher. This type may be used on all Class A (ordinary combustible materials), B (flammable liquids), and C (electrical) type fires.

How do you use a fire extinguisher?
Remember the acronym P.A.S.S., **P**ull pin, **A**im hose, **S**queeze handle, and **S**weep at the base of the fire.

When do I use a fire extinguisher?
A fire extinguisher should only be used after the fire alarm has been pulled, employee evacuation has begun, and the Fire Department notified. If at that time the fire is still in the incipient stage and it is safe to do so, you may use the extinguisher to put out the fire.

Do I need to be trained on fire extinguisher use?
Yes. Employees are required to receive training prior to using a fire extinguisher and annually thereafter.

Even though I am trained, am I required to use a fire extinguisher?
No, you will not be required to use a fire extinguisher in the event of a fire in your area.

FIRE EXTINGUISHER

Purpose

Oregon Administrative Ruling 437-002-0187

The purpose of this program is to educate and train employees on the classes of fire, classes of extinguishers, proper use, and assessing the fire hazard to determine whether or not an employee should attempt to extinguish the fire.

RESPONSIBILITIES

Risk Management

- Provide or coordinate fire extinguisher training and support
- Review and revise this program to reflect applicable regulations and industry best practices

Managers and Supervisors

- Ensure fire extinguishers are regularly inspected and maintained
- Ensure the annual inspections and maintenance are being completed

Employees

- Attend fire extinguisher training as required

POTENTIAL FIRE HAZARDS

Fire hazards can exist in almost any work area. Potential hazards that may warrant the use of an extinguisher may include:

- Improper storage or use of flammable liquids and combustibles
- Smoking in prohibited areas
- Accumulation of trash and debris
- Unauthorized hot work operations
- Faulty electrical equipment
- Vandalism
- Kitchen fires

GENERAL INFORMATION

Portable fire extinguishers have been installed in the workplace regardless of availability and rapid response of the local fire department. City of Hillsboro employees are allowed to use fire extinguishers if the following conditions are true:

- Fire alarm has been pulled and employee evacuation has begun
- Fire Department has been notified
- The fire is small and not spreading
- The employee using the extinguisher in not endangered by the fire or smoke
- The user has an unobstructed exit route
- If the employee needs to use it to protect life and safety

- If the employee is comfortable using an extinguisher. IF NOT, evacuate the building

Note: City of Hillsboro employees are *not required* to use a fire extinguisher in the event of a fire.

Distribution of Extinguishers
When feasible, fire extinguishers shall be installed on hangers or brackets and shall be conspicuously located along normal paths of travel so they are readily accessible for immediate use. In locations where visual obstruction cannot be completely avoided, directional arrows or other markings shall indicate the location of extinguishers.

Extinguishers having a gross weight less than 40 pounds shall be installed so that the top of the extinguisher is not more than 5 feet above the floor, while those weighing more than 40 pounds shall be mounted so that the top is no more than 3 ½ feet above the floor. Extinguishers mounted in cabinets, wall recesses, or set on shelves must be placed so that the operating instructions face outward. The location of such extinguishers will be made conspicuous by marking the cabinet or wall recess in red, which will distinguish it from the normal decor.

If extinguishers intended for different classes of fire are located together, they shall be conspicuously marked to ensure that the proper class extinguisher selection is made at the time of a fire. Extinguisher classification markings will be located on the front of the shell above or below the extinguisher nameplate. Markings are of a size and form to be legible from a distance of 3 feet.

Inspection and Maintenance
All extinguishers shall be inspected monthly to ensure adequate charge, that hoses are in good condition and connections are tight, and that they have not been tampered with or physically damaged. The tag attached to the extinguisher shall list the date of the monthly inspection and initials of person completing the inspection.

If an extinguisher has been tampered with or is not in operable condition, it shall immediately be removed from service and repaired or replaced. An operable extinguisher shall be put in place while the damaged extinguisher is being serviced.

In addition, fire extinguishers shall be serviced annually by a qualified vendor and noted on the extinguisher tag. Annual inspection documentation must be retained and stored within the department for 3 years. Invoices received for these services may act as documentation of completion.

Training
Annual Fire Extinguisher Training shall be completed by all City of Hillsboro employees who may have the potential of using an extinguisher. The training curriculum includes:

- Fire tetrahedron
- Classes of fire
- Classes of extinguishers
- Using an extinguisher – P.A.S.S.
- When to use an extinguisher

Note: Documentation of training shall be maintained for 3 years within the Risk Department.

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Risk Management
HAZARD COMMUNICATION
Employee Right to Know

Frequently Asked Questions

What is a Hazardous Chemical?
A hazardous chemical is any chemical that is classified as a physical hazard, a health hazard, a simple asphyxiate, a combustible dust, a pyrophoric gas, or a hazard not otherwise classified. .

How do hazardous chemicals affect me*?*
Chemicals that pose health hazards can damage an exposed person's tissue, vital organs, or internal systems. Overexposures to hazardous chemicals may cause temporary irritation, discomfort or worse, permanent damage to the body.

What are some physical hazards of chemicals?
Chemicals that are physical hazards are unstable, and when handled improperly, can cause fires or explosions. Common physical hazard characteristics include combustibility, compressed gases, explosive capabilities, flammability, or reactivity with water or other chemicals.

How can I learn more about the chemical materials used in the workplace?
Your employer is required to maintain Safety Data Sheets (SDS) for each hazardous chemical in the workplace. The SDS will provide health and safety information such as safe handling and use, PPE requirements, first aid measures, physical and health hazards, and emergency contact information.

What is the GHS and how will it affect me?
The GHS is the Globally Harmonized System of classification and labeling of chemicals. It is a new standard that will help to eliminate confusion between different SDS formats and improve safety through consistent labeling. New GHS compliant labels and SDS sheets will be in use worldwide by June 1, 2016.

When will I be trained?
Employee training occurs at time of hire and every 3 years thereafter on the components of the Hazard Communication Program. Additional training will occur when new chemicals are introduced to the work place, if there is a deficiency noted in the existing program, or if an employee is unable to demonstrate adequate knowledge of the program.

HAZARD COMMUNICATION
Employee Right to Know

Purpose

OSHA Regulation 1910.1200

Employees have the right to know what chemicals they are using or what chemicals they may be exposed to in the workplace. The purpose of this program is to ensure workers who may be exposed to hazardous chemicals understand the hazards, how to read a Safety Data Sheet (SDS) and how each employee can protect them from an exposure.

RESPONSIBILITIES

Risk Management

- Provide training to employees affected by Hazard Communication procedures
- Review the Hazard Communication Program annually and revise it to reflect changes in OR-OSHA rules and/or Departmental procedure or policy

Managers and Supervisors

- Implement and enforce the Hazard Communication Program
- Collect the proper SDS for any non-exempt chemical that is brought into the department
- Ensure the affected employees are trained on new products prior to first use
- Ensure that the chemicals and pipes used within the department are properly labeled. Note: This could be achieved through quarterly site inspections of your departments

Employees

- Comply with the components of this program
- Ensure that the chemicals and pipes within the department are properly labeled
- Employees shall use chemicals in the workplace for the purpose for which they were intended, and will review health and safety data concerning hazardous chemicals prior to using them

GENERAL INFORMATION

OSHA has adopted the Global Harmonization System (GHS) which has added emphasis on how chemical hazards are communicated to employees. This includes:

- Labels and warnings
- Signal Words
- Hazard Statements
- Pictograms
- Precautionary Statements
- Contact information for manufacturer, importer, or other responsible party

GHS has mandated that manufactures develop a more consistent format of providing chemical information to the user and that has brought changes to the Material Safety Data Sheet (MSDS). Manufactures had until 2016 to make those revisions which will also include changing from MSDS to Safety Data Sheets (SDS).

SDS provide important safety and health information on chemical products and materials used on the workplace. SDS are required to be obtained by the person who purchases the product. SDS must be onsite and reviewed by the users prior to first use of the product.

The SDS are required to be in English; however it is permissible to have additional copies of SDS in other languages that are appropriate to the work place. If an employee is unable to read an SDS, a co-worker or supervisor must explain the information to the employee as it is found on the SDS before the employee has any contact with the product.

SDS management can be accomplished in two ways. Departments can make paper copies readily available to employees or use the city's online KHA Online SDS system on the city intranet, or a combination of both. SDS shall be available to all employees during every work shift. Employees who travel away from their shop or base facility will have information from the SDS readily available, either by telephone, radio, or by having a copy of the applicable SDS with them.

If SDS are kept in hard copy form, they shall be added to the chemical inventory list and a copy inserted in the SDS binder. **All copies of new SDS shall be sent to Risk Management.** On a monthly basis, Risk Management will submit the new SDS to KHA and have the sheets entered into the city SDS Management Database.

SDS Management Options:

1. Online KHA Online SDS Management System can be accessed via "hillsboroatwork". Or access the Risk Management or your department home page. Click on the SDS icon link.

And/or

2. Each department may maintain a hard copy SDS Binder that contains the following information:
    - A copy of the Hazard Communication Program
    - Chemical Index List
    - Secondary Labels and Instructions
    - Current SDS

Chemical Index List
Each department who chooses to maintain hard copies will need to designate an individual(s) who will be responsible for maintaining the SDS binders, including the chemical indexes.

The Chemical Index List shall include the following information:

- The product name
- The product manufacturer or importer
- Where the product is used

Adding New Chemicals

The responsible supervisor or designee shall ensure an SDS has been obtained for each new non-exempt hazardous chemical. The SDS shall be reviewed by Risk Management prior to first use to ensure the product is appropriate for the use. If so, the purchase will be approved and the new SDS will be added to the SDS data base. The supervisor will ensure employees understand the physical and health hazards and protective measures. If the proper SDS for a specific chemical is not obtained prior to first use, that chemical shall not be used.

SDS ARCHIVES

If a chemical is no longer used by a department, they shall write the department name and date on top of the SDS and forward to Risk Management. Risk Management will archive the SDS for 30 years from the date of removal. If the SDS is in KHA, the sheet will be archived in KHA. If the sheet is not in KHA, the paper copy will be archived in a file within Risk Management.

EXEMPTION:

Consumer products may be exempt from the Hazard Communications Program and SDS requirements if all 4 conditions exist:

- Purchased at a local, non-industrial store
- Used at relatively the same frequency and quantity as a typical consumer would use
- Use has intended by the manufacturer
- If the consumer product is not assigned to a specific individual for a specific job task

Note: Exempt materials, including consumer products shall bear the appropriate labels, and be stored and used in accordance with any safety precautions provided by the manufacturer.

CONTAINER LABELING/PIPE LABELING

The chemical or product name on the label shall be consistent with that found on the SDS and product index. Supervisors are responsible for ensuring that all containers of hazardous chemicals received at his/her facility:

1. Are clearly labeled as to hazardous contents
2. Bear the appropriate hazard warning(s)
3. List the contact information for the manufacturer, importer, and/or distributor

As manufacturers transition to the new GHS labeling system, new labels will include:

- Product Identifiers
- Signal Word
- Hazard Statement
- Pictograms
- Precautionary Statement

Primary chemical containers missing or bearing unreadable labels shall be reported to the department supervisor immediately. The supervisor is then responsible to re-label the container with a proper label or properly dispose of that container and get a new primary container of that product.

If secondary chemical containers are used, the employee transferring the product from the primary container to the secondary container is responsible for labeling the secondary container.

Exemption: A secondary container need not be labeled if the contents are for the immediate use by the individual who transferred the chemical into the container. In this case, the container must be under the sole control of that individual. It is also the responsibility of the individual who used the secondary container to ensure the container is emptied of the chemicals, cleaned appropriately and stored as required at the end of each shift.

PIPE LABELING SYSTEM

Pipes carrying hazardous chemicals through any City facility shall be labeled indicating the contents. The labeling shall be located at the beginning and end of continuous pipe runs and where confusion may occur; such as close to valves, branches, and where pipes pass through walls, floors, and ceilings. If the pipe has a long run, it is recommended that the labels are placed every 50 feet.

Where pipes are located above or below the normal line of vision, the lettering shall be placed above or below the horizontal centerline of the pipe, so it is clearly visible. SDS shall be maintained for all hazardous chemicals carried in pipes.

NON-ROUTINE TASKS

Periodically, employees must perform hazardous non-routine tasks. Before starting work on such projects, each affected employee shall be instructed by the responsible supervisor about hazardous chemicals to which s/he may be exposed during such activity. This information will include;

- Specific physical and health hazards
- Protective measures to reduce exposure, including PPE, ventilation, and safe handling procedures, and emergency procedures
- SDS shall be made readily available

PROGRAM AVAILABILITY

The written *Hazard Communication Program* shall be available for review by any employee during any work shift. This program is readily available in the City Risk Management Manual or on the Risk Management home page on the intranet.

CONTRACTORS

When a contractor is brought into a City facility to perform any type of work, the responsible supervisor of that facility will inform the contractor of the following;

- Any hazardous chemicals to which the contractor or his/her employees may be exposed
- The procedure for obtaining pertinent SDS
- An explanation of the chemical labeling system in use
- Precautions the contractor and his/her employees may take to lessen the possibility of exposure by using appropriate protective measures
- Who to inform if there is a release of a hazardous chemical
- The contractor shall also inform us, the City of Hillsboro, of the hazardous chemicals they may be bringing onsite to complete their work and supply us with the required SDS for those products
- The Contractor shall remove all hazardous chemicals from the site when their work is completed.

ACCIDENTAL RELEASE

If a small scale chemical spill occurs, the responsible employee(s) shall notify their supervisor or designee immediately, secure the scene, and consult the SDS. Follow the manufacturer's directions for PPE use, spill clean-up materials, safe work procedures, and proper disposal requirements. Examples of a small scale spill may include but not limited to; vehicular fluids such as antifreeze, transmission fluid, oil, and less than 10 gallons of gasoline.

All appropriate personal protective equipment shall be used to clean up any chemical spill. All used absorbent material and recovered chemical must be contained, stored, and disposed of appropriately. Notify the Risk Management Department for storage and disposal of hazardous waste debris.

If the spill is so large, or has the potential to place any employee in danger from exposure to a toxic chemical, fire, explosion, or if the chemical may react with other chemicals stored or used in the area, secure the scene, evacuate the area and notify the **Hillsboro Fire Department by calling 911**.

EMPLOYEE EXPOSURE

Any employee suffering an injury or illness due to chemical exposure should follow normal procedures for reporting a work related injury or illness; seek medical attention and

complete the Incident Report Form and an 801 if medical treatment is necessary. A copy of the applicable SDS should be presented to the employee's medical provider.

EMPLOYEE TRAINING

All employees who may be exposed to hazardous chemicals while performing their jobs shall be trained on the *Hazard Communication Program*. Program components include where the applicable SDS are kept and how to read them, health and physical hazards, personal protection, and proper labeling.

As new chemicals are introduced to the workplace, supervisors are responsible to training the affected employee(s) of the chemicals, associated hazards, and how to properly use, store, and dispose of the chemicals, and how to deal with a chemical release. This classroom or one-on-one training is a requirement prior to exposure to hazardous chemicals.

The Hazard Communication Program shall be the subject of refresher training as needed or at least every 3 years. Documentation of scheduled training will include the employee's name, instructor's name, date of training, and a brief description of the information covered during the training session. The documentation will be maintained by the Department and Risk Management for a minimum of three years.

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Risk Management
INJURY REPORTING

Frequently Asked Questions

Why is injury reporting necessary?
Reporting all injuries is important to the success of the Loss Control Program because it identifies where losses are occurring and helps to determine what level of intervention is required to prevent reoccurrence. Ideally, the goal is minimize or eliminate the potential hazards that cause injuries or illness to employees.

What is the difference between an accident and a near miss?
An accident is considered an unplanned event that resulted in some form of injury or illness which may or may not require immediate medical attention. A near miss is an event that occurred that could have resulted in an accident, but did not. In other words, it was a close call.

What is a first aid case?
A first aid case is defined as basic or limited treatment for an illness or injury until definitive medical treatment can be accessed or until the illness or injury is dealt with (as not all illnesses or injuries will require a higher level of treatment).

How do I report an injury?
If you are injured at work you should immediately report it to your supervisor. The severity of your injury will determine what steps for reporting are required. If you require immediate medical attention, you will be required to complete an 801 and an Incident Report Form. If you have an injury that does not require first aid or immediate medical treatment (such as a strain) you are required to complete an incident report form. This serves as important documentation should you need to seek medical treatment in the future. If your injury is very minor and only requires first aid, then you will be required to fill out the First Aid Log.

Will I receive training on the Injury Reporting Program?
Yes, you will be trained initially and retrained if program changes are made that affect the employees.

INJURY REPORTING

Purpose

Oregon Administrative Rule 437-001-0700

To establish procedures for reporting and investigating work place incidents resulting in a near miss, first aid, or any occupational injury or illness.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Injury Reporting Program
- Support the supervisors and employees during an investigation
- Assist departments with developing corrective action recommendations
- Maintain OSHA Logs for all City of Hillsboro Departments
- Annually audit the Injury Report Program for effectiveness
- Maintain all records per the City retention schedule

Managers and Supervisors

- Control hazards in the workplace to minimize the risk of incidents
- Conduct accident investigations for all medical treatment injuries
- Ensure immediate and long term corrective actions are taken to prevent recurrence
- Ensure Workers Compensation 801 form and Incident Report Form are completed by the injured employee(s)

Employees

- Identify and control hazards in the workplace to minimize the risk of incidents
- Report hazardous conditions, near misses, and all injuries to your supervisor
- Complete Workers Compensation 801 (medical treatment only) and Incident Report Form when injured
- Assist as requested in all incident investigations

DEFINITIONS

Incident: An occurrence or event that could have serious consequences: an accident, near miss, or the need for first aid.

Accident: An unexpected and undesirable event, especially one resulting in damage, injury or illness.

Near Miss: A narrowly avoided mishap that could have caused property damage, injury or illness, but did not.

First Aid Case: Basic or limited treatment for an illness or injury until definitive medical treatment can be accessed, or until the illness or injury is dealt with (as not all illnesses or injuries will require a higher level of treatment).

REPORTING SYSTEM AND FORMS

Near Miss Reporting

It is the responsibility of each department to make a near miss reporting system available to all employees. Possible options could include utilizing a lockbox or equivalent with 3 X 5 index cards. If an employee is involved in a near miss, they may record the information on the card and place it in the box. Names are not required on the cards. The Safety Committees will address each item at their monthly meetings.

In addition, employees may use the City of Hillsboro, Risk Management, Intranet site to submit any suggestion or concern they may have. All submissions may be anonymous.

Note: If an employee is involved in, or witnesses a near miss and thinks it requires immediate mitigation, they shall contact their Supervisor and/or Risk Management to immediately investigate and recommend corrective actions.

First Aid Report of Injury

Each department is responsible to maintain a First Aid Report of Injury Log within their department. If an employee is injured while performing a job task and needs to use any type of product from the first kit, they shall document their injury in the log. If an employee sustains an injury while working in the field and uses the first aid kit stocked in the vehicle, that employee shall document the injury in the log after returning to the department. On a quarterly basis, the department safety committee will collect the logs and review them with Risk Management staff for tracking and trending purposes.

Note: If an employee is injured outside of work, at home, vacation, etc, and needs to use first aid products to cover, clean, or protect while on the job, such instances would not be required to be documented in the log.

The following information should be noted in the First Aid Log:

- Employee Name (Optional)
- Date
- Brief description of injury and body part (Example: Filing papers and receive paper cut on left index finger)

See Appendix A: **First Aid Report of Injury** for more information.

Incident Report Form

All incidents that require the use of this form may be investigated. If employee(s) needs to seek immediate medical treatment, the investigation should be completed as soon as the employee(s) returns to the workplace.

The Incident Report Form covers the following types of incidents:

- Injuries that require immediate medical treatment,
- Injuries that do not require immediate medical treatment but may in the future,
- Work related illnesses (heat stress, chemical exposure, etc.),
- All other injuries that are beyond the scope of First Aid treatment.

This form is located on the Risk Management intranet page under Workers Compensation.

Workers Compensation Claim (Form 801)
The 801 form is used when an employee is injured and seeks medical treatment from a Physician or other Licensed Health Care Professional. Completed 801 and Incident Report Forms shall be sent to Risk Management in a sealed confidential envelope.

If the employee is incapacitated and cannot complete and/or sign the required forms, the supervisor should complete as soon as possible and forward to Risk Management.

GENERAL REQUIREMENTS

Investigation Teams
The supervisor of each department and/or the Safety Officer is responsible for the investigation of each incident that requires medical treatment beyond first aid.

The goal of an investigation is to answer the following questions:

- Who was involved
- What happened to cause the injury
- Where did the incident take place
- When did the incident occur
- Why did the incident occur (root cause)

When feasible, a team approach should be used. Each team should consist of the Supervisor, a member of Risk Management, the employee(s), and any witnesses involved in the incident.

After the investigation is completed, the investigation team is responsible for analyzing the information and developing and implementing corrective action to prevent reoccurrence. A brief follow-up plan shall also be developed to ensure the corrective actions are effective.

Conducting an Investigation
The Supervisor or team should be assembled and the investigation completed as soon as possible after the incident. Photos, diagrams, and notes made at the scene and during follow-up analysis shall all be preserved and kept with the final investigation report. Interviews with witnesses and those involved shall be conducted in a confidential setting.

In some cases, law enforcement, OSHA, and/or some other regulatory agency may be conducting investigations. The investigation team shall cooperate fully and assist when necessary. Law enforcement or other agency reports may be obtained and attached to other documentation concerning the incident.

Training
Employees will be trained on the Injury Reporting Program initially at the time of hire and retrained if program changes are made that impact the employees.

Appendix A
First Aid Report of Injury

Employee Name (optional)	**Date**
Description of Injury and Body Part Effected:	

Example Form

Employee Name (optional) JoAnne Appleseed	**Date** Today's Date
Description of Injury and Body Part Effected: Moving wood and received splinter in palm of right hand	

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Frequently Asked Questions

What should I do if OSHA wants to inspect my department?
If a compliance officer wants to inspect, there are a few things that should occur, be cordial, politely ask the officer to wait while you contact your supervisor and contact Risk Management for assistance with the inspection

Do I have to let OSHA into the facility?
Yes. If an employer refuses to admit an OSHA compliance officer or attempts to interfere with an inspection, OSHA will take appropriate legal action such as obtaining a warrant to inspect.

What will the compliance officer be looking for?
The primary purpose of a compliance inspection is to determine if the employer is complying with OSHA standards and providing a safe and healthy workplace.

Will I know in advance of an OSHA Inspection?
Inspections are always conducted without advanced notification. However there are special circumstances under which OSHA may give advanced notice, but such a notice will normally be less than 24hrs.

How do I prepare my Department prepare for an OSHA Inspection?
Work with Risk Management to ensure required programs are in place. Support your Safety Committee and their efforts. Ensure employees attend required safety training and have the necessary skills and equipment to perform the tasks safely. Observe work site activities for safe work practices, equipment and conditions.Implement corrective actions if necessary.

How does a compliance officer prepare for an inspection?
Before an inspection, a compliance officer becomes familiar with as many relevant facts about the workplace, such as inspection history, the nature of the business, and any particular standards that might apply. This will provide the compliance officer with a knowledge of potential hazards and industrial processes that might be encountered during the inspection.

OSHA INSPECTIONS

Purpose

The purpose of this program is to educate and train employees on the rights and responsibilities and outline the process and procedures during an OSHA Inspection

RESPONSIBILITIES

Risk Management

- Provide or coordinate training on OSHA process, procedures, and standards
- Assist and support the departments to identify and implement specific safety standards and best practices in order to prevent accidents, injuries, and OSHA penalties
- Assist departments during an OSHA compliance Inspection

Managers and Supervisors

- Ensure programs, process and procedures are in place to support the efforts of providing a safe and healthy workplace
- Support and implement safety programs
- Support and promote employee participation in safety and health activities
- Investigate accidents and injuries to identify root causes and develop prevention strategies to prevent reoccurrence

Employees

- Be actively engaged in safety and health efforts and the prevention of accidents and injuries

How OSHA works

Oregon OSHA's mission is to assure, as far as possible, safe and healthful working conditions for every employee in Oregon, to preserve our human resources and to reduce the substantial burden which is created by occupational injury and disease.

The Oregon Safe Employment Act (OSEAct) was enacted in 1973 to ensure the occupational safety and health of Oregon's workforce. In Oregon, Oregon OSHA administers the OSEAct and enforces occupational safety and health rules establishing minimum performance standards.

Enforcement

Safety and health compliance officers perform workplace inspections in agriculture, construction, general industry, and logging to measure and enforce employer performance in providing employees a safe and healthful workplace in accordance with the OSEAct. They perform over 5,000 unannounced safety and health inspections of the workplaces of both public and private-sector employers each year around the state.

Occupational Health Laboratory
Oregon OSHA operates a nationally certified Occupational Health Laboratory in Portland. This well-equipped lab analyzes samples collected by field compliance officers and consultants. Samples are analyzed and the results are used to determine whether workers are overexposed to hazardous substances.

Insurer/Self-Insured Program
This program ensures that workers' compensation insurance companies provide policyholders with loss prevention services at no charge. In addition, the program requires that self-insured employers write and implement occupational safety and health management plans. The City of Hillsboro is self insured and provides these services (See Safety and Loss Control Program and Insurance Program)

Consultative Services
Professional safety and health consultants help employers evaluate their work environment and implement changes to enhance workplace safety and health. Staff members also help firms develop their own occupational safety and health programs. Oregon OSHA provides over 2,000 consultative visits each year. Request for a consultation should be coordinated through Risk Management

Standards
This section writes and publishes Oregon OSHA's occupational safety and health rules, and helps the public understand new or revised codes. Code interpretations, hazard alerts, and technical advice are also provided.

Resource Center
Oregon OSHA's Resource Center contains a technical library, an audiovisual lending library, and workplace safety and health research assistance. Risk Management has an account with the Resource Center. Requests for materials can be made through Risk.

Appeals Section
The Appeals Section is an independent program within Oregon OSHA responsible for processing appealed citations. Appeals specialists conduct informal conferences with employers throughout the state. Resolution is reached in about 85% of all informal appeals. When not resolved, appeals are heard by an administrative law judge as part of the formal appeal process.

To carry out its responsibilities, Oregon OSHA does the following:

- Inspects places of employment
- Investigates industrial accidents, fatalities or catastrophes
- Issues citations for violations
- Identifies safety and health hazards which may or may not be violations and brings them to the attention of employers and employees
- Issues reasonable correction orders
- Assists employers and employees in safety and health matters
- Assesses and collects civil monetary penalties for violations

- Holds informal conferences with employers or employees to discuss citations, penalties or correction orders and other safety and health matters without limiting or extending the employer's appeal rights
- Grants or denies extensions of the times set by correction orders and citations.

PRIORITY OF INSPECTIONS

Inspections must be prioritized to predominantly focus enforcement activities upon places of employment reasonably believed to be the most unsafe. Inspections should be made according to the following priorities found in Oregon Administrative Rules (OAR) 437-001-0055:

- Imminent danger – An inspection made as soon as possible after Oregon OSHA becomes aware of the condition or practice.
- Fatality, catastrophe or accident – An investigation made as soon as possible after Oregon OSHA becomes aware of a fatality, catastrophe or accident. NOTE: An employer must report a fatality or catastrophe (3 or more employees are admitted to hospital as a result of the same incident) within 8 hours of occurrence. An employer must report hospitalization, loss of an eye, amputation or avulsion that results in bone loss within 24hrs.
- Complaint – An inspection initiated when Oregon OSHA receives a complaint and the nature of the information indicates the complaint's probable validity. Note: Any person may submit a complaint to Oregon OSHA of possible violations of any statute or of any lawful regulation, rule, standard or order affecting employee safety or health at a place of employment.
- Referral – An inspection made if safety or health violations were observed by an Oregon OSHA employee or other federal, state or local governmental representative and the nature of the information indicates the referral's probable validity.
- Programmed & Emphasis Inspections – An inspection following the provisions in OAR 437-001-0057.
- Follow-up – An inspection initiated when the employer requests removal of a Red Warning Notice; when a stay of correction or a variance has been denied; an extension of time has been denied; when Oregon OSHA believes the employer is not in compliance or to monitor progress towards correction of a violation; or when the employer is issued a citation with a correction order.

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THE OPENING CONFERENCE

Compliance Officer Responsibilities (OAR 437-001-0075)

- The Compliance Officer (CO) will, if possible, conduct a joint opening conference with the employer or a representative, and a representative of the employees, if any. The CO will present credentials as a means of identification;
- Explain the purpose, nature and intended scope of the inspection;
- Request the records which need to be examined;
- Obtain the name of the employer representative, and give that person the opportunity to accompany the CO on the inspection;
- Obtain the name of the employee representative, if any, and give that person the opportunity to accompany the CO on the inspection;
- Explain that employee participation may be accomplished through random interviews;
- Determine if there are trade secrets to be protected;
- Inform the employer that sampling may be done and photographs may be taken;
- Explain that past and present efforts will be evaluated to determine any good faith penalty adjustments;

- Explain that injury and illness history & past inspection activity will be reviewed to determine penalty adjustments for history;
- Determine what personal protective equipment is required in the place of employment and arrange to have and use such equipment; and
- Explain that a closing conference will be held with both the employer or a representative, and a representative of the employees, if any.

After the opening conference, the CO and accompanying representatives proceed through the establishment to inspect work areas for safety and health hazards. The CO determines the route and duration of the inspection. While talking with employees, the CO makes every effort to minimize any work interruptions.

THE INSPECTION

The CO will ask to review safety program documents during inspection. The review may include but is not limited to:

- OSHA 300 Logs
- Accident Investigation reports
- Safety Committee meeting minutes
- Emergency Action Plans
- Training records

The CO will ask to review safety program documents during the inspection. The review may include but is not limited to:

- Hazard Communication
- Exposure Control Plans
- Lock-out/Tag-out
- Permit Required Confined Spaces
- Fall Protection

During the inspection the CO will want to perform a walkthrough inspection of the establishment. The Inspection team should accompany the CO as he/she tours the facility. Every effort should be made to focus the tour and any discussions to the original purpose of the inspection and not expand the scope of the inspection by touring parts of the facility that are unrelated to the nature and scope of the inspection. If the CO finds a violation in open view, he or she may ask permission to expand the inspection.

The CO observes safety and health conditions and practices; consults with employees privately, if necessary; takes photos, videotapes, and instrument readings; examines records; collects air samples; measures noise levels; surveys existing engineering controls; and monitors employee exposure to toxic fumes, gases, and dusts.

The CO consults employees during the inspection tour. He or she may stop and question workers, in private, about safety and health conditions and practices in their workplaces. Each employee is protected under the Act from discrimination by the employer for exercising his or her safety and health rights.

During the course of the inspection, the CO will point out to the employer any unsafe or unhealthful working conditions observed. At the same time, the CO will discuss possible corrective action if the employer so desires.

Some apparent violations detected by the CO can be corrected immediately. When the employer corrects them on the spot, the CO records such corrections to help in judging the employer's good faith in compliance. Although corrected, the apparent violations will serve as the basis for a citation and, if appropriate, a notice of proposed penalty. OSHA may reduce the penalties for some types of violations if they are corrected immediately.

CLOSING CONFERENCE

At the conclusion of the inspection, the CO conducts a closing conference with the employer, employees, and/or the employees' representative. The CO discusses with the employer all unsafe or unhealthful conditions observed during the inspection and indicates all apparent violations for which he or she may issue or recommend a citation and a proposed penalty. The CO will not indicate any specific proposed penalties but will inform the employer of appeal rights.

During the closing conference, the employer may wish to produce records to show compliance efforts and provide information that can help OSHA determine how much time may be needed to abate an alleged violation.

If an employee representative does not participate in either the opening or the closing conference held with the employer, the CO holds a separate discussion with the employee representative, if requested, to discuss matters of direct interest to employees. ·

After the CO reports findings, the Area Director determines whether he or she will issue citations and/or propose penalties.

Citations

Citations inform the employer and employees of the regulations and standards alleged to have been violated and of the proposed length of time set to correct alleged hazards. The employer will receive citations and notices of proposed penalties by certified mail. The employer must post a copy of each citation at or near the place a violation occurred for 3 days or until the violation is abated, whichever is longer.

Penalties

These are the types of violations that may be cited and the penalties that may be proposed.

Other-Than-Serious Violation- A violation that has a direct relationship to job safety and health, but probably would not cause death or serious physical harm. OSHA may assess a penalty from $0 to $1,000 for each violation. The agency may adjust a penalty for an other-than-serious violation downward by as much as 95 percent, depending on the employer's good faith (demonstrated efforts to comply with the Act), history of previous violations, and size of business.

Serious Violation- A violation where there is a substantial probability that death or serious physical harm could result.

Willful Violation- A violation that the employer intentionally and knowingly commits. The employer is aware that a hazardous condition exists, knows that the condition violates a standard or other obligation of the Act, and makes no reasonable effort to eliminate it.

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Repeated Violation- A violation of any standard, regulation, rule, or order where, upon Re-inspection, a substantially similar violation is found and the original citation has become a final order.

Failure-To-Abate – Failure to correct a prior violation.

Additional violations for which OSHA may issue citations and proposed penalties are as follows:

- Falsifying records, reports, or applications.
- Violating posting requirements.
- Assaulting a CO or otherwise resisting, opposing, intimidating, or interfering with a CO in the performance of his or her duties.

Penalties are assessed based upon probability ratings.

- LOW- If the factors considered indicate it would be unlikely that an accident could occur;
- MEDIUM- If the factors considered indicate it would be likely that an accident could occur; or
- HIGH - If the factors considered indicate it would be very likely that an accident could occur.

The probability rating may be adjusted on the basis of any other relevant facts which would affect the likelihood of injury or illness. Those factors include:

- The number of employees exposed;
- The frequency and duration of exposure;
- The proximity of employees to the point of danger;
- Factors, which require work under stress;
- Lack of proper training and supervision or improper workplace design; or
- Other factors which may significantly affect the degree of probability of an accident occurring.

A severity rating for each violation is determined by the CO on the basis of the degree of injury or illness which is reasonably predictable. If more than one injury or illness is reasonably predictable, the CO will determine the severity based upon the most severe injury or illness. Severity ratings are selected from the following schedule:

- Other Than Serious - Conditions that could cause injury or illness to employees but would not include serious physical harm;
- Serious Physical Harm- Injuries that could shorten life or significantly reduce physical or mental efficiency by inhibiting, either temporarily or permanently the normal function of a part of the body. Illnesses that could shorten life or significantly reduce physical or mental efficiency by inhibiting, either temporarily or permanently the normal function of a part of the body.
- Death - The severity rating may be adjusted on the basis of any other relevant facts which would affect the severity of the possible injury or illness.

After receipt of a citation, the employer must

- Promptly post the citation for employees information for three days or until the violation is corrected, whichever occurs last
- Assure that any amendments or withdrawals to a citation are posted with the original citation for three days or until the violation is corrected, whichever occurs last;
- Correct each violation by the date ordered; and

- If no appeal is filed, remit any penalty by the 31st calendar day following receipt of the citation

Other posting requirements are found in OAR 437-001-0275

APPEALS BY EMPLOYEES

If an employee complaint initiates an inspection, the employee or authorized employee representative may request an informal review of any decision not to issue a citation.

APPEALS BY EMPLOYERS

Within 30 working days of receiving a citation, an employer who wishes to contest must submit a written objection to OSHA. The OSHA Area Director forwards the objection to the Occupational Safety and Health Review Commission (OSHRC), which operates independently of OSHA.

Risk Management

PANIC BUTTON PROCEDURES

Frequently Asked Questions

What happens when I activate the button?
Several things will happen as soon as the button is activated. First, Sonitrol is immediately notified and determines the location of the emergency. The Hillsboro Police Department through WCCCA (Washington County Consolidated Communications Agency, which is the 9-1-1 call center), is then notified. Sonitrol and Police monitor the audio feed to aid in their response planning. Hillsboro Police are dispatched to the location to respond to the incident.

When do I activate the button*?*
Anytime you or your co-workers feel threatened by another employee, disgruntled citizen, or anyone who displays aggressive, unruly behavior.

How can I assist the Police in the response?
Use key words when communicating. Remember, the audio is being monitored in the area the alarm was activated. Anything you can say to provide the Police with information will help them determine their response.

Where are the buttons located?
Commonly, the panic buttons are located at the department's front desks. The panic buttons are mounted to the underside of the desks or are in remote control form. Some have a thumb lever which you insert your thumb into and flip down. Others have 2 buttons which you push simultaneously and hold for three seconds to activate.

PANIC BUTTON PROCEDURES

Purpose

Panic buttons are installed in various locations throughout City buildings to assist employees in the event of an emergency. The purpose of this program is to ensure that employees understand how the panic button system works and why they are important. In the event of an emergency, employees may not be able to call 9-1-1. In such instances, activating the panic button will notify Police (through our monitoring company and the 9-1-1 call center) that an incident is occurring, and they will respond.

RESPONSIBILITIES

Risk Management

- Develop and maintain operating procedures
- Train employees on use of the panic buttons

Managers and Supervisors

- Understand the procedures and proper use of the panic buttons
- Ensure that all new employees receive proper training on the panic buttons

Employees

- Attend training offered by Risk Management
- Understand and follow the procedures for use of the panic buttons

WHAT HAPPENS WHEN I ACTIVATE A PANIC BUTTON?

- Sonitrol is immediately notified (Sonitrol is our security monitoring company)
- Sonitrol determines the location of the emergency and notifies WCCCA (Washington County Consolidated Communications Agency) who then dispatches Police
- Sonitrol continues to monitor the audio feed and provide information to WCCCA, to aid Police in their response
- Hillsboro Police are dispatched to the location and will respond

If at any time you feel you or your co-workers are in danger, do not hesitate to press a panic button and / or call 9-1-1.

The benefit to activating the panic button system is the ability for Sonitrol to monitor the audio feed. All areas that have a panic button have audio feed that allows Sonitrol to hear what is happening in the area where the alarm was activated. Police may call the location of the situation to attempt to talk to you and obtain more information, if appropriate.

How can I assist Hillsboro Police Department in responding to the panic alarm?

Use key words when communicating. Remember, the audio is being monitored in the area the alarm was activated and anything you can say to provide the Police with information will help them determine their response.

Examples: You might say, “I’m going to have to ask you *two* gentlemen to leave”…or “Please put the knife away”…or “Why do you want to blow up this building?” Use the audio monitoring to give the Police as much information as possible about the situation before they enter the area.

TYPES OF PANIC BUTTONS

The Panic Buttons are either:

- Two button hard-wired
- Two button remotes mounted w/Velcro underneath the desk tops
- Two button remotes (floating)

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Risk Management
POINT OF DISPENSING
MEDICAL COUNTERMEASURES

Frequently Asked Questions

What is a Medical Countermeasure or MCM?
In the event of a declared public health emergency, and in partnership with the Cities Readiness Initiative, the City of Hillsboro has developed a plan to protect you and your family by providing timely access to medication and ongoing communication about the emergency.

What is a Point of Dispensing or POD?
A Point of Dispensing, or POD, is a public health term used to identify a location where medication may be quickly dispensed in times of emergency. A POD would be set up in a City facility to provide medication for City of Hillsboro employees and their families.

How does the City get access to medication?
The City of Hillsboro is registered with Washington County as a Push Partner. In the event of a major public health emergency, the City would receive rapid access to information and life-saving medication.

Are employees trained on MCM and POD?
Yes, Employee CERT members were the first group of employees to be trained on Medical Countermeasures and POD. This training will become available to all interested staff in the future as it would take a large number of resources to operate a POD during an emergency.

Are there practice drills?
The County performs quarterly call down drills with the City through the Oregon Health Alert Network. The City has designated Points of Contact. If there were a public health emergency, Washington County would activate the City's POD. The employees who have been trained in Medical Counter Measures and POD Activation have also participated in table top exercises and drills.

POINT OF DISPENSING
MEDICAL COUNTERMEASURES

Purpose

The Medical Counter Measures and Point of Dispensing Program is designed to protect employees in the event of a public health emergency by providing timely access to necessary medication.

RESPONSIBILITIES

Risk Management

- Work with the Cities Readiness Initiative Team to provide ongoing training for new employees and refresher training
- Ensure the City remains registered as a Push Partner
- Ensure the City has guidelines in place as well as supplies on hand to support a POD

Managers and Supervisors

- Understand the benefits and importance of Medical Counter Measures and being a Push Partner
- Support training of employees for staffing of POD

Employees

- Educate and prepare for emergency situations that may arise at work

What is a Point of Dispensing or POD?

A Point of Dispensing, or POD, is a public health term used to identify a location where medication may be quickly dispensed in times of emergency. A POD would be set up in a City facility to provide medication for City of Hillsboro employees and their immediate family members if there were a public health emergency.

What is a Medical Counter Measure or MCM?

In the event of a declared public health emergency, and in partnership with the Cities Readiness Initiative, the City of Hillsboro has developed a plan to protect you and your family by providing timely access to medication and ongoing communication about the emergency. Oral antibiotics would be administered by trained City staff.

TRAINING

The initial group of trained staff were the Employee CERT members. This training is now open to all interested City employees and is provided by a member of the Cities Readiness Initiative, a federally funded program. This training is offered once a year and coordinated through Risk Management.

Staff are trained on:

- Activation of the Point of Dispensing (POD)
- Assigning duties for Point of Dispensing to include:
    - Point of Contact / Coordinator
    - Transporter to pick up medication
    - Site POD Manager
    - POD Greeter / Educator
    - POD Dispensers
    - POD Consultants
    - Support Staff Positions including security and traffic flow control
- Accessing Just in Time training when needed
- Where to pick up medication – assigning a team to transport
- Work with IS to set up a computer lab for employees who need to complete intake forms
- Gathering necessary supplies – gathering items stored in garage area
- Setting up POD flow with tables, chairs, supplies, and signage
- Coordinating communication with the CMO

Trained City employees have done table top exercises and drills to practice setting up the Point of Dispensing (POD) and practice their duties of dispensing and consulting. In the unlikely event of a bioterrorist attack or other large scale public health emergency, the City of Hillsboro has a plan to help its employees and their families.

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Risk Management
SAFETY COMMITTEES

Frequently Asked Questions

What will I do as a committee member?
You will be responsible to assist in coaching workers on safe work practices and helping them correct unsafe behavior or conduct periodic work group safety meetings that affect your department. Members may also assist in investigating accidents or injuries and developing corrective action recommendations to remove hazards from the workplace.

Do we have to conduct inspections?
Yes, the safety committee is required to conduct quarterly safety inspections of their facilities. This consists of site tours and documenting your findings. The committee is then responsible to develop corrective action recommendations so the department can mitigate the hazards or meet OR-OSHA compliance rules.

How often are safety committees supposed to meet?
Committees are required to meet monthly with the exception of office environment only committees, who may meet quarterly.

What are the duties of the Committee Chairperson?
The chairperson is responsible for keeping the meeting on track so the agenda can be completed in the allotted time. By taking time to prepare, the chairperson can ensure that the agenda is not too lengthy, and that the information and resources (people and materials) will be available.

Will I be trained on my responsibilities as a committee member?
Yes, you will receive training provided by Risk Management.

SAFETY COMMITTEES

Purpose

Oregon Administrative Rule 437-001-0765

The safety committee's purpose is to assist management in creating and maintaining a safe work environment for all employees. The safety committee plays an important role and serves as a valuable communication link between employees and management on safety issues.

As a safety committee member, employees may be asked by their supervisor to take part in:

- Coaching workers on safe work practices and helping them correct unsafe behavior
- Conducting periodic work group safety meetings affecting their department; and
- Helping to investigate accidents or safety suggestions from employees

Each member has an additional responsibility to serve as an example to co-workers. Employees' attitudes are influenced by their observance of safety rules and procedures, wearing protective equipment, and making suggestions for improved working conditions and safety procedures.

Activities include not only being involved in safety matters that arise, but also participation in the ongoing safety and prevention program. This includes:

- Workplace inspections
- Review of accidents and near-misses
- Review of employee complaints/concerns
- Review of occupational safety programs; and
- Review of injury and illness statistics

RESPONSIBILITIES

Risk Management

- Assist departments in establishing safety committees
- Support safety committees by having a member of Risk staff attend each meeting
- Offer in-house Safety Committee Training to all safety committee members
- Act as a liaison between committee members and management if needed
- Train members to conduct workplace inspections
- Motivate and encourage the development and efficiency of all safety committees

Managers and Supervisors

- Allow employees to attend monthly meetings and attend training as needed
- Encourage employee participation in safety activities
- Understand the roles and responsibilities of safety committee members

Employees

- Attend Safety Committee Training, offered in-house or through Oregon OSHA
- Attend monthly safety committee meetings
- Assist in conducting workplace inspections
- Ensure that accident investigation procedures are in place
- Work safely to set a good example for co-workers
- Report all unsafe acts or conditions
- Act as a liaison between fellow workers and management on safety related issues

MOTIVATION

One of the ways to motivate safety committees is to help them be successful and give them visibility. A great way to do this is to create a safety committee where employees feel privileged to be members and can see they actually can make a difference in the safety culture of their department.

State law, through the Oregon Occupational Safety and Health Administration (OR-OSHA), requires safety committees. Effective committees are an integral part of a successful safety culture. They can create enthusiasm among employees concerning work place safety as well as recognition of the cost of job-related injuries and illnesses. The City of Hillsboro requires departments to establish a safety committee based on OR-OSHA rules. The following pages explain the requirements and responsibilities of a safety committee.

People who are motivated and committed to making safety a priority should be encouraged to serve as safety committee members. There should be strong department support with high visibility and attention from upper management. Recommendations should be acted on quickly.

Examples of what an effective safety committee can achieve are:

- Seek out and respond to employee's safety concerns
- Identify workplace hazards through workplace inspections
- Make recommendations to management to eliminate hazards
- Assist in creating accident investigation procedures
- Identify causes of accidents and determine preventative measures
- Assist in providing safety information and training to all employees

An empowered safety committee headed by a committee chairperson is one of the keys to a positive safety culture.

SAFETY COMMITTEE GUIDELINES

Scope

Safety committees are required for all public or private employers. (with few exceptions.) To be practical and effective, it is advisable to establish a committee that matches the structure of your department. If you have multiple locations, it may be acceptable to organize one committee for all locations and have a committee representative from each location and/or work group.

Membership Requirements
OR-OSHA states that:

- The safety committee must be composed of both employer and employee representatives. If agreed upon by labor and management the committee may have more employee representatives
- The employee representatives shall be volunteers or elected
- Each type of work group should be represented on each committee
- Each committee member shall serve a minimum of one year. Risk Management recommends a maximum of three years at a time, to allow others to participate
- The chairperson shall be elected by the committee
- Employee representatives attending the committee meetings, inspections, and training shall be compensated by the employer at their regular hourly wage

Duties and Responsibilities
The duties and responsibilities of an effective safety committee include:

- Meeting monthly except when quarterly safety inspections are performed. In a low hazard work environment (office work) the committee may meet quarterly
- Conducting each meeting with a prepared agenda. The Chairperson prepares the agenda
- Taking minutes at each meeting and retaining those records for three years. The Secretary is responsible for maintaining all committee records
- Posting and/or distributing the minutes to all employees
- Making recommendations for improved workplace safety to management
- Establishing a system to allow members to obtain safety-related suggestions, report of hazards, or other information, directly from all persons involved in the operation of the workplace
- Establishing procedures for investigating all safety-related accidents
- Conducting quarterly workplace inspections

Training
All safety committee members shall be trained at a minimum in:

- Safety committee purpose and operation
- OR-OSHA Rules as stated above
- How to conduct a safety committee meeting
- Hazard Identification
- Accident Investigation

Safety Inspections
The committee is responsible for regular review of the safety programs, work conditions, and work procedures. This includes regular workplace inspections to identify hazards arising from the work conditions or practices and to ensure that established safety procedures and programs are being followed.

If the committee identifies safety deficiencies, these should be brought to the attention of the supervisor so that corrective action can begin. Inspections should take place at least quarterly. A written recommendation identifying the hazards and suggesting corrective action should be presented to management.

Investigations
The members are responsible for ensuring that accidents are investigated to determine their causes so corrective action may be taken.

Employee Safety Concerns
Employees should first contact their immediate supervisor if they have safety complaints or concerns. An employee should then notify their safety committee representative. Safety Committee members represent all employees and serve as an important communication link between employees and management.

Employees will be informed by their supervisor and/or the safety committee as to the disposition of their safety concerns. Even if no action is possible or the committee considers the concern unjustified, the employee should be told of the decision and the reasoning behind it. The committee shall inform the employee within a reasonable time frame.

Meetings
Each safety committee member should understand that their duties do not begin and end once a month at the meeting. There should be time allowed for preparation and assignments given between meetings.

The meetings can be worthwhile and productive depending on the attitudes and behavior of the various members and support of management. Meetings will be productive if they are considered as problem-solving sessions, using knowledge and experience to develop solutions. Working as a team should be the goal. Meetings will not be a political forum or a place to air grievances. Participation from all members should be encouraged.

Chairperson's Duties
The chairperson is responsible for keeping the meeting on track so the agenda can be completed in the allotted time. By taking time to prepare, the chairperson can ensure that the agenda is not too lengthy, and that the information and resources (people and materials) will be available.

The meeting should close on a positive note of achievement so the members feel that their time spent was providing a valuable service to their fellow workers.

Other important tips for getting the most out of your meeting:

- Respect other member's time
- Keep an open mind
- Recognize communication problems
- Recognize team goals and efforts
- Concentrate on one subject at a time
- Share credit for team effort
- Thank others for their contributions
- Present solutions
- Don't be discouraged by the first obstacle you encounter
- Use available resources. Finish the job – make a decision and/or a recommendation

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Risk Management
THREAT ASSESSMENT

Frequently Asked Questions

What is a Threat Assessment Team?
A Threat Assessment Team is a group of individuals from Police, Human Resources, and Risk Management who are trained to assess potentially harmful or violent behavior of employees to determine if intervention is necessary to prevent violence and ensure employee safety.

Who's on the team?
The City's Threat Assessment Team is comprised of trained individuals from the Police Department, Human Resources, and Risk Management. If warranted, specialists (such as psychiatrists or other health care professionals) may be consulted or added to the team.

What happens if I call Human Resources and report a threat?
Human Resources staff has been trained to determine if the situation requires the convening of the threat assessment team. If so, Police will be contacted and the team will meet to determine the next steps in investigating the situation and intervening to keep our employees safe from any potential threat of harm.

What do I do if my co-worker is being threatened?
If you are comfortable doing so, approach your co-worker and encourage them to speak with their supervisor and/or Human Resources about the behavior. If this is not an option, speak directly to your supervisor. Just be sure to speak to someone. It's important not to let violent or harmful behavior go unreported. If you see something or hear something; say something!

What type of behavior should I report?
Any behavior that makes you feel threatened or unsafe should be reported immediately to a supervisor or Human Resources. If you are threatened with bodily harm in person, over the phone, or in writing, by a co-worker or outside person, report it immediately. If someone physically harms you while at work, report it to your supervisor and if warranted, call 9-1-1. All threats are taken seriously at the City of Hillsboro.

THREAT ASSESSMENT

Purpose

The City of Hillsboro is committed to providing a safe work environment for all of its employees. The City of Hillsboro's Threat Assessment process is a comprehensive and systematic approach to investigate and assess employees who are engaged in or exhibiting behaviors implying aggression or violence directed at other people.

RESPONSIBILITIES

Risk Management

- Process development and implementation in coordination with HPD
- Provide or coordinate training on threat assessment process with HPD

Managers and Supervisors

- Report all threatening behavior to HR immediately
- Have knowledge of Threat Assessment process

Employees

- Report all threatening behavior to HR or your supervisor immediately

GOALS OF THE THREAT ASSESSMENT TEAM

- Provide a protocol to assess threats of potentially harmful or violent behavior, risk factors, and action required to support employee safety.
- Provide a multi-level system that can mobilize broader community resources to help facilitate the development and implementation of safety monitoring and management plans as needed.
- Develop and maintain a sense of safety among employees, supervisors, and managers.

PROCESS

Level I - Inquiry

If any employee feels threatened by another employee or outside person's behavior or actions, Human Resources should be contacted immediately. Trained HR staff will determine if it is necessary for the Threat Assessment Team to convene, and meet with the individual who feels threatened by the aggressive behavior or actions.

Initially the threatened employee will meet with a representative from Police, HR, and Risk Management. The facts will be gathered and the situation discussed to determine if further action is needed including a Level II meeting.

Level II - Staff Complaint

At this level additional staff and professionals, i.e. psychologists, other law enforcement agencies, if applicable based on location, or other consultants may be asked to participate to assist the team in developing a plan of action including necessary measure to keep employees in a safe work environment.

Procedures will be put into place and follow up will be conducted in 2-4 weeks. This process will continue as needed.

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Frequently Asked Questions

What do I do if my vehicle is in an unsafe condition?
Vehicles shall be maintained in a safe condition at all times. In the event of an unsafe mechanical condition, the vehicle shall be immediately placed out of service. When a vehicle is placed out of service, the appropriate supervisor and Facilities and Fleet shall be notified. The vehicle shall not be returned to service until repair is verified by the Fleet Maintenance Shop.

Can I leave my vehicle unattended while fueling?
No. A vehicle is never to be left unattended while fueling; however, utility vehicles shall only be fueled when unoccupied.

Can I haul passengers in a vehicle that is designed for one person?
No, passengers are only allowed if safe riding provisions such as seats and safety belts are present. If other restraints are provided, they shall be used as intended by the manufacturer whenever the vehicle is under way. Riding on a pickup tailgate, trailer hitch or tongue, or the bed of a flatbed or dump truck is prohibited, even for a few feet.

What safety equipment should we have in our vehicles?
Each fleet vehicle shall have a serviceable fire extinguisher and first aid kit. The extinguisher shall be securely stowed but accessible by the operator. Monthly checks are required for all fire extinguishers. First aid kits shall be restocked as needed.

Can I use my cell phone while driving a city owned vehicle?
Except for personnel who operate emergency equipment, use of any cell phone while operating a vehicle on City business is not recommended. Use of a cell phone includes activating or deactivating the telephone, dialing, answering, conversing, and sending or receiving email or text messages. Employees are encouraged to pull over to the side of the road and stop the vehicle in order to use the cell phone. *Refer to 2011 Oregon Revised Statute 811.507 for full information on operating a motor vehicle while using a mobile communication device.*

VEHICLE SAFETY

Purpose

The purpose of this program is to establish safe practices and procedures for the use and maintenance of all City of Hillsboro owned motor vehicles and industrial related equipment.

RESPONSIBILITIES

Risk Management

- Provide or coordinate necessary training for authorized employees and supervisors,
- Maintain training records for a minimum of three years
- Maintain active insurance policies on all department vehicles
- Assist in accident investigations when appropriate
- Regularly update *Vehicle Safety Program*

Managers and Supervisors

- Ensure that department vehicles are maintained in a safe condition
- Allow only authorized and trained employees to operate department vehicles
- Allow time to complete necessary training; Defensive Driving, Safe Fueling, Accident Reporting
- Immediately remove from service any vehicle with any safety defect, and notify Fleet maintenance
- Enforce the requirement for safety check and/or pre-trip inspection of each department vehicle prior to its use each shift

Employees

- Maintain proper drivers license as required by the City's Safe Driver Policy
- Operate department vehicles in a safe, responsible manner and obey all traffic laws
- Participate in driver training programs
- If required to maintain a CDL, participate in the City substance-testing program
- Ensure all vehicle occupants use seatbelts and other available restraints before driving vehicle
- Follow safe fueling procedures
- Conduct safety check and/or pre-trip inspection prior to first use of the day
- Immediately report any safety defects or vehicle problems to your supervisor or Fleet Maintenance
- Report use of all prescription medication that may affect driving ability, and not operate any vehicle under the influence of medication which may cause drowsiness or other impairment

GENERAL OPERATION OF VEHICLES

- Yield to all emergency vehicles
- Drivers of vehicles are required to stop at blind crossings and corners where necessary for safe operation and shall not overtake and pass other vehicles at intersections, blind spots, curves, and other dangerous locations
- It is prohibited to manually tow or push a disabled vehicle
- No vehicle shall be loaded beyond its safe operating capacity, and all loads shall be stable, secured, and well-balanced
- Vehicles being loaded must have its wheels properly blocked, in addition to having brakes set to prevent movement of vehicles
- When vehicles are parked, the parking brake shall be set. The wheels of vehicles parked on an incline where the risk of rolling exists, tires shall be chocked
- All equipment left unattended in the right-of-ways at night, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, to identify the location of the equipment
- Operators of city vehicles are prohibited from driving up to anyone standing in front of a stationary object

VEHICLE MAINTENANCE

Vehicles shall be maintained in a safe condition at all times. In the event of an unsafe mechanical condition, the vehicle shall be tagged out of service. When a vehicle is placed out of service, the appropriate supervisor and Fleet Maintenance Shop is to be notified. The vehicle shall not be returned to service until repair is verified by the Fleet Maintenance Shop.

Vehicle operators and supervisors must ensure that vehicles assigned to them are delivered to the Fleet Maintenance Shop for scheduled maintenance. Department vehicles are to receive regular maintenance and a mechanical inspection every three to four months or 3,000 miles, as required by the manufacturer. Maintenance records are maintained by Fleet Maintenance. Inspection and maintenance points include:

- ✓ Visual inspection of brake system
- ✓ Fluid system levels and visual inspection
- ✓ Brake pad wear
- ✓ Belts and hoses
- ✓ Battery condition
- ✓ Filter replacement
- ✓ Lubrication
- ✓ Oil change
- ✓ Emissions systems visual inspection. Full emissions test every year
- ✓ Tire tread
- ✓ Seat belt and other driver/passenger restraints

Work that cannot be performed in the City fleet shop will be sent to a qualified vendor recommended by the Fleet Manager.

VEHICLE SAFETY CHECK

Prior to each first daily use the driver shall perform a check of the vehicle for proper operation of the following safety features, as applicable:

- ✓ Horn
- ✓ Backup warning (if equipped)
- ✓ Head, tail, and signal lights
- ✓ Windshield wipers
- ✓ Tire inflation (visual check)
- ✓ Brakes
- ✓ Steering control
- ✓ Mirrors
- ✓ First aid kit
- ✓ Fire extinguisher
- ✓ Broken or damaged glass

FUELING

Employees fueling vehicles shall abide by all the safety instructions at the fueling facilities. In addition, a vehicle is never to be left unattended while fueling; however, utility vehicles shall only be fueled when unoccupied.

Only UL approved closed safety containers no larger than five gallons shall be used for transporting fuel. An exception is if an appropriate tank has been affixed to the bed of a Class C vehicle (pickup, flatbed, or other open-body truck) for the purpose of hauling fuel to a work site. The five-gallon container should be set on the ground to fill, not left in the back of the vehicle. The filled fuel containers are to be stowed outside of the passenger compartment as far from the passengers as possible. Fuel containers and other cargo shall be secured to prevent tipping and sliding during transit.

TRAILERS AND EQUIPMENT

It is prohibited to use a department vehicle to tow any trailer that exceeds the tow rating of the vehicle and hitch coupler. Proper coupling devices shall be used, with safety chains or cables that comply with all manufacturers' specifications and applicable DOT and OR-OSHA rules.

Perform safety inspection of trailer prior to use (tire inflation, lights, connections, safety chains). Do not load trailer beyond its posted capacity and ensure the load is secure and stable, and in compliance with appropriate DOT rules.

GENERAL VEHICLE SAFETY

All vehicles will be operated, licensed and insured in accordance with applicable local, state and federal laws. Each department facility has available copies of the current *Oregon Drivers Manual*, and *CDL Manual* for reference.

Passenger Provisions—Passengers are only allowed if safe riding provisions have been made. Safe provisions include seats and safety belts for all seats in the vehicle. If other restraints are provided, they shall be used as intended by the manufacturer whenever the vehicle is under way. Riding on a pickup tailgate, trailer hitch or tongue, or the bed of a flatbed or dump truck is not allowed, even for a few feet.

Cargo—Cargo should be separated from the passenger compartment whenever possible. In the case of a van, SUV, or extended cab, a cage, cargo net, or other means to secure the load from entering the passenger area shall be used. Cab shields, canopies, or bulkheads are required in vehicles that carry heavy items loaded by cranes, loaders, or similar equipment.

Accessibility for Inspection, Maintenance, and Utility—All accessible areas of the vehicle should be within reach with the aid of ladders, handholds, steps, and/or grab bars. Anyone using such aids should maintain a three-point contact with the climbing aid at all times; either two hands and one foot, or two feet and one hand. Drivers and passengers are to enter and exit the cab facing the vehicle.

Housekeeping—All department vehicles shall be kept in a clean and sanitary condition. Trash shall be collected in a suitable receptacle and emptied regularly. No items shall be left on the floorboard where they may impede the driver's ability to safely operate foot pedals. No items shall be left loose in the cab which could fly around in the event of a crash or sudden stop.

Parking—The parking brake shall be engaged whenever the vehicle is parked. Tire chocks shall be used while loading and unloading the vehicle when parked on an incline, or when necessary to prevent movement of the vehicle. If a department vehicle must be left along a public roadway after hours, it shall be made visible with the use of the following: lights, reflectors, or barricades equipped with lights or reflectors.

Backing—Backing a vehicle is an inherently hazardous maneuver and should be avoided when possible. When backing is unavoidable, first walk around the vehicle to look for obstacles. Make sure side and rearview mirrors are adjusted to minimize the blind spot. In a vehicle with limited rear view, a spotter shall be used and, and when required, the vehicle shall be equipped with an audible backing alarm.

Safety Equipment—Each fleet vehicle shall have a serviceable fire extinguisher and a first aid kit. The extinguisher shall be securely stowed but accessible by the operator. Monthly checks are required for all fire extinguishers. First aid kits shall be restocked as needed.

Recommended items for first aid kits include the following:

- Scissors
- Antimicrobial Soap, or waterless antimicrobial hand wash solution
- Nitrile or latex disposable gloves
- Biohazard disposal bag
- Face shield
- Emergency breathing mask

- Adhesive bandages (i.e., Band-aids)
- 3-inch gauze pads
- Roller gauze
- Elastic bandage (i.e., Ace)
- Cloth or paper medical tape
- Triangle bandage
- Antiseptic wipes
- Instant cold pack

Distractions—Distractions such as eating, drinking, applying makeup, and reading is prohibited while driving. The route of travel should be decided upon prior to getting under way. Allow sufficient time to safely reach your destination.

Cell Phones - Except for personnel who operate emergency equipment, use of any cell phone while operating a vehicle on City business is not recommended. Use of a cell phone includes activating or deactivating the telephone, dialing, answering, conversing, and sending or receiving email or text messages. Employees are strongly encouraged to pull to the side of the road and stop the vehicle to use the cell phone. If there are two people in the vehicle, the passenger should be using the cell phone while the driver focuses on driving. *Refer to 2011 Oregon Revised Statute 811.507 for information regarding operating a motor vehicle while using a mobile communication device.*

VEHICLE MODIFICATIONS

Modifications or additions to city vehicles are prohibited unless granted permission by Fleet Maintenance. Modifications and additions which affect load capacity and safe operation of a vehicle shall be performed only under the direction of the manufacturer or authorized supplier. Only accessories made by the manufacturer of the vehicle, or authorized for use by the manufacturer shall be used.

Nameplates and required marking, such as rated capacity, need to be conspicuous and legible. Exceeding the rated capacity of a cargo or utility vehicle is prohibited. If rollover protection is required for a specific vehicle, it must meet all criteria in the OR-OSHA rule for installation, placement, and capacity.

ACCIDENT REPORTING

If City of Hillsboro employees are involved in a vehicle motor accident the following protocol shall be implemented.

1. When conditions permit, move to the shoulder or other safe area to prevent further damage or injury
2. Call for Police (9-1-1 for injuries or Non-emergency 503.629.0111)
3. Call your immediate Supervisor
4. Check with other party involved and ask if they are OK
5. Administer First Aid if necessary and you are properly trained
6. If able, complete the City of Hillsboro Accident Report at the scene

Each vehicle shall have a yellow envelope in the glove box and shall include the following information:

- ✓ Procedure for reporting an accident
- ✓ City of Hillsboro Vehicle Accident Reporting Form
- ✓ Vehicle Registration
- ✓ Insurance Card

TRAINING

Risk Management provides Safe Driver Training to all City Departments as needed. Topics of discussion include:

- Defensive driving tips
- Driving distractions
- Hazards of cell phone use while driving

Additional driver training courses may be offered at the annual Safety School.

811.507 Operating motor vehicle while using mobile communication device; exceptions; penalty. (1) As used in this section:

(a) "Hands-free accessory" means an attachment or built-in feature for or an addition to a mobile communication device, whether or not permanently installed in a motor vehicle, that when used allows a person to maintain both hands on the steering wheel.

(b) "Mobile communication device" means a text messaging device or a wireless, two-way communication device designed to receive and transmit voice or text communication.

(2) A person commits the offense of operating a motor vehicle while using a mobile communication device if the person, while operating a motor vehicle on a highway, uses a mobile communication device.

(3) This section does not apply to a person who activates or deactivates a mobile communication device or a function of the device or who uses the device for voice communication if the person:

(a) Is summoning medical or other emergency help if no other person in the vehicle is capable of summoning help;

(b) Is using a mobile communication device for the purpose of farming or agricultural operations;

(c) Is operating an ambulance or emergency vehicle;

(d) Is 18 years of age or older and is using a hands-free accessory;

(e) Is operating a motor vehicle while providing public safety services or emergency services;

(f) Is operating a motor vehicle while acting in the scope of the person's employment as a public safety officer, as defined in ORS 348.270;

(g) Is operating a tow vehicle or roadside assistance vehicle while acting in the scope of the person's employment;

(h) Holds a valid amateur radio operator license issued or any other license issued by the Federal Communications Commission and is operating an amateur radio;

(i) Is operating a two-way radio device that transmits radio communication transmitted by a station operating on an authorized frequency within the citizens' or family radio service bands in accordance with rules of the Federal Communications Commission;

(j) Is operating a vehicle owned or contracted by a utility for the purpose of installing, repairing, maintaining, operating or upgrading utility service, including but not limited to natural gas, electricity, water or telecommunications, while acting in the scope of the person's employment; or

(k) Is using a function of the mobile communication device that allows for only one-way voice communication while the person is:

(A) Operating a motor vehicle in the scope of the person's employment;

(B) Providing transit services; or

(C) Participating in public safety or emergency service activities.

(4) The offense described in this section, operating a motor vehicle while using a mobile communication device, is a Class C traffic violation.

(5) The Department of Transportation shall place signs on state highways to notify drivers that violation of this section is subject to a maximum fine of $500. [2007 c.870 §2; 2009 c.834 §1; 2011 c.530 §1; 2013 c.757 §1]

Note: 811.507 was added to and made a part of the Oregon Vehicle Code by legislative action but was not added to ORS chapter 811 or any series therein. See Preface to Oregon Revised Statutes for further explanation.

Hillsboro
Risk Management

Risk Management

WHAT TO DO IF YOU ARE INVOLVED IN A VEHICLE ACCIDENT

In the event of an accident, remain CALM, COURTEOUS, and CONSISTENT in your version of the accident.

PROCEDURE:

1) WHEN CONDITIONS PERMIT, MOVE TO THE SHOULDER OR OTHER SAFE AREA TO PREVENT FURTHER DAMAGE OR INJURY

2) CALL FOR POLICE (911 IF INURIES OR NON-EMERGENCY 503-629-0111)

3) CALL YOUR SUPERVISOR

4) CHECK WITH OTHERS INVOLVED AND ASK IF THEY ARE "OKAY"

5) ADMINISTER FIRST AID IF NEEDED AND IF YOU ARE TRAINED TO DO SO

6) COMPLETE THE CITY VEHICLE ACCIDENT REPORT ON THE SCENE

    a. OBTAIN COMPLETE INFORMATION FROM THOSE INVOLVED USING THE ENCLOSED CRASH REPORT

    b. OBTAIN THE NAMES OF WITNESSES INCLUDING ADDRESSES AND PHONE NUMBERS

    c. UPON RETURN TO THE OFFICE, SEND COMPLETED FORMS AND PICTURES TO RISK MANAGEMENT

NEVER "Make a deal" for damages

NEVER leave the scene of even a MINOR accident

NEVER accept an offer of cash, check or "private" settlement

NEVER offer to pay ANYTHING even if you think you are at fault

If your vehicle is drivable, please take it to Fleet for inspection. Do not leave personal items or City equipment in the vehicle.

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Frequently Asked Questions

What is Wildfire Smoke Protection?
With large-scale wildfires becoming more frequent across the western United States wildfire smoke is an increasing hazard. Wildfire smoke contains dangerous chemicals and tiny particles that can cause air quality to reach unhealthy or hazardous levels affecting employees. To protect employees in the event of hazardous air quality, engineering, administrative, and personal protective equipment (PPE) controls will be implemented to reduce the impacts of wildfire smoke on employees.

What are the potential hazards for a Wildfire Smoke?
Wildfire smoke exposure poses a hazard to the cardiovascular and respiratory systems. That could result in developing difficulty breathing, asthma attacks, reduced lung function, chest pain, or cardiac arrest.

What are signs and symptoms of a Wildfire Smoke?
Signs and symptoms of wildfire smoke exposure are similar to allergies: coughing, runny nose, and eye irritation and inflammation.

Is there a way to determine when Wildfire Smoke could be more hazardous?
Yes, when the Air Quality Index (AQI) for particles smaller than 2.5 micrometers (μm) (PM2.5) reach unhealthy for sensitive groups level of 101 or greater. The AQI is available from the U.S. Environmental Protection Administration's AirNow website at https://www.airnow.gov and is also available as an IOS and Android app.

WILDFIRE SMOKE PROTECTION

Purpose

OSHA Regulation 437-002-1081

The purpose of this program is to protect our employees from hazards of working in environments affected by wildfire smoke. These procedures describe protections for employees affected by wildfire smoke when the AQI for PM2.5 is equal to or greater than 101.

RESPONSIBILITIES

Risk Management

- Provide or coordinate annual training for wildfire smoke protections and maintain employee training records for a minimum of three years.
- Assist and support the Departmental Directors and Supervisors in the administration and maintenance of the Wildfire Smoke Protection Plan.
- Review Department's protection plan as needed or requested.

Managers and Supervisors

- Implement and monitor compliance with the *Wildfire Smoke Protection Plan.*
- Ensure that employees are trained annually to recognize symptoms of wildfire smoke exposure, methods to protect employees from wildfire smoke, and how to don, doff, and care for PPE.
- Ensure current and forecasted AQI is monitored. The AQI is available from the U.S. Environmental Protection Administration's AirNow website at https://www.airnow.gov and is also available as an IOS and Android app.
- Ensure effective two-way communication is available with at least one person on-site able to contact emergency services if needed.
- Consider rescheduling tasks, adjusting work assignments to indoor tasks, or stop work based upon existing or forecasted AQI values.

Employees

- Comply with this program in its entirety.
- Complete annual wildfire smoke protection training.
- Notify supervisor of hazardous tasks/conditions as soon as possible.
- All employees are empowered to take initial action to aid employees suffering from the effects of wildfire smoke exposure and encouraged to contact emergency services (911) if needed.
- Ask questions if you do not fully understand the requirements of the Wildfire Smoke Protection Program.

Definitions

Air Quality Index (AQI) – An index developed by the Environmental Protection Agency (EPA) as an indicator of overall air quality based on five criteria pollutants regulated under the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide.

NIOSH – The National Institute of Occupational Safety and Health of the United States Center of Disease Control and Prevention. NIOSH tests and approves respirators for use in the workplace.

PM2.5 – Solid particles and liquid droplets suspended in air, known as fine particulate matter, with an aerodynamic diameter of 2.5 micrometers or smaller and measured in micrograms per cubic meter ($\mu g/m^3$).

Sensitive groups – Individuals with pre-existing health conditions and those who are sensitive to air pollution are among those likely to experience health problems from exposure to wildfire smoke. Examples of sensitive groups include: people with lung disease such as asthma or chronic obstructive pulmonary disease (COPD), including bronchitis and emphysema, and those who smoke; people with respiratory infections, such as pneumonia, acute bronchitis, bronchiolitis, cold, flu, or those recovering from severe respiratory illness; people with existing heart or circulatory problems, such as irregular heartbeat, congestive heart failure, coronary artery disease, angina, and those who have had a heart attack or stroke; children under 18 years old, and adults over age 65; pregnant women; people with diabetes; and people with other medical or health conditions which can be exacerbated by exposure to wildfire smoke as determined by a physician or other licensed healthcare provider.

Wildfire smoke – Emissions from unplanned fire in wildlands, which may include adjacent developed and cultivated areas to which the fire spreads or from where it originates.

Wildlands – Uncultivated and sparsely populated geographical areas covered primarily by grass, brush, trees, slash, or a combination thereof.

Background

Wildfires are occurring more frequently and the smoke they produce present a health hazard for employees, especially while working outdoors. The smoke from wildfires contains gasses and particles that have the potential to contain varying concentrations of toxic compounds dependent on a multitude of factors including the weather, fire behavior, and material or vegetation burning. Particulate matter of 2.5 micrometers or smaller, PM2.5, can be inhaled into the lungs and enter the bloodstream.

Risk Factors

The following are **environmental risk factors** for exposure to wildfire smoke:

- PM2.5 AQI of 101 or greater / PM2.5 of 35.5 $\mu g/m^3$ or greater.
- Time spent working outdoors or in work areas without mechanical ventilation or the ability to close doors and windows.
- Filtered mechanical ventilation of building and vehicles.
- Ability to keep doors windows, and bays closed in buildings and work areas.
- Ability to keep doors and windows closed in vehicles.

The following are **personal risk factors / sensitive groups** for wildfire smoke:

- Lung disease (asthma, chronic obstructive pulmonary disease (COPD), etc.)
- Smoking / Vaping
- Respiratory infections (pneumonia, bronchitis, cold, flu, COVID-19, etc.)
- Heart-related illness
- Under 18 years of age
- Over 65 years of age
- Pregnancy
- Diabetes

Monitoring and Communicating Air Quality Index

The Air Quality Index (AQI) was developed by the Environmental Protection Agency (EPA) as an indicator of overall air quality based on five criteria pollutants regulated under the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The AQI can be found by using the EPA's AirNow website at www.airnow.gov or the Department of Environmental Quality's website at https://oraqi.deq.state.or.us/.

All supervisors and managers are required to monitor and communicate current and forecasted wildfire smoke air quality hazards when the concentrations in ambient air for PM2.5 is or is expected to be at or above the AQI levels listed below:

- AQI 101 (35.5 $\mu g/m^3$)
- AQI 251 (200.9 $\mu g/m^3$)
- AQI 501 (500.4 $\mu g/m^3$)

It is recommended that all supervisors and managers download the EPA's AirNow App from the Apple App Store or Google Play Store. This provides an efficient way to determine the current and forecasted AQI to keep our employees safe.

Wildfire Smoke Exposure

Symptoms of wildfire smoke exposure include:

- Eyes: burning sensation, redness, tearing, and temporary vision impairment
- Respiratory system: runny nose, sore throat, cough, difficulty breathing, sinus irritation, wheezing, and shortness of breath
- Fatigue, headache, irregular heartbeat, and chest pain

Severe health symptoms of wildfire smoke include asthma attacks, difficulty breathing, and chest pain. If experiencing severe health symptoms notify supervisor and call emergency services (911) if needed.

Wildfire Smoke Exposure Controls

Whenever possible work in enclosed buildings, structures, or vehicles with mechanical filtered ventilation with all doors, bays, and windows closed when the outdoor AQI is equal to or exceeds 101. For employees that routinely work outdoors supervisors should consider rescheduling tasks, adjusting work assignments to indoor tasks, or stop work based upon existing or forecasted AQI values.

If unable to alter or suspend work assignments that would expose employees to wildfire smoke take the minimum precautions below based on the current or forecasted AQI for PM2.5.

- AQI 101-250
    - Ensure effective two-way communication is available to communicate changing AQI, PPE availability, or health symptoms of employees
    - Voluntary use of a NIOSH approved filtering facepiece respirator (N95, P95, P100)

- AQI 251-500
    - Ensure effective two-way communication is available to communicate changing AQI, PPE availability, or health symptoms of employees
    - Mandatory use of a NIOSH approved filtering facepiece respirator (N95, P95, P100). With instruction on how to don, doff, caring for and storing the respirator, and how to conduct a seal test for the respirator. Without the need for medical evaluations or fit testing usually required for respirator use.

- AQI 501 or greater
    - Ensure effective two-way communication is available to communicate changing AQI, PPE availability, or health symptoms of employees.
    - Mandatory use of a NIOSH approved filtering facepiece respirator (N95, P95, P100). Adhering to all aspects of the Respiratory Protection Standard, 29 CFR 1910.134, requiring the development of a Respiratory Protection Program (if needed), medical evaluations, fit testing, and instruction on how to don, doff, caring for and storing the respirator, and how to conduct a seal test for the respirator.

Only NIOSH-approved filtering facepiece respirators may be used for exposure to wildfire smoke such as N95 and P100 filtering facepiece respirators.

Training

All employees and their supervisors/managers will receive wildfire smoke awareness training. The topics to be discussed include but are not limited to the following:

- Symptoms of wildfire smoke exposure
- Potential acute and chronic health effect of wildfire smoke exposure
- How to obtain current and forecasted AQI values
- Protections for wildfire smoke exposure
- How to don, doff, and store NIOSH approved filtering facepiece respirators.
- Importance, benefits, and limitations of using NIOSH-approved filtering facepiece respirators
- How to report wildfire smoke exposure health effects and when medical care is needed
- Two-way communication methods

Training must be completed by all employees annually.

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ARC FLASH ELECTRICAL SAFETY

Frequently Asked Questions

What are some causes of an electrical arc flash?
Accidents, such as dropped tools, accidental contact with electrical systems and the buildup of conductive dust, dirt, corrosion and particles. Other causes may include improperly designed or utilized equipment, improper work procedures and electrical equipment and insulation failure.

What are the hazards from an arc flash?
Arcing faults release dangerous levels of radiant heat energy, capable of causing severe burns. Arcs produce some of the highest temperatures known to occur on earth, up to 35000 degrees Fahrenheit. Serious burns can occur, as well as possible hearing damage from sound blasts.

Who needs training for arc flash safety?
Employees who work on or around electrical equipment shall be adequately trained to identify and control electrical hazards. However, only “qualified persons” are allowed to perform electrical work.

Whom can I contact for more information?
The Supervising Electrician or Signing Supervising Electrician for the City of Hillsboro is the primary point of contact for information regarding NFPA 70E and arc flash safety. You may also contact a member of Risk Management for more information.

ARC FLASH ELECTRICAL SAFETY

Purpose

NFPA 70E

The purpose of the program is to provide a practical safe working area for employees relative to the hazards arising from the use of electricity. This program outlines the necessary safe work practices associated with electrical energy during activities such as installation, inspection, operation, maintenance, repair or demolition.

Definitions of Terms
See Appendix A: Definition of Terms

TRAINING REQUIREMENTS

Employees who work on or around electrical equipment shall be adequately trained to identify and control electrical hazards. Only qualified persons are allowed to perform electrical work.

A **qualified person** shall be defined as:
one who possesses a valid State of Oregon Electrical License or is enrolled in an approved Apprenticeship Program and has demonstrated the skills and knowledge in the:

- Construction/operation of electric equipment and installations; and
- Distinguishing exposed live parts from other parts of electrical equipment; and
- Ability to determine the nominal voltage of exposed live parts; and
- Clearance distances and the corresponding voltages to which the qualified person will be exposed; and
- PPE requirements outlined in the NFPA 70E standards.

Note 1 to the definition of "Qualified Employee:" Whether an employee is considered to be a

> "qualified person" will depend upon various circumstances in the workplace. For example, it is possible and, in fact, likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment.

Additional Training Requirements for Qualified Employees

- Qualified employees shall also have the ability to select the appropriate voltage detector and shall demonstrate their ability to use and interpret the data provided by the detector.
- Employees, who are exposed to shock hazards and those employees responsible for taking action in case of an emergency, shall be trained in methods to release victims from contact with electrical conductors or parts. They must also hold a valid First Aid/AED/CPR card.

Note: While qualified employees are trained and skilled to work on high voltage equipment (>600 v or higher), the City recommends work of this magnitude be contracted out to a company who specializes in high voltage work. If a contractor is used, see the Contractor section at the end of this program.

Training Frequency

Qualified employees shall be trained at minimum, every three years, on the requirements listed under the qualified person section above. For the job tasks that are performed on occasion, such as once or twice a year, shall require retraining with documentation before performing the actual job task.

Note: An employee who is undergoing on-the-job training for the purpose of obtaining the skills and knowledge necessary to be considered a qualified person and who, in the course of such training, has demonstrated an ability to perform specific duties safely at his or her level of training and who is under the direct supervision of a qualified person, shall be considered to be a qualified person for the performance of those specific duties.

Unqualified Person

An unqualified person is defined as a person who does not possess the skills and knowledge as listed above in the Qualified Person section. Unqualified persons shall be trained in, and be familiar with, any electrical safety related practices necessary for their safety.

Note: An unqualified person may utilize a local disconnecting device such as a disconnect, cord plug or safety switch if they have received adequate training and PPE, and that the action is to energize/de-energize a piece of equipment or a light. If the breaker has been tripped, Facilities Maintenance shall be contacted before further work may continue. Unqualified persons shall not reset a tripped breaker.

Electrical Safety Program Principles
All employees who work on or around electrical equipment shall utilize the safe work practices and principles outlined in this section. Qualified employees shall:

- Inspect and evaluate the condition of the electrical equipment prior to commencement of work activities;
- Maintain the electrical equipment's insulation and enclosure integrity throughout the job task;
- Pre plan your job tasks and document first-time procedures;
- When possible, always de-energize and properly control any hazardous energy associated with the equipment you're working on;
- Anticipate unexpected events;
- Identify and mitigate hazards as necessary to protect oneself and co-workers from electrical shock, burn, blast, or other potential hazards associated with electrical work.

Electrical Safety Program Controls and Procedures
Effective controls shall be utilized consistently to prevent injury to City employees and others performing electrical work on City property. Common electrical controls include:

- Employees performing the work are trained and qualified for the work they are performing;
- Safe work procedures are developed and utilized by the workers when necessary;
- Employees are able to identify and mitigate electrical hazards as they arise;
- Treating all electrical conductors or circuit parts as live until proven otherwise.

Arc Flash Risk Assessment
All electrical panels and equipment shall be assessed to determine the arc flash boundary, the incident energy at the working distance, shock hazard, and the PPE required to work within the flash boundary. The Arc Flash Risk Assessment shall be updated when major modification or renovations occur or at minimum, be validated every 5 years. The Arc Flash Risk Assessment shall also take into consideration the design of the over current protective devices, opening times and condition of maintenance.

The following pieces of equipment requiring an analysis include:

- Switch boards
- Panel boards
- Industrial control panels
- Meter socket enclosures
- Motor control centers

Upon completion of the analysis, all panels and equipment shall bear the appropriate label. The label shall contain the following data:

- Available incident energy
- Shock hazard
- Hazard/Risk Category (HRC) to determine level of PPE
- Arc flash boundary
- The limited, restricted, and prohibited approach distances.

See Appendix B: Example Label
Note: Tables in NFPA 70E Edition may be used in the interim if the buildings have not been evaluated and labeled as required by this section.

Establishing an Electrically Safe Work Condition
Prior to employees working on electrical equipment, they shall de-energize and render the equipment in an electrically safe work condition. This can be accomplished by controlling the hazardous energy or lockout/tagout (LOTO). See the Controlling Hazardous Energy Program in the City's Risk Management Manual. Once locked out, qualified employees shall don the proper PPE and test to ensure the electrical equipment is in a safe electrical condition.

If qualified employees are unable to LOTO due to infeasibility or increased risk, live electrical work is permitted using an Energized Electrical Work Permit (EEW). The EEW Permit must be documented and approved by the Signing Supervisor Electrician prior to beginning work. The employees performing the live electrical work will need to consider and document the following information:

- Description & location of the equipment to be worked on and location;
- Sound justification as to why the equipment can't be de-energized and live electrical work needs to be performed;
- Description of the safe work practices to be employed;
- Results of the limited, restricted and prohibited boundaries;
- Means employed to restrict access of unqualified persons from the work area;
- Evidence of completion of a job briefing and discussion on job specific hazards;
- Authorization and signature the Signing Supervisor Electrician;
- All EEW Permits shall be maintained for 3 years.

See Appendix C: Electrical Work Permit (EEW)

Building Department Electrical Inspections
Whenever possible, all electrical inspections on electrical equipment shall be done in non-energized state. Electrical Inspectors shall verify the contractor has completed Lock-out/Tag-out procedures and the equipment is isolated from power prior to inspection. If this is not possible, the inspector shall verify the contractor has performed

an Arc Flash Risk Assessment, thus establishing an Arc Flash Boundary and the appropriate PPE level required for inspection. Visual “no contact” inspections shall not be considered “live electrical work” and shall not require an EEW.

Unqualified Employees working within the Limited Boundary Approach
Unqualified employees shall not be permitted to work within the limited approach boundary. If crossing into the boundary is required, the qualified employee shall advise the unqualified person of the possible hazards and escort them while in the boundary area. Under no circumstances shall the escorted, unqualified person be permitted to cross into the restricted approach boundary. All employees shall don the appropriate PPE while working on electrical equipment.

Personal Protective Equipment
Personal protective equipment shall be provided and used by the employees performing the work. Each employee qualified to perform electrical work shall be responsible to maintain their PPE in a sanitary condition and shall:

- Be worn at the appropriate times;
- Maintained as directed by the manufacturer;
- Inspected prior to first use each day;
- Replaced or repaired as necessary; and
- Rubber gloves shall have documented testing results on a quarterly schedule.

Note: PPE selection will be based on the HRC rating on the Warning Label on the equipment or through the individual assessment using tables in the most current version of NFPA 70E

Test Instruments and Equipment
Only qualified persons shall perform task such as testing, troubleshooting, and voltage measuring within the limited approach boundary of energized electrical conductors or circuit breakers operating at 50 volts or more or where an electrical hazard exists. Prior to use, all testing equipment shall be visually inspected for external defects or damage that might expose an employee to injury. Any damaged equipment shall be immediately removed from service and repaired or replaced as needed. When a test instrument is used for testing for the absence of voltage on conductors or circuit parts operating at 50 volts or more, the test instrument shall be verified before and after the actual test is performed.

Portable Electric Equipment
This section applies to the use of cord and plug connected equipment, including cord sets (extension cords). This section of the program is applicable to any City Department that uses extension cords for construction related activities such as building a new foot bridge in a park or installing a new boiler, in a facility where one did not exist prior.

While it is recommended, maintenance related activities are exempt from this requirement.

Handling
Portable equipment shall be handled in a manner that will not cause damage. Using an extension cord to raise or lower equipment is prohibited. Extension cords shall not be fastened with staples or hung in such fashion to cause damage to the outer jacket or insulation.

Visual Inspection Requirements for Portable Cord and Plug Connected Equipment and Flexible Cord Sets
Before each use, portable cord and plug connected equipment and extension cords shall be inspected for loose parts or missing pins, damaged insulation or outer jacket. If any damages are observed the tool or cord shall immediately be removed from service and repaired or replaced as needed. Departments using extension cords for construction related activities are required to test and inspect the cords quarterly and mark, with colored tape, the end of each cord. The color shall coordinate per the Facilities Maintenance protocol.

Conductive Work Locations
Employees using portable electric equipment or extension cord in highly conductive work environments such as those inundated with water or moisture shall use GFCI protection. Users of electrical devices and extension cords shall have dry hands when plugging or unplugging these devices and locking type connectors shall be secured after connection.

Ground Fault Circuit Interrupter (GFCI)
GFCI use is required for all work activities that occur outdoors that involve using electrical tools and cord sets supplied by 125-volt, 15, 20, or 30 ampere circuits. All GFCI devices shall be tested per the manufacturer’s instructions and shall not be modified, even on a temporary basis.

Electrical Safety Auditing
The Electrical Safety Program shall be audited annually to ensure compliance and adherence with the program. The scope of the audit shall cover both the written components and field work. The audit team shall consist of the Facilities Operations and Maintenance Manager, the Signing Supervisor Electrician, the Safety and Risk Officer, and a non-Facilities Maintenance Employee. Any deficiencies noted during the audit shall be discussed and corrective actions developed within 30 days, or immediately if IDLH conditions are noted. Notes and finding from the audit shall be documented and retained for a minimum of 5 years.

Contract Work

Any department hiring a contractor to perform electrical work governed by 70E shall host a meeting with the contractor to discuss known hazards and other safety related information. This meeting must take place prior to the project start date and shall be documented.

See Appendix D: Host/Contractor Meeting Minutes.

Appendix A: Definitions of Terms

Arc Flash Hazard – A dangerous condition associated with the possible release of energy caused by an electric arc.

Arc Flash Risk Assessment – A study investigating a worker's potential exposure to arch flash energy, conducted for the purpose of injury prevention and the determination of safe work practices, arc flash boundary, and the appropriate levels of PPE.

Flash Protection Boundary — The distance at which the incident energy from the live part is equal to 1.2 cal/cm2, the limit for a second-degree burn on bare skin. Persons must not cross this boundary unless they are wearing appropriate personal protective clothing and are under close supervision of a qualified person.

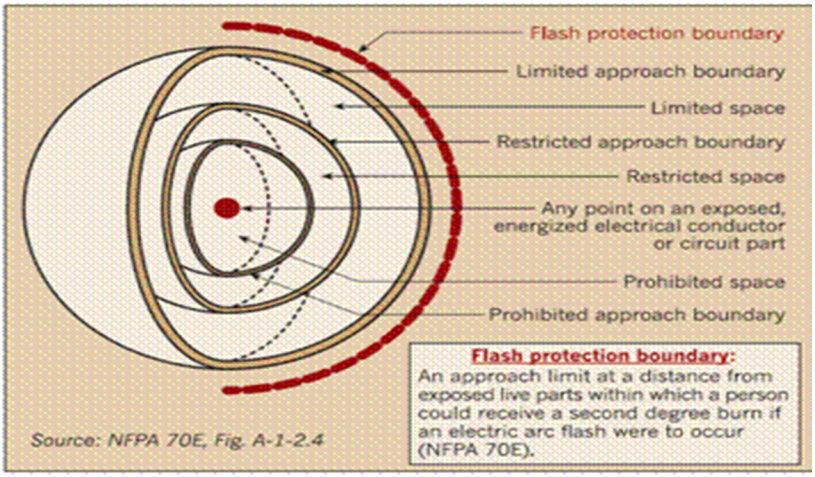
Limited Approach — The distance at which barriers should be placed to protect unqualified personnel from an electrical hazard. Only qualified persons and escorted unqualified persons are allowed to enter a limited space.

Prohibited Approach — The distance at which qualified personnel should not introduce grounded equipment or material not insulated for the voltage rating due to the possibility of flashover. A documented and management-approved risk analysis and plan are required to enter a prohibited space.

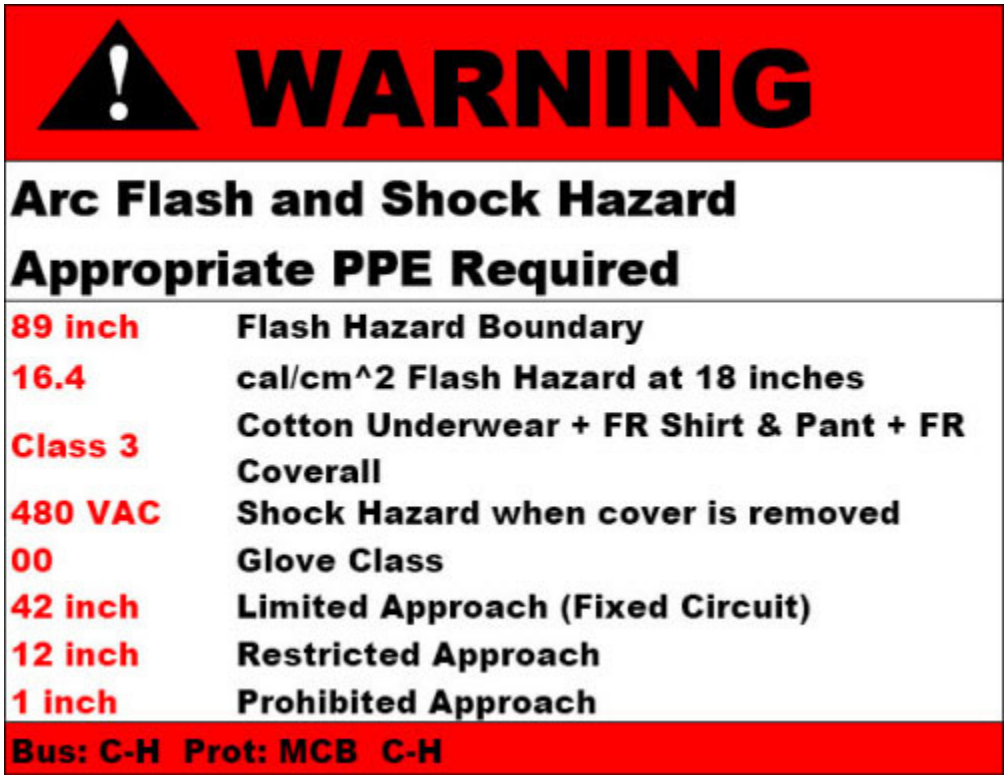
Restricted Approach — The distance at which only qualified personnel are allowed with appropriate protective clothing and personal protective equipment for the associated hazard. No unauthorized conductive material and no unqualified persons are permitted to cross a restricted boundary. Further, a documented and management-approved plan is required to enter a restricted space.

Shock Hazard – A dangerous condition associated with the possible release of energy caused by contact or approach to energized electrical conductors or circuit parts.

Shock Hazard Analysis – Is used to determine the voltage to which personnel will be exposed, the limited, restricted and prohibited boundaries, and PPE necessary to minimize the possibility of shock to personnel.



Appendix B: Example Label



Appendix C: Energized Electrical Work Permit (EEW)

ENERGIZED ELECTRICAL WORK PERMIT (EEW) Date: _____ Job #_____

ELECTRICAL EQUIPMENT:_____LOCATION:_____
START DATE: _____
END DATE: _____
GENERAL CONTRACTOR (IF USED):_____

DESCRIPTION OF WORK TO BE COMPLETED:_____
_____

CAN THIS WORK BE COMPLETED IN A DE-ENERGIZED STATE? **YES** **NO** (IF NO, JUSTIFY BELOW)
JUSTIFICATION FOR REQUESTING LIVE ELECTRICAL WORK TO BE PERFORMED:
_____
_____

LIMITED APPROACH _____FT. _____IN.	AVAILABLE FAULT CURRENT _____
RESTRICTED APPROACH _____FT. _____IN.	ARC FLASH BOUNDARY _____
PROHIBITED APPROACH _____FT. _____IN.	HAZARD/RISK CATEGORY 1 2 3 4 **(CIRCLE ONE)**

_____
_____

MEANS TO RESTRICT UNQUALIFIED PERSONS FROM THE WORK AREA:
_____

I HEREBY REQUEST THE AUTHORIZATION TO PERFORM LIVE ELECTRICAL WORK AS DESCRIBED ABOVE. I AM TRAINED AND QUALIFIED TO COMPLETE THE WORK AND WILL VERIFY THAT A JOB BRIEFING WITH THE AFFECTED EMPLOYEES WILL BE COMPLETED UPON APPROVAL OF THIS REQUEST OR PRIOR TO THE WORK BEGINNING.
EMPLOYEE SIGNATURE:_____PRINT NAME:_____ DATE:_____

I **HAVE REVIEWED THE WORK PLAN AND APPROVE THE REQUEST FOR LIVE WORK TO BE COMPLETED AS DESCRIBED ABOVE.**
SIGNATURE:_____DATE:_____
PRINT NAME:_____
SIGNATURE:_____DATE:_____
PRINT NAME:_____

Appendix D: Host/Contractor Meeting Minutes

The purpose of this pre-project meeting is to discuss the hazards and safe work procedures required to perform this work safely and to ensure all people involved are aware of what the job task entails. This meeting is required to be complete before any work begins.

DATE:_____

EMPLOYEE NAME:_____ TITLE:_____

COMPANY NAME:_____

PHONE NUMBER:_____EMAIL:_____

MAILING ADDRESS:_____

ELECTRICAL LICENSE NUMBER:_____

JOB TASK(S) TO BE COMPLETED:_____

_____

_____

JOB LOCATION:_____

CAN WORK BE COMPLETED IN A DE-ENERGIZED STATE? YES NO (IF NO, AN ENERGIZED ELECTRICAL WORK PERMIT IS REQUIRED)

HAZARDS ASSOCIATED WITH THE JOB: **YES NO N/A (IF YES, PLEASE EXPLAIN)** _____

_____

SAFE WORK PROCEDURES EMPLOYED:_____

_____

_____

SPECIAL PRECAUTIONS:_____

_____

_____

CONTROLLING HAZARDOUS ENERGY:_____

_____

_____

PERSONAL PROTECTIVE EQUIPMENT REQUIRED:_____

_____

_____

EMERGENCY CONTACT INFORMATION:_____

_____

CITY OF HILLSBORO EMPLOYEE SIGNATURE: _____

DATE:_____

CONTRACT EMPLOYEE SIGNATURE: _____

DATE: _____

Risk Management

BLOODBORNE PATHOGEN

Frequently Asked Questions

What are bloodborne pathogens (BBP)?
Bloodborne pathogens are microorganisms that are capable of causing severe illness or death when transmitted from an infected individual to another through contact with blood or certain body fluids.

How could a person be exposed to BBP?
Exposure to BBP occurs in many ways. Needlestick injuries are the most common means of exposure for health care workers, but BBP can also be transmitted through contact with: eyes, nose, and mouth or through broken skin.

What are the most common forms of BBP?
The most common illnesses caused by BBP are: Hepatitis B (HBV), Hepatitis C (HCV), and AIDS from Human Immunodeficiency Virus (HIV).

How can I protect myself from BBP's?
Personal Protective Equipment (PPE) helps prevent occupational exposure to infectious materials. PPE is considered appropriate only if it prevents blood or other potentially infectious material (OPIM) from passing through or reaching the employee's work clothes, street clothes, skin, eyes, mouth, or other mucous membranes under normal conditions of use.

What do I do if I think I have been exposed to a BBP?
If you think you have been to exposed to BBP's, report it to your supervisor or designee immediately. Your supervisor or designee should begin an investigation and contact Risk Management at 503-681-6219 for assistance or further instructions.

BLOODBORNE PATHOGEN

Purpose

OSHA Regulation 1910.1030

The purpose of the Bloodborne Pathogen Program (BBP) is to educate employees of the potential hazards associated with exposure to human blood or other potentially infectious materials (OPIM). This program establishes the procedures necessary to minimize risk of exposure and to establish a follow-up protocol in the event an employee suspects or is exposed to a BBP.

The occupational hazards of viral hepatitis, HIV, tuberculosis, and other communicable diseases are apparent and it is imperative that all personnel take special precautions to minimize exposures to infectious/contagious people or material. Personal protection shall be used as appropriate and personal decontamination shall routinely occur to safeguard the health and welfare of others. Equipment, clothing, and medical waste shall be cared for as outlined herein. These guidelines apply to all personnel who have been identified in this plan as “at risk” personnel and/or those employees who may come in contact with blood or OPIM as part of their regular duties.

RESPONSIBILITIES

Risk Management

- Administer a comprehensive Exposure Control Plan, review annually and update as needed based on OR-OSHA regulations
- Provide support to department managers, supervisors, and employees in the implementation and maintenance of this program
- Coordinate training for all City of Hillsboro personnel
- Maintain training and exposure records for all City of Hillsboro employees

Managers and Supervisors

- Implementation and enforcement of the BBP Program
- Provide at no cost to the employees, the equipment and PPE necessary to minimize the risk of disease exposure
- Monitor personnel to insure compliance and the proper use of PPE. If deficiencies are noted, appropriate counseling or retraining shall be provided.

Employees

- Comply with all aspects of this program
- Report exposures or potential exposures to their supervisor or designee immediately
- Attend annual BBP training as outlined in the BBP program

GENERAL REQUIREMENTS

Exposure Determination

The City of Hillsboro is required to determine the probability of exposure based on job positions and requirements and determine the necessary level of training for each employee. The Exposure Determination table below categorizes the departments probability of being exposed based on job position and general job tasks, and the level of training each employee will receive.

Category	Probability of Exposure	Departments/Job Positions	Job Tasks	Level of Training
1 - All procedures or job-related tasks may very likely involve an inherent potential for mucous membrane or skin contact with blood, body fluids, or tissues, and/or a potential for spills or splashes of infectious materials.	High Risk	Fire Department : Battalion Chiefs Lieutenants Engineers Firefighters Paramedics/EMT's Volunteer Firefighters Police Department Chief Officers Division Personnel Public Education Officer Emergency Manager Sworn Officers Police Services Specialist Police Reserves Police Evidence Techs Public Works - Sewer	• Emergency Response • First Aid/CPR • Handling of crime scene/accident evidence • Unruly Subjects • Accident Scenes • Clean up activities • Motor Vehicle Accidents	BBP Training (OSHW)
2 - Under normal work conditions, employees are not exposed to BBP's. However, due to the nature of the department, employees may be exposed to blood or OPIM if an accident or an injury occurs or if BBP materials are identified such as a needle. ***Collateral Duty Category**	Moderate Risk	Parks and Recreation Department SHARC Parks Maintenance Tyson Rec. Center Jackson Bottom Wetlands Public Works Street Traffic Fleet Water Operations/ Water Treatment Plant Facilities Maintenance	• First Aid/CPR • Containment, clean up, or disposal activities	
3 (Non "At-Risk" Employees) Involve no exposure to blood, body fluids, or tissues, and Category 1 Tasks are not a condition of employment. ***Collateral Duty Category**	Low Risk	All other City of Hillsboro Departments: Civic Center Departments Library Cultural Arts Center	If employees in this category identify a BBP spill, needles, or OPIM, they shall notify supervisor immediately.	If employees in this category are selected to be trained, they will receive BBP from OSHW.

***Collateral Duty –** If in the event a Category 2 or 3 employee is potentially exposed to an incidental clean-up situation or removes a discarded needle, the employee will be offered the same hepatitis vaccinations and post exposure follow up outlined in this plan.

Occupational Exposure – This is a quick reference guide concerning the different levels of exposure that personnel may encounter.

Communicable Disease Guidelines		
Exposure Level	**Exposure Description**	**Action Required**
Level One	Contact limited to being in the presence of a person suspected of having a communicable disease.	No special action required unless the person has or is suspected to have an airborne disease such as TB or meningitis. If so, follow Appendix C, Exposure Reporting Process.
Level Two	Contamination of intact skin, clothing, or equipment with blood and/or body fluids.	Follow decontamination procedures, such as hand washing and laundry requirements.
Level Three	Exposure of open skin, cuts or breaks, mucous membranes, such as eyes, nose or mouth, to blood or other bodily fluids. This also includes needle sticks or human bites.	Follow actions outlined in Appendix C, Exposure Reporting Process.

COMPLIANCE METHODS

Universal Precautions

All blood and OPIM shall be treated as though it contains pathogenic agents. All necessary steps shall be taken to prevent contact with such materials, including, engineering controls, administrative controls, and the use of PPE.

Personal Protective Equipment

The City shall provide appropriate PPE to minimize the risk of exposure to blood and OPIM. PPE includes protective barriers for eyes, face, head and extremities. The use of PPE is required for all personnel with a risk of exposure to potentially infectious materials (PIM).

Personal protective clothing must be maintained in a sanitary and reliable condition. Such clothing shall be used according to manufacturer's guidelines. *"At risk personnel"* must ensure that any personal cuts, abrasions, and other wounds, are always properly dressed for their own and the patient's/client's protection.

Gloves

Disposable gloves (nitrile or equivalent) shall be used by City personnel with risk of exposure to blood or OPIM. All emergency response personnel, including volunteer first aid providers, shall don impervious gloves before initiating any emergency care tasks involving patient contact. Gloves must be of appropriate material, size and quality for the procedures to be performed.

When gloves become contaminated they should be removed when possible, taking care to avoid contact with the exterior of the gloves. Hand washing should occur after glove removal. All gloves that have been exposed to body fluids or substances shall be considered contaminated and must be disposed of in an approved red biohazard container.

If significant body fluids are encountered, personnel may consider double gloving to reduce the risk of personal exposure. Personnel should never leave soiled gloves or other materials used at the scene of the emergency.

Masks and Eye Protection
All personnel and volunteer first aid providers are required to use masks and protective eyewear or face shields when there is a potential for exposure to body fluids and OPIM from the following:

- Mucosal membranes (eyes, mouth or nose);
- Where splashes or aerosols of material are likely to occur including but not limited to, providing emergency care to a patient's airway.

Masks may be placed on a person when the potential for airborne transmission of disease exists, however, routine care does not require the use of masks.

Resuscitation Equipment
Pocket masks or protective barriers shall be included in City first aid kits. A protective barrier shall be used whenever an individual voluntarily comes to the aid of a person in need of mouth-to-mouth breathing, in the absence of or while awaiting the arrival of EMS.

Bloodborne Pathogen Clean-up Kits
Ready-made clean up kits for body fluid spills are available in various City facilities. These kits shall contain the appropriate PPE and clean-up and disposal materials to ensure adequate protection for the user. The kits are to be used only to clean up spills from solid surfaces like vinyl floors or countertops. If the spill affects carpeting, upholstery, or other cloth materials, additional precautionary steps will need to be implemented and affected materials removed or replaced on an as needed basis. Contact Risk Management for additional instructions. Only Category 1 or Category 2 employees are authorized to use the kits to clean up blood or other potentially infectious spills.

Specific BBP Clean-Up Protocol
In the event a City of Hillsboro employee encounters a BBP spill of blood or other potentially infectious materials (OPIM), the following protocol shall be used to ensure a safe clean-up operation.

Assessment
The BBP spill shall be assessed to determine the resources necessary to perform the clean-up. If the amount of blood or OPIM is minimal, then any trained Category 1 or Category 2 employee can perform the clean-up and disposal. In example: a few drops or small pool of blood or OPIM on the floor/counter top. If the spill is larger in size, out of our scope of clean-up or has affected the carpeting, furniture, wood surfaces, walls, ceiling, blinds, etc. then Facilities shall be contacted. If necessary, please contact Risk Management for assistance.

Secure the Affected Area
If trained clean-up personnel are not readily available, employees should attempt to secure the area with caution tape, barricades, or signage, etc., to keep all other personnel or citizens out of the affected area. If the spill is isolated to a single room and if it is possible and safe to do so, lock the door to prevent unauthorized entry.

RESOURCE OPTIONS

Facilities
Faculties oversees day to day janitorial services to most city facilities. Janitorial staff are trained and qualified to perform BBP clean-up. Facilities can assist during all work shifts, after hours contact is via the After Hours pager at 503-615-6799.

Each City building should have a spill kit adequate. Facilities will provide them upon request. Facilities will ensure the proper disposal.

Parks Department (Parks Department Only)
If a BBP spill is located in any Parks facility during business hours, trained Parks Maintenance employee may perform the clean-up. If after hours, see options below: Contact the Parks Maintenance On-Call Pager Person – 503-271-3332.

Fire Department
If the Hillsboro Fire Department responds to an emergency within the City of Hillsboro, the responders will perform the BBP clean-up after the scene has been secured or incident has been released. If the clean-up is out of their scope of abilities and equipment, a restoration service shall be contacted for proper removal and disinfection of the site. Examples include: if carpet or upholstery is soiled with BBP materials or if the scene is very large with multiple infected areas.

Restoration Services
The City of Hillsboro may utilize either of the restoration services below for BBP clean-up that is out of the cities scope. Such instances may include when blood or OPIM has saturated carpeting, upholstery, or other fabric materials, or if walls, wood, or concrete have been affected by large amounts infectious materials. The department supervisor, manager, or designee shall work with Facilities to initiate clean-up.

CARE AND CLEANING

Specific information regarding individual City department cleaning policies will be kept at each department.

Cleaning
Cleaning is the physical removal of dirt and debris. Personnel should use soap and water, combined with scrubbing action. The scrubbing action is the key to rendering all items safe. Cleaning is generally sufficient for non-critical equipment. However, if non-critical equipment has become grossly contaminated with blood or body fluids, they also must be disinfected.

Disinfecting
Disinfecting is reducing the number of disease-producing organisms by physical or chemical means. Personnel should clean the item with soap and water and then apply a disinfecting solution. Solutions such as bleach and water, at a 1: 10 dilution ratio or other commercially available solutions are acceptable disinfectants. A fresh disinfectant solution must be made

every 24 hours. DO NOT use bleach solution in the cleaning of electronic equipment. Refer to the Safety Data Sheet (SDS) for each commercial disinfectant solution to determine what personal protective equipment may be needed and appropriate handing procedures.

Remember, disinfectants can be toxic or caustic. Disinfecting solutions should have an EPA registry number. Routine disposal of the germicidal cleaning water in the drainage is acceptable.

Cleaning/Disinfecting Areas
Used equipment from an emergency incident should be bagged and properly labeled, or otherwise identifiable as a biohazard, and transported to the designated cleaning area.

Each fire and police station will allocate a specific area for cleaning contaminated equipment. The area:

- Must only be used for cleaning contaminated equipment.
- Should not be used for the cleaning of SCBA face pieces.
- Needs to be away from the station living quarters.
- Must be conspicuously marked with limited access to prevent accidental exposures.

Medical equipment should never be cleaned or disinfected in the station's living quarters, especially food preparation or eating area. SDS for each disinfectant shall be on file and available to all personnel.

Hand washing
Hand washing is the single most important means of preventing the spread of infection. After removing gloves, hands and other affected skin surfaces shall be washed thoroughly. Personnel should scrub hands briskly for 10-15 seconds with warm water and non-abrasive soap.

Hand washing in food preparation areas is prohibited. In areas where occupational exposure risks may occur, personnel shall not eat, drink, smoke, or apply cosmetics or lip balm or handle contact lenses. When facilities are not available, personnel should use a waterless hand cleaner according to manufacturer's directions.

Showering
Shower facilities are available to city personnel located at the Fire Department, Police Department, Public Works, Water Treatment Plant, Parks and Recreation, and the Civic Center. A full shower is highly recommended when there is extensive splash by blood or other potentially infectious materials in hair, on clothing, etc. Thoroughly wash in warm, not hot, water with a non-abrasive soap.

Contaminated Clothing
If an individual’s clothing becomes soiled with blood or OPIM, it should be changed at the first opportunity. The soiled clothing should be handled as little as possible, and never without gloves or other appropriate personal protective equipment. It should be bagged and sealed for disinfection or disposal. See “Laundry” section below.

Laundry
Personnel who have clothing contaminated with blood or OPIMs should bag and seal the contaminated clothing and launder it at the nearest fire station. The use of the department’s turnout extractor (which is separate from the stations uniform washer and dryer) should be used per Fire Department protocol. All potentially contaminated laundry should be

laundered separately at the hottest possible washer and dryer settings. (use turnout extractor). Personnel who wear their uniform between work and home should routinely change into personal clothing or a clean uniform before leaving the work. Turnouts shall be laundered per manufacturer's guidelines. Other uniforms or work clothing that are grossly blood-soiled should be disposed of as biohazard waste.

BIOHAZARDOUS WASTE / REGULATED WASTE

Biohazard Waste Containers

The Department of Environmental Quality mandates the proper disposal of biohazard waste. Each department will supply biohazard containers that meet, or exceed, OSHA and EPA specifications.

Sharps Containers

When personnel generate biohazard waste (regulated waste) at an incident, it is their responsibility to dispose of that material in a properly marked red sharps container. When transporting biohazard waste aboard vehicles, the employees shall place such waste upright and in appropriately marked leak-proof containers. Please contact Risk Management for disposal considerations.

Biohazard Bags

Objects contaminated with potentially infectious materials must be placed in an impervious bag. If outside contamination of the primary bag is likely, it shall be placed inside a secondary bag. The bag will have the signal word "BIOHAZARD" or other biological hazard symbol. The items may then be transported to a designated disinfecting/cleaning area for disposal or appropriate cleaning. Protective equipment shall be worn when handling used biohazard waste containers.

Biohazard spills kits and Sharp containers are provided by Facilities. All biohazard waste should immediately be transported to be taken to Fire Station 1 for disposal. Facilities can assist with the necessary arrangements.

GENERAL SHARPS HANDLING

As mandated by OSHA, Risk Management will maintain a Sharps Injury Log (Appendix D) to track all contaminated sharps injuries including needle sticks and assist to identify any problem area or operations. The log will include type / brand of device, department / work area that the injury occurred and brief description of how the incident occurred. Emphasis will be made to protect the employee and maintain confidentiality. This log will be kept for five years.

To prevent needle-stick injuries, contaminated needles will not be:

- Recapped
- Purposely bent or broken
- Removed from disposable syringes
- Otherwise manipulated with two hands

Resheathing instruments, self-sheathing needles or forceps should be used instead of recapping needles with two hands. All at risk personnel will have available puncture resistant containers (sharps container) to dispose of needles, disposable syringes and other sharp surface instruments.

If a needle is found on City property by an individual who does not have training nor is equipped to pick it up, report it to your supervisor immediately. Arrangements will be made for proper pick up and disposal by a Category 2 employee.

SHARPS HANDLING – FIRE DEPARTMENT ONLY

To comply with the Needle Stick Safety and Prevention Act, the Fire Department's Safety Committee reviews all incidents involving needle sticks and near misses that are reported. The Safety Committee reviews the operational procedures governing the use of IV needles and recommends methods for avoidance including new technology for the reduction of accidents.

The Emergency Management (EMS) Committee regularly reviews new equipment and products prior to being placed in service including needles used for IV therapy. Information learned from the Safety Committee and EMS Committee is shared with the Washington County EMS Operations committee for discussion on compatibility between all emergency responder agencies within Washington County. The result of these groups is forwarded to the EMS/Special Operations Chief for changes or new equipment implementation.

IMMINUNIZATION/VACCINATION/TESTING

The City will offer select immunizations to reduce the risk of contracting certain communicable diseases. This program is based on individual risk and job duties.

Hepatitis B vaccination is free of charge to all *"at risk employees"*. Other City employees who are not required to perform high or moderate risk activities, such as provide first aid or clean-up BBP spills, will have available to them the Hepatitis B vaccination series free of charge if they have a work-related exposure to blood or other potentially infectious material. Although the City of Hillsboro cannot require anyone to receive the immunization, it is strongly recommended.

Any at risk or exposed employee who does not wish to have the vaccination when offered will be required to sign a waiver (Appendix A) specifying his/her decision. At any time thereafter, the employee may revoke the waiver and receive the indicated vaccination. Those who receive the vaccination series may receive Hepatitis B Antibody testing to ensure vaccination coverage and Hepatitis B booster doses when appropriate at no cost to the employee.

For Police and Fire Only: Baseline and yearly Tuberculosis (TB) testing is recommended for all Fire and Police personnel with public contact unless contraindicated [(of a condition or circumstance) suggest or indicate that (a particular technique or drug) should not be used in the case in question]. All vaccination and TB Testing records will be kept confidential and in accordance with OSHA and HIPAA guidelines.

POST EXPOSURE FOLLOW-UP/REPORTING

Documentation

If an employee has or suspects an exposure to potentially infectious material, they are to notify their immediate supervisor, and fill out a *Personnel Exposure Record* (see Appendix B). The incident must be documented within 24 hours of the suspected exposure. The *Personnel Exposure Report* shall be forwarded to Risk Management in a confidential envelope and the Occupational Health Services Provider listed on the bottom of the exposure report. Risk Management shall maintain all confidential testing and medical information in a secure location according to applicable state and federal standards.

Treatment

Treatment is medical care given to reduce the chances of contracting a communicable disease after exposure. Post-exposure testing and treatment shall be based on current guidelines from OSHA, CDC and applicable state and federal standards (See Appendix C: Exposure Flow Chart).

Healthcare Professional's Written Opinion

The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

- Whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination;
- That the employee has been informed of the results of the evaluation; and
- 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. If source of exposure testing is required, the testing will be requested by the Occupational Health Services Coordinator. Testing will be conducted as outlined in OAR statues related to HIV testing.

OSHA 300 LOG

All contaminated sharps injuries must be recorded on the OSHA 300 log. All other exposure incidents need only be recorded on the OSHA 300 log when medical treatment is initiated as part of the post exposure evaluation. These incidents are recorded as injuries until or unless the employee is diagnosed with an illness, such as Hepatitis B/C or HIV, upon which the OSHA log must be changed accordingly.

These particular types of incidents must be recorded as "privacy-concern" cases. The individual's name is not to be used, and a case number shall be assigned. Risk Management will keep the separate confidential list of privacy- concern case numbers and corresponding individual.

EMPLOYEE TRAINING

Employees in Category one shall receive BBP training and be offered the Hepatitis B vaccinations within 10 days of assignment at no cost to the employee. Employee refresher training will occur on an annual basis.

The BBP training provided by Occupational Safety, Health and Wellness (OSHW) covers the following elements:

- What are blood and airborne pathogens
- Epidemiology
- Modes of transmission
- Prevention and exposure risks to viral hepatitis and HIV
- BBP clean up kits and use
- Disposal sites
- Proper reporting procedures
- Personal Protective Equipment

Note: Additional communicable diseases may be added to the training as appropriate.

CONFIDENTIALITY OF PATIENT INFORMATION DISCLOSURES

All personnel and patient related information must be considered confidential. The City of Hillsboro will comply with all state and federal statues, including HIPAA to the extent that the regulations require.

Appendix A:
Bloodborne Pathogen
Statement of Declination

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B virus (HBV) infection. The City of Hillsboro has given me the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the vaccination at this time.

I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, which is a serious disease. If in the future I continue to have occupational exposures to blood or other potentially infectious materials and I want to be vaccinated, I can receive the vaccination series at no charge to me.

I am aware that if interested in receiving this series of shots, I need to contact Risk Management for further instruction.

_____
Employee Name

_____
Department

_____
Date

Copy Distribution: _____ Employee

_____ Risk Management

City of Hillsboro
PERSONNEL EXPOSURE REPORT

Exposure Type: ☐ **Infectious Disease** ☐ **HazMat**

EMPLOYEE INFORMATION

Employee Name: _____ **Department:**
Cell/Pager: _____ **Employee #:** _____ **Station:**
Shift: _____ **Email:** _____ **Contact Info:**
Other Info: _____

EXPOSURE INFORMATION

Incident #: _____ **Alarm #:** _____
Incident Date: _____ **Incident Time:** _____
Incident Address: _____
Nature of Call: _____
Length of Exposure (Hours/Minutes): _____
Description of Exposure (If needlestick include location): _____

Signs and symptoms experienced at the scene: _____

Delayed symptoms: _____

Type of Exposure:
- ☐ Presence Only
- ☐ Respiratory Intact
- ☐ skin
- ☐ Clothes/equipment
- ☐ Bite
- ☐ Non intact skin Mucous
- ☐ membrane
- ☐ Instrument/Needle stick

Brand/type of needle: _____

Source of Exposure:
- ☐ Blood
- ☐ Vomit
- ☐ Urine
- ☐ Feces
- ☐ Respiratory
- ☐ List: _____

Precautions Taken:
- ☐ Gloves (Exam)
- ☐ Disposable Mask
- ☐ Gloves (Turnout)
- ☐ Eye Wear
- ☐ Turnouts

Decontamination (Procedures followed): _____

PATIENT (SOURCE) INFORMATION

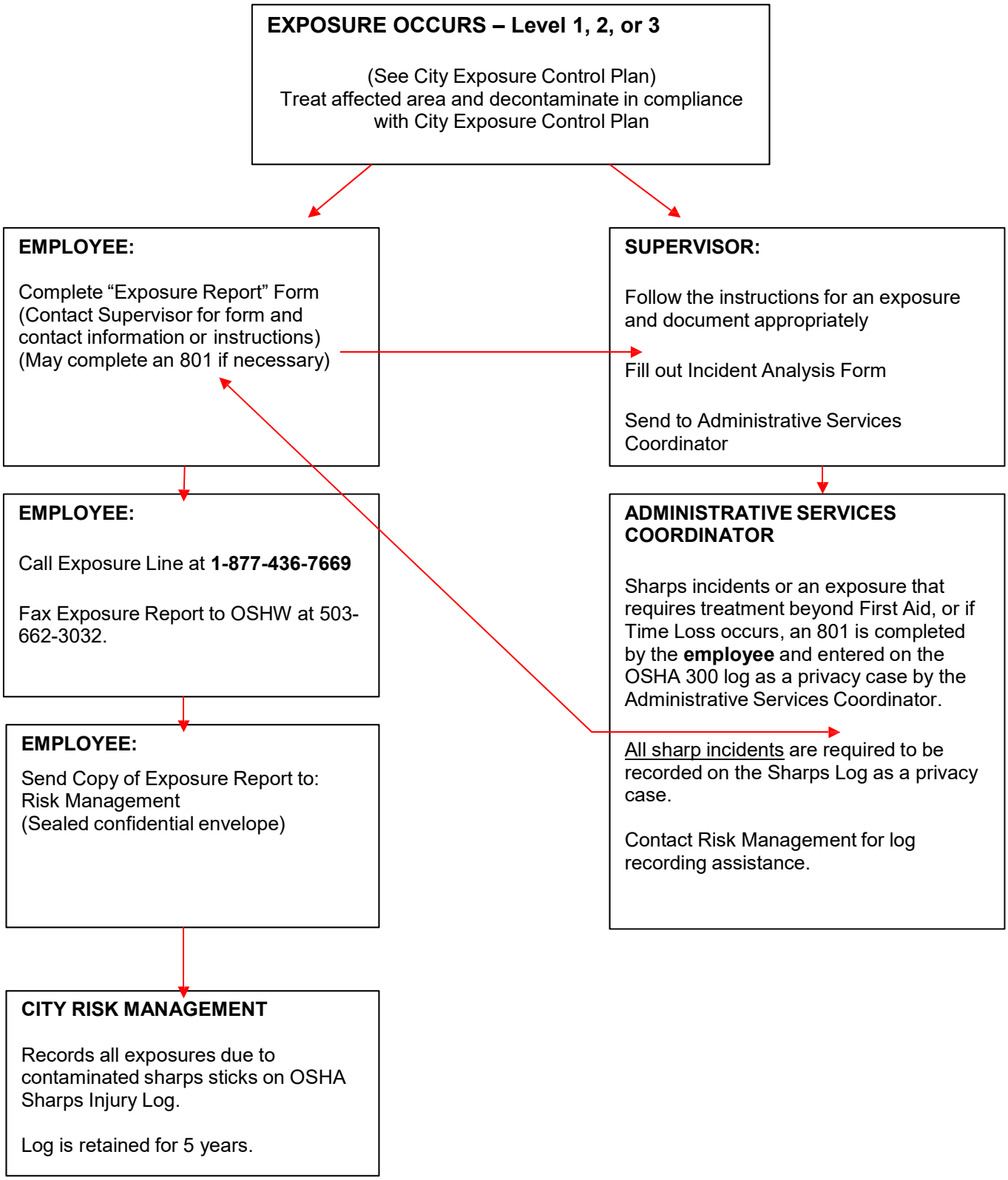
Patient Name: _____ Patient DOB: _____
Transported to: _____ Ambulance Co.: _____
Is the person suspected of having a communicable disease? _____
Other units involved: _____
Additional information: _____

Exposure Service Contacted? ☐ Yes ☐ No

SIGNATURE: _____ DATE: _____

NOTE: Fax to OSHW confidential fax at 503-662-3032, keep a copy for your records and send original to Risk Management.

Appendix C: Exposure Reporting Process



Appendix D: Sharps Injury Log - City of Hillsboro

All sharps related injuries shall be documented on this log and retained for five years in Risk Management.

Date of injury	Type of sharp	Brand name	Where injury occurred	How injury occurred

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Frequently Asked Questions

What is a Confined Space?
A confined space is a space that is large enough for a human to bodily enter, has limited means of entry or exit, and is not designed for continuous human occupancy. A Permit Required Confined Space also has one or more of the following characteristics; potential for hazardous atmosphere, engulfment hazards, and converging sidewalls that taper off to a smaller cross section, or any other recognized hazards.

What potential hazards could be in a Confined Space?
Confined spaces may contain many potential hazards such as electrical, chemical, thermal, mechanical, or biological. Certain spaces may also have fall hazards, water build-up, or even insects or snakes. Commonly, the major hazards in a confined space are the atmospheric conditions including oxygen deficiencies, carbon monoxide, hydrogen sulfide, or flammable gases.

How do I know if the air quality is acceptable prior to entering a space?
Atmospheric testing shall be completed for all confined space work prior to entry. If the gas detector sounds an audible alarm, entry shall not occur. If the alarm sounds while in the space, immediate evacuation of the space is required. No person shall enter any space that has unacceptable air conditions until the air has been ventilated and brought back within the acceptable entry conditions.

Is there a safe work procedure to follow prior to entry?
Yes, the City of Hillsboro uses one of two forms for entry; **Form A**: Entry Checklist or **Form B**: Entry Permit. Each of the forms outlines the proper procedures for safe entry.

Can I enter a confined space without receiving any training?
Employees are not allowed to enter any confined spaces without proper training. If you are asked to make an entry prior to receiving the formal training, stop what you are doing and talk to your supervisor. Do not enter the space.

CONFINED SPACE

Purpose

OSHA Regulation 1910.146

The purpose of this document is to establish safe entry procedures for confined space work within the City. Unless otherwise specified herein, all confined spaces within the City of Hillsboro shall be considered Permit Required Confined Spaces (**PRCS**) until fully evaluated for atmospheric, physical, and other potential hazards. Only employees, who are trained in the recognition of confined spaces, and the potential hazards thereof, shall be allowed to enter to do work in confined spaces. No employee shall enter any Permit Required Confined Space without an attendant present that shall remain outside the confined space to monitor, protect, and communicate with the entrant.

RESPONSIBILITIES

Risk Management

- Provide or coordinate training for confined space entrants, attendants, and entry supervisors and maintain employee training records for a minimum of three years
- Assist and support the Departmental Managers and Supervisors in the administration and maintenance of the Confined Space Program

Managers and Supervisors

- Implement and monitor compliance with the *Confined Space Entry Program*
- Ensure that employees are trained to recognize confined spaces and potential hazards
- Ensure the equipment necessary for Confined Space Entry is available and in working order. This includes fall protection devices, safety harnesses, retrieval systems, ventilation equipment, respiratory protection, air monitoring equipment, and rescue equipment
- Whenever possible, the City of Hillsboro will attempt to eliminate the hazards of confined spaces by means of engineering controls and design
- Designate an Employee to calibrate and maintain Gas Detection Equipment on a monthly basis

Employees

- Do not enter a confined space without the expressed permission of the appropriate supervisor(s). Only trained and authorized employees are allowed to enter and work inside a confined space
- Comply with this program in its entirety and follow all steps of the entry procedure as shown on the entry permit or other comparable entry document
- Any employee who observes others failing to follow safety procedures shall report his/her observations to a supervisor. If an entrant or other employees are in imminent danger, every employee has the right and obligation to stop work on the hazardous task
- Ask questions if you do not fully understand the requirements of the Confined Space Program

TYPES AND CHARACTERISTICS OF CONFINED SPACES

The two types of Confined Spaces are defined as:

1. **A <u>Confined Space</u> is one that:**

    - Is large enough and so configured that an employee can bodily enter and perform assigned work, and
    - Has limited or restricted means for entry or exit, and
    - Is not designed for continuous employee occupancy

2. **<u>Permit Required Confined Space</u> (PRCS) is one that:**

    - Is large enough and so configured that an employee can bodily enter and perform assigned work, and
    - Has limited or restricted means for entry or exit, and
    - Is not designed for continuous employee occupancy

    And contains one of more of the following characteristics:

    - Contains or has the potential to contain a hazardous atmosphere
    - Has the potential for engulfment
    - Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller section
    - Contains a fall hazard from a fixed industrial ladder 24 feet or greater in length
    - Contains any other recognized serious safety or health hazard

3. **Alternate Entry Procedures** can be used when:
    - All hazards have been eliminated: or
    - All physical hazards, if any have been eliminated and all atmospheric hazards are controlled with continuous ventilation

Note: Alternate entry cannot be used to enter a continuous system unless you can isolate the area to be entered from the rest of the space, can demonstrate that the conditions that caused the hazard or potential hazard no longer exist within the system during the entry, or can demonstrate that engulfment cannot occur and continuous ventilation in the area to be entered is sufficient to control atmospheric hazards.

Note: Doorways and other portals through which a person can *walk through* are not considered limited means of entry or exit, therefore ”walk in” access to a space may eliminate the need for either *Form A* or *Form B.* For those spaces that have permanent lighting and ventilation, shall be evaluated on an individual basis for safety.

Due to the large number of Confined Spaces in the City of Hillsboro, the City will rely on employee training and established work practices as an effective means of recognizing the existence of Confined Spaces. The employees shall use the training and established work practices to identify, evaluate, and control any hazards that pose a threat during entry.

If in the evaluation of the Confined Space (**Form A: Entry Checklist**), the identified hazards cannot be eliminated, the Space shall be considered a Permit Required Confined Space. This will require the use of ***Form B: Entry Permit***.

Note: Manholes exceeding five feet or greater in depth shall be considered Permit Required Confined Spaces and Form B: Entry Permit shall be used.

ACCEPTABLE ENTRY CONDITIONS

Acceptable entry conditions must exist in a Confined Space to allow an employee to enter and safely work within the space. An acceptable atmospheric condition is the absence of any substance that is capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects. Atmospheric testing is required for two distinctive purposes: evaluation of the hazards of the Confined Space and to verify that acceptable entry conditions in the space exist. This verification will be documented on the entry checklist and/or permit.

Acceptable Oxygen levels in a confined space must remain between 19.5% and 23.5% by volume.

- Levels below 19.5% are considered an Oxygen deficient atmosphere and may result in adverse health effects to the entrant. Levels above 23.5% are considered Oxygen enriched which enhances combustion. Acceptable Oxygen levels must remain between 19.5% and 23.5% at all times. **If oxygen levels are below normal atmospheric level (20.8%) every effort shall be made to determine why normal oxygen has been displaced or if there is a calibration problem with the gas detector.**

- A combustible or flammable atmosphere in a confined space is a flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL) or Lower Explosive Limits (LEL); or an airborne combustible dust at a concentration that meets or exceeds its LFL (this concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet or less).

- An atmosphere is considered toxic when concentrations of any substance for which a dose exceeds the Permissible Exposure Limit (PEL) as established by OSHA. The City of Hillsboro tests for the following toxic gases: Carbon Monoxide (CO) at 35 ppm and Hydrogen Sulfide (H2S) at 10 ppm.

Note: For air contaminants where OSHA has not determined a dose or PEL, other sources of information shall be consulted, such as the Hazard Communication Program and/or an SDS in order to provide guidance in establishing acceptable atmospheric conditions and appropriate personal protective equipment.

The City of Hillsboro **gas detectors** are equipped with Oxygen (**O2**), Hydrogen Sulfide (**H2S**), Carbon Monoxide (**CO**) and Flammable **(LEL**) sensors. It is City of Hillsboro policy that the atmosphere of the confined space be tested and monitored prior to and continuously throughout all confined space work. If the "gas detector" should alarm, acceptable entry conditions no longer exist and entry shall be immediately terminated and employees evacuated.

The confined space shall be re-evaluated and efforts will be made to determine the exact cause of the alarm. Entry will not be allowed until the hazard has been corrected or controlled by other acceptable means. Air sampling is required before re-entry into the space.

The City of Hillsboro provides gas detection equipment and all employees involved with confined space work will be trained in the proper and appropriate use of gas detection equipment including maintenance and calibration. Each department shall designate and train one individual to calibrate and maintain the equipment on a monthly basis.

Note: If the gas detector indicates any present levels of CO, H2S, or LEL (regardless of whether an alarm sounded or not), the levels shall be documented on the Permit/Checklist and a copy sent to Risk Management so that employee exposure records can be maintained.

ISOLATION

Isolation is the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as:

- Blanking or blinding: The absolute closure of a pipe, line, or duct by the fastening of a solid plate that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate
- Misaligning or removing sections of lines, pipes, or ducts
- Double block and bleed system
- Lockout of all energy sources
- Blocking or disconnecting all mechanical linkages

Note: If total lockout cannot be achieved, (since water service cannot always be interrupted) all valves must be accessible and operable so as to provide immediate and rapid shut down.

VENTILATION

Mechanical ventilation equipment shall be used when necessary for all confined space entries in order to obtain or maintain acceptable entry conditions. Forced air ventilation shall be so directed as to ventilate the immediate area where an employee is or will be present within the space. The air supplying the ventilator shall be from a clean air source and not increase the hazards in the confined space. Specific ventilation needs are a part of the evaluation process of the space. The surrounding atmosphere and conditions such as traffic or adjacent processes must be taken into consideration.

Note: If mechanical ventilation controls **or eliminates** an atmospheric hazard, Form A: Entry Checklist can be used. If mechanical ventilation is necessary to **maintain** acceptable entry conditions, then **Form B: Entry Permit** shall be used.

Exception: Mechanical ventilation may not be necessary if the entry point of the space provides adequate natural ventilation with no atmospheric hazards present.

COMMUNICATION

The employees involved with confined space entry must communicate with each other during all phases of the entry. The attendant will remain in continuous contact with the entrant during the confined space work. If visual/vocal communication cannot be maintained, radio communication shall be provided.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Standard personal protective equipment (PPE) shall be required for all confined space work. See your departments PPE Matrix for requirements. All PPE shall be appropriate for the task being performed and

potential hazards in the space. Additional PPE may be required as determined by the supervisor, qualified person, or as required on the entry permit. A SDS may also be consulted for additional information.

Additional Safety Equipment:

- Ladders for safe access and egress must be in place, in use, and extend 3' above the landing
- Lighting equipment and/or flashlights will be used if needed to enable employees to see well enough to work safely and to exit the space quickly in an emergency. (All electrical equipment will be equipped with ground fault protection.)
- Electrical tools used in confined space work shall be protected with a ground fault circuit interrupter (GFCI)
- For known chemical hazards, the Material Safety Data Sheets (MSDS) shall be readily available and reviewed (prior to entry) by employees involved in the entry. Refer to the *Hazard Communication Program* for additional information
- Rescue and emergency equipment will be provided and used when and where appropriate. (See Rescue Procedures)

FALL PROTECTION

Fall protection equipment shall be provided and used as required to protect the entrant, other City of Hillsboro employees, and pedestrians in the area. When there is a potential hazard created by vehicular or pedestrian traffic, the entrance and work area around the confined space shall be barricaded or otherwise protected. Such protective equipment could include:

- Portable guardrails or barricades for protecting floor openings such as open vaults or manholes
- Or traffic cones and a competent stand-by person to prevent accidental entry by pedestrians or other COH employees
- Ladders for ingress/egress. **Note:** When an employee uses a ladder to enter/exit a confined space they shall always face the ladder and maintain 3-point contact (two hands and a foot, or two feet and a hand) on the ladder
- Utilizing a tripod or davit arm with a full body harness to protect employees from falls from a fixed ladder of 24 feet or greater

HOT WORK PERMITS

A hot work permit is required while performing the following tasks in a confined space: welding, torch cutting, brazing, or cutting with a gas operated chop saw. These types of activities create an ignition source and/ or smoke within the space. Mechanical ventilation is likely required to maintain acceptable entry conditions. The Hot Work Permit is in addition to the entry permit, and must be completed by the entry supervisor.

Note: The performance of hot work inside Confined Space shall automatically classify the space as a Permit Required Confined Space. See Appendix A.

ROLES AND EMPLOYEE TRAINING

Three roles, requiring a minimum of two people, are required for any confined space entry:

- Entrant
- Attendant
- Entry Supervisor

Either the Entrant or the Attendant may assume the role of the entry supervisor, if adequately trained to do so.

Entry Supervisor - Ensures that the conditions required by the entry permit or alternative entry checklist are met prior to and during entry. The Entry Supervisor:

- Must be able to recognize the potential hazards that may be encountered during an entry
- Verifies that all tests specified by the entry permit or alternative entry checklist have been performed and that all procedures and equipment specified by the entry document are in place before authorizing entry
- Signs the entry permit or alternative entry checklist authorizing entry
- Terminates entry and cancels the entry permit or alternative entry checklist when;
    - The entry operations are completed, or
    - A condition that is not allowed under the entry document develops in or near the space
- Verifies that rescue services are available and that a means of summoning them is operable, if required
- Removes unauthorized individuals who enter or attempt to enter the confined space
- Determines that entry operations remain consistent with terms of the entry permit or alternative entry checklist and that acceptable entry conditions are maintained

Authorized Entrant - Only someone trained as an entrant will be allowed to enter and perform work in a confined space, regardless of other skills possessed to do work in the space. The Authorized Entrant;

- Must know the potential hazards associated with the specific confined space,
- Shall use tools and equipment properly
- Will communicate frequently and effectively with the attendant
- Will notify the attendant immediately of any dangerous conditions or hazardous exposures to workers in the space
- Will leave the space immediately when the attendant orders evacuation, when a hazardous or prohibited condition exists, and/or when any gas detector alarm sounds

Attendant – All confined space entries require an attendant to be present during the entire entry. The attendant:

- Shall hold a valid First Aid and CPR certification card
- Must know the hazards that may be encountered during an entry
- Is aware of signs, symptoms, and behavioral effects of hazard exposure in authorized entrants
- Remains outside the space during entry operations until relieved by another attendant
- Communicates with entrant as necessary to monitor entrant status and to alert entrant of the need to evacuate the space if needed
- Monitors activities inside and outside the space to determine if it is safe for entrant to remain in the space

- Keeps unauthorized personnel from entering the space
- Operates non-entry rescue equipment
- Summons rescue personnel (911) when necessary. The attendant is not to enter the space under any circumstances
- Performs no duties that would interfere with the primary duty of monitoring the safety of the entrant

A safety briefing involving all participants shall be held prior to each confined space entry to review the potential hazards, documentation, and entry procedure.

Formal training shall be completed at least every three years by all entrants, attendants, and entry supervisors. The formal training shall include classroom instruction as to the content of the *Confined Space Entry Program*, the potential hazards of confined spaces, and entry documentation as well as hands-on instruction and demonstration of air monitoring, ventilation, and rescue equipment to be used for confined space entry.

New hire employees are prohibited to enter a Permit Required Confined Space prior to receiving formal confined space training. New employees shall review the *Confined Space Entry Program* and mentor with an experienced, competent peer prior to assuming any role in a confined space entry. The employee's supervisor shall oversee the completion and documentation of the independent training.

RESCUE TECHNIQUES

The City of Hillsboro utilizes two rescue techniques, non-entry rescue, and emergency rescue.

- Non-entry Rescue is performed by the authorized attendant if the entrant has been injured, fallen unconscious, or unable to self-rescue. **A mechanical retrieval system (tripod/davit arm) for non-entry rescue shall be available for vertical, unobstructed Permit Required Confined Space entries of more than five feet deep**. When non-entry rescue is to be performed, at least one individual on site shall hold current certification in First Aid and Cardiopulmonary Resuscitation (CPR).

- Emergency Rescue by the City of Hillsboro Fire Department is performed for the lateral and vertical entries where obstructions make it impossible to safely retrieve an individual from the confined space. The entry attendant shall summon the Fire Department when necessary.

Note: Although "Self rescue" does not constitute an acceptable rescue technique Self evacuation is mandatory anytime the entrant is told to evacuate by the attendant, if the gas detectors sounds an alarm, acceptable entry conditions no longer exist, or anytime the entrant perceives that they may be in danger.

Training Officers of the City of Hillsboro Fire Department have access to all of the PRCS that may be entered by personnel. These officers also have access to completed entry permits and other documentation describing the spaces rescue crews may encounter and the potential hazards of each.

The Fire Department will be notified prior to any planned PRCS entry where rescue services may be required. Such notification will be documented on the entry permit. If there is no one available to perform rescue services, the PRCS work will be postponed until rescue personnel are available. For

more information regarding rescue services, and contact names and telephone numbers, please see *Appendix B: Rescue Services.*

Rescuers must practice performing permit space rescues prior to entry and no more than 12 months before an entry.

NOTE: If emergency services should be needed during confined space work, 911 dispatchers should be notified that the emergency is related to confined space work so the Technical Rescue Team from Hillsboro Fire can be dispatched at the same time.

CONTRACTORS

When contractors are hired to perform tasks in PRCS, the responsible Manager, Supervisor, Project Manager, Engineer, or Project Inspector is responsible for ensuring that the following occurs:

- The contractor is to be informed that the work will involve PRCS and that entry is allowed only through compliance with applicable OR-OSHA rules
- The contractor will be informed of known conditions and hazards that may designate a confined space as permit required
- This written program will be made available to a contractor upon request
- The contractor will be responsible for training and equipping its personnel to make confined space entry, and will develop specific procedures for personnel to evaluate, enter, and conduct work in a confined space on a city project
- There shall be coordinated entry operations with the contractor when City of Hillsboro personnel and contractor personnel will be working in or near the PRCS
- A debriefing with the contractor shall occur at the conclusion of the contracted work regarding any hazards confronted or created in the PRCS during entry operations

CONFINED SPACE ENTRY DOCUMENTATION

Each confined space entry made by City of Hillsboro personnel shall be documented and maintained for a minimum of one year at the respective department. For spaces that are entered less than once a year, at a minimum, the two most recent entry documents should be on file. All Permits and Entry/Exit Checklists shall be readily available upon request for internal or external review. This will aid in the annual program review and audit to assess the program effectiveness and identify any additional training needs.

Note: If the gas detector indicates any present levels of CO, H2S, or LEL (regardless of whether an alarm sounded or not), the levels shall be documented on the Permit/Checklist and a copy sent to Risk Management so that employee exposure records can be maintained.

Confined Space Program - Form A: Entry Checklist

Entrant(s) _____ _____ Date: _____

Attendant/Entry Supervisor _____ _____

Space to be entered and location _____

Purpose of Entry _____

Is **Hot Work** going to be performed is this space? YES NO (If **YES**, Use Form B: Entry Permit)

Gas Detector ID# _____

ENTRY CHECKLIST: (if you circle **NO** to any of the following questions, use Form B: Entry Permit)

1. Is the Oxygen Content between 19.5 and 23.5%?	YES	NO	N/A
2. Are Combustible levels less than 10% of the Lower Explosive Limits? (LEL)	YES	NO	N/A
3. Are Toxic Gas levels less than Permissible Exposure Limits? (CO<35ppm, H2S<10ppm)	YES	NO	N/A
4. Are the openings guarded from accidental entry or falls? (Portable Guardrails, Barricades, Cones)	YES	NO	N/A
5. Has the hazard of drowning been eliminated?	YES	NO	N/A
6. Have ALL energy sources potential for injury, illness, or death been locked out or eliminated?	YES	NO	N/A
7. Is the fixed industrial ladder less than 24 feet in length?	YES	NO	N/A
8. Has all of the crew been informed of their duties? (Safety Briefing)	YES	NO	N/A

Additional Information:
If an atmospheric hazard exists and mechanical ventilation will **Control** the hazard, the space can remain a non-permit required confined space and this form may be used.

PPE REQUIRED:

_____Utility Gloves	_____Face Shield	_____Safety Vest	_____Rubber Gloves
_____Hearing Protection	_____Safety Toed Shoes	_____Safety Glasses	_____Hard Hat
_____Rubber Boots	_____Goggles	_____Respirator	_____ Fall Protection

To be completed after exiting the Confined Space

	YES	**NO**
Has all the equipment been removed from the space?	( )	( )
Has the entrant safely exited the space?	( )	( )
Has the opening been closed and secured to prevent unauthorized entry?	( )	( )

Attendant /entry supervisor Signature _____

Notes_____
_____

Confined Space Program - Form B: Entry Permit

Entrant(s)_____ _____
Attendant (s)_____ _____First Aid/CPR: **YES NO**

Entry Authorized By:_____ Title:_____
Issue Date: _____ Time: _____ AM PM Duration of permit _____

Space to be entered and location_____

Work to be performed_____

ATMOSPHERIC TESTING / MONITORING

Gas Detector I.D. # _____

	Pre-Entry Test	Interval Test	Interval Test	Acceptable
Oxygen Content (percent):	_____	_____	_____	19.5-23.5%
Flammability (LEL):	_____	_____	_____	<10% LEL
Carbon Monoxide (PPM):	_____	_____	_____	<35 PPM
Hydrogen Sulfide (PPM):	_____	_____	_____	<10 PPM

POTENTIAL HAZARD CONDITIONS

□ Pressurized Lines □ Atmospheric Hazards □ Noise □ Hot Work
□ High Water Levels □ Flammable Materials □ Limited Lighting □ Traffic Hazards
□ Stored Energy □ Engulfment □ Corrosive Materials □ Part of a Continuous System

ISOLATION/SECURING THE SPACE

□ Lock-Out □ Ventilation (Mechanical, Natural) □ Extinguisher on-site
□ Fall Protection/Prevention □ Work Zone Traffic Control □ Fire Watch Person
□ Debris Removal □ Additional Lighting □ Vactor/Pumps

CHECK PPE REQUIRED:

_____Utility Gloves _____Face Shield _____Safety Vest _____Rubber Gloves
_____Hearing Protection _____Safety Toed Shoes _____Safety Glasses _____Hard Hat
_____Rubber Boots _____Goggles _____Respirator _____ Fall Protection

COMMUNICATIONS AND RESCUE

□ Communications (Verbal Visual Radio) □ Self-Rescue/Non-Entry (Tripod/davit arm with body harness)
□ Hillsboro Fire Department (summon 9-9-1-1)
□ YES □ NO Contacted prior to entering a known PRCS where rescue service may be required.

To be completed after exiting the Permit Required Confined Space

Exiting the Space Checklist	YES	NO
Has all the equipment been removed from the space?	( )	( )
Has the entrant safely exited the space?	( )	( )
Has the opening been closed and secured to prevent unauthorized entry?	( )	( )

PERMIT EXPIRATION DATE _____ **TIME** _____ AM PM

ENTRY SUPERVISOR _____

Appendix A: Hot Work Permit (Work is not permitted unless this permit is filled out and posted in work area)

Date _____/_____/ _____ Time _____AM PM

Building/Confined Space_____

Department _____

Work to be done _____

Special Precautions _____

Fire Watch Required? _____ Yes _____ No

Name of Fire Watch Person _____

The location where work is to be done has been examined by me, the necessary precautions have been taken, and permission is granted for this work.

Signed_____
Individual responsible for work authorization

Time Started _____ Time Completed

Permit Expiration Date_____ Time _____AM PM

CHECK LIST

□ Employees involved are trained and authorized to complete work.

□ Hot work equipment is in good working condition (i.e. welder, torches, tools, etc.)

□ Floors/ground free of debris

□ Flammables/Combustibles removed from area (35 feet)

- □ If not, non-combustible covers used to protect nearby combustibles and/or equipment.

□ All floor and wall openings are protected.

□ Containers, tanks, ducts, and other enclosures have been cleaned and purged of flammable vapors, liquids, dusts, and other hazardous materials.

□ Fire extinguisher is onsite and readily available.

□ All operations have been discontinued in area.

□ Employees have proper PPE for the job task.

□ Natural or mechanical ventilation

Fire Watch Person (after hot work is complete)

The hot work area was continuously monitored while the cutting, welding, or other hot work was being performed. The hot work area was also monitored 30 minutes after the work was completed and no fire conditions were noted.

Signed_____

Appendix B: Permit Required Confined Space Rescue Services

Hillsboro Fire Department, 240 1st Ave., Hillsboro

City of Hillsboro contact for coordination of simulated rescue:

1. Eric Fullan, Safety and Risk Officer 503-615-6586
2. Training Chief, Hillsboro Fire

To arrange standby rescue services for PRCS entry, notify:
Main Line-Administrative Assistant: 503-681-6166. The Administrative Assistant will notify the Battalion Chief on duty of the planned entry.

Forest Grove Fire Department, 1919 Ash Street, Forest Grove
Non-entry PRCS rescue* and non-permit confined space rescue only until further notice.

Training Officer: 503-992-3240

Joint Water Treatment contact for coordination of simulated rescue:
Chris Wilson, Plant Supervisor 503-615-6671

To arrange standby rescue services for specified entry, notify:
Business Office Secretary at 503-992-3240.

*Leave all rescue equipment in place to use with the assistance of FGFD.

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Frequently Asked Questions

How do I know how much a crane is capable of lifting?
Each crane is required to have a capacity rating designation affixed to it. Commonly, you will find the rating on the hoisting block or bridge. Markings shall be visible to the operator at all times.

How often do I have to inspect a crane?
Cranes are required to be inspected daily, prior to each use, monthly, and annually. The inspection criteria are contained within this written program and follow the manufacturer's recommendations.

What if our crane is only used occasionally?
Cranes that sit idle for a period of 1-6 months need to be inspected according to the monthly inspection criteria. A crane that sits idle for a period of 6 months or more shall be inspected to meet the requirements of the annual inspection.

Is riding the load or hook an acceptable practice?
No, employees are absolutely prohibited from riding the hook or a load at any time. If an employee needs to assist in load movement, tag lines shall be used.

Will I receive training on crane safety and using a crane?
Yes, you will be properly trained on crane safety and inspections prior to first use on the job.

CRANE SAFETY

Purpose

OSHA Regulation 1910.180
437-002-6230

The purpose of this program is to provide guidelines for proper inspection, maintenance, and use of cranes within the City of Hillsboro. Only authorized employees are permitted to use any lifting devices, however, all employees are required to follow the safeguards in this program. The term “crane” in this program refers to the styles utilized within the City of Hillsboro: Truck Mounted Mobile Cranes or Overhead Cranes

GENERAL RESPONSIBILITIES:

Risk Management

- Administer and maintain the Crane Safety Program
- Coordinate or conduct the required employee training
- Annually evaluate program effectiveness

Managers and Supervisors

- Allow only trained and authorized employees to operate a crane
- Ensure the required inspections and preventive maintenance is done in a timely manner, with records
- Ensure employees are complying with the components of this program

Employees

- Immediately tag out of service and report unsafe equipment conditions
- Follow safe operating procedures and inspections for all lifting equipment used
- Attend required training sessions when offered

GENERAL REQUIREMENTS

Any employee using a crane shall be trained and authorized prior to first use and shall comply with the manufacturer’s specifications and limitations applicable to the crane. The crane or any attachments used to execute a lift shall never be overloaded beyond the rated capacity. Cranes used within the City of Hillsboro shall also bear the appropriate hazard or warning signs and rated capacity limits, which must be visible from ground level. All cranes shall receive pre-use, frequent, and periodic inspections as required, using the appropriate inspection form.

INSPECTIONS

All cranes need to be inspected for wear or damaged moving parts. The City of Hillsboro has classified the inspections into three main categories:

1. **Daily, pre-use inspections** – This inspection shall be conducted prior to the operator using the piece of equipment. Documentation is not required. The user is required to check the functionality of the controls, limit switch, and brake to ensure there is no maladjustment that interferes with normal operations. The operator shall visually inspect for any deterioration or leakage in any lines, valves, guards, or parts of the lifting system including hooks, chains, and ropes.

2. **Periodic Inspections** – This inspection shall occur on a monthly basis and be documented on the **Monthly Crane Inspection Checklist (Appendix A). This inspection form must be filed and maintained for 3 years from date of inspection**. See checklist for inspection criteria.

3. **Annual Inspections** – This inspection shall be completed by the vendor or outside resource on an annual basis. Each department will be responsible to ensure this requirement is completed. Documentation shall be filed and maintained for the life of the crane.

The operator shall make routine observations during operation for any defects which might appear between regular inspections. Any deficiencies shall be carefully examined and determination made as to whether they constitute a safety hazard.

Inspection exceptions to the rule:
Cranes that sit idle, or not used regularly, do not need to be inspected on a monthly basis. However, they will need to be inspected prior to first use in accordance with the points below:

- A crane which has been idle for a period of 1 month or more, but less than 6 months, shall be given a documented (Appendix A) inspection prior to use
- A crane that has been idle for a period of 6 months or more, shall receive an inspection by the vendor or outside resource prior to first use

Note: In the event any deficiencies are noted on any type of inspection, the crane shall be tagged out of service and repaired or replaced immediately. Repairs shall only be made by an authorized person (s) such as the vendor or manufacturer. Authorized City of Hillsboro employees may conduct preventative maintenance such as greasing, lubing, and inspections.

Operational Testing
Prior to first initial use, all new, or extensively repaired or altered cranes shall be load tested by or under the direction of a competent person to confirm the new load rating of the crane. The load test shall not exceed 125% of the rated load unless otherwise recommended by the manufacturer. The operational testing will likely be conducted by the manufacturer or the vendor who supplied the crane. Each department shall be responsible to obtain such documentation from the outside resource. The load test reports shall be filed within the department and maintained for life of the equipment.

Maintenance Procedures
Authorized City of Hillsboro employees are allowed to perform minor adjustments or preventative maintenance activities such as greasing, lubing, etc. Prior to beginning any adjustments or maintenance, the crane shall:

- Be placed in a location where it will cause the least interference with other cranes or operations in the area
- All controls must be in the off position and locked out when feasible
- Have some form of warning to other personnel that the crane or hoist is being serviced and not to be used. *The authorized person conducting the adjustments or maintenance could fulfill this requirement if they do not leave the crane or hoist unattended while performing work from beginning to end*

Wire Rope Inspection

A thorough inspection of all ropes in use shall be made at least once a month and a record which includes the date of inspection, the signature of the person who performed the inspection and an identifier for the wire ropes. This record shall be prepared and kept on file where readily available. All inspections shall be performed by an appointed or authorized person. Any deterioration, resulting in appreciable loss of original strength shall be carefully observed and determination made as to whether further use of the rope would constitute a safety hazard. Some of the conditions that could result in an appreciable loss of strength are the following:

- Reduction of wire rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires.
- A number of broken outside wires and the degree of distribution of concentration of such broken wires.
- Worn outside wires.
- Corroded or broken wires at end connections.
- Corroded, cracked, bent, worn, or improperly applied end connections.
- Severe kinking, crushing, cutting, or unstranding.

Handling the Load

The size of the load a crane can safely maneuver is dependant on its individual rated lifting capacity. The rated capacity is not to be exceeded, unless for load testing purposes at 125%. The hoisting chain or rope shall be free of kinks, knots, frays, or twists and shall not be wrapped around the load. The load to be lifted shall be attached to the load block by means of a sling or other approved lifting device.

Once attached, the operator shall ensure the load is balanced and test the crane brake if the load weighs 75% or greater of the cranes lifting capacity. The brake can be tested by lifting the load 2-3 inches off the floor and allowing it to suspend for a short amount of time. If the brake is functioning properly, the load should not descend back to the floor. If it does, the crane lift shall be terminated and the crane taken out of service for repair.

When moving the load, ensure there are no obstructions such as people or other objects that may create a trip, crush, or struck by hazard. If an employee is on the load or handling the hook, movement of the crane is not allowed. An employee riding the hook or load is prohibited. If an employee needs to assist in positioning the load while in motion, then tag lines shall be used. Lifting loads overhead of people is absolutely prohibited.

When lowering the load, ensure area is clear and ready for load placement. If the crane has wire rope versus chain links, the load shall not be lowered to the point where there are less than two full wraps of rope remaining on the hoisting drum.

Holding the load
The operator shall not be permitted to leave his position at the controls while the load is suspended. No person should be permitted to stand or pass under a load on the hook. If the load must remain suspended for any considerable length of time, the operator shall hold the drum from rotating in the lowering direction by activating the positive controllable means of the operator's station.

Overhead Power Lines
If the crane must encroach within 20' feet of an overhead power line, every effort must be made to contact the utility owner and determine the cranes minimum approach distance to the power line. This should include an onsite planning meeting with the utility to determine what steps that should be taken to prevent encroachment. These steps may include warning lines, barricades, or signage in view of the operator to indicate 20' boundary from the overhead power line location.

If the crane, load line, or load can move within the 20' boundary the operator must:

- Work with utility owner to de-energize and ground the power line, or
- Work with the utility owner to determine minimum approach distance

Crane Operator Training
Crane operators must be trained in a variety of topics relating to the safe operation of the equipment. Training requirement may vary depending upon whether the crane is being used for maintenance (replacement with like equipment) or construction (new installation). At a minimum an operator should be trained in ground conditions should be firm, drained, and graded so that the crane can operate on a level surface with adequate support, be familiar and use proper rigging practices and keeping employees clear of the load.

The operator shall also be trained in:

- Safety devices
- Operational aides
- Load charts and capacities
- Operator manual
- OSHA Crane Rules

Safe crane operation also includes competent signal person so proper directions are communicated to and understood by the operator.

Crane operator training is required every three years, unless there is reason the training needs to be refreshed

Appendix A: Monthly Crane Inspection Checklist

Location:	Crane Serial Number:
Date:	Inspector:

Hooks	**Y**	**N**	**Hoist Chains**	**Y**	**N**	**Hoist Ropes**	**Y**	**N**
Safety Latch Function?			End Connections are in good condition?			Reduction in rope diameter?		
Throat Opening < 15%?			Excessive wear?			Broken wires?		
Hook Twist < 10%?			Twisted links?			Worn wires?		
			Distorted links that interfere with function?			Corroded wires?		
			Stretched links?			Cracked, bent, or worn end connections?		
						Severe kinking, crushing, cutting, or unstranding or wires?		

Does this Crane pass the inspection? **Y** **N**

If no, this crane was removed from service on _____ (date)

If no, what corrective actions are necessary to repair crane? _____

Frequently Asked Questions

What is an "Unqualified Employee?
Unqualified Employees can be defined as employees who have not been trained or authorized to conduct electrical work on any type of electrical equipment or panel.

Am I allowed to work on high voltage lines?
Employees who work on high voltage lines must have at least 2 years of training and experience working with high voltage. Only Qualified Employees are allowed to work on energized conductors or equipment connected to energized high-voltage systems.

What are the inspection requirements for electrical PPE?
As with all PPE, it needs to be inspected prior to each use, and periodically to ensure adequate protection to the users. Rubber gloves and sleeves are required to be tested every 3 months.

Are we able to make any repairs to damaged extension cords or power tools cords?
NO. If any cord ends or electrical plugs need to be replaced, those types of repairs shall be made by a qualified Facilities Maintenance employee. If you have damaged cords, contact Facilities Maintenance for assistance.

Will I receive training on Electrical Safety?
You will receive training if your job position requires you to work on or around electrical equipment.

ELECTRICAL SAFETY

Purpose

OSHA Regulation 1910.301 and Subdivision S
NFPA 70E

The purpose of this program is to prevent injuries and protect City of Hillsboro employees from electrical hazards in the workplace. Specific safety procedures for preventing electric shock or other injuries resulting from direct/indirect electrical contact while working on or near energized parts or de-energized parts shall be developed and implemented as required. This program was created using the electrical requirements from both, OR-OSHA and NFPA 70E. See Arc Flash Program in the Risk Management Manual for additional information

RESPONSIBILITIES

Risk Management

- Administer and maintain the Electrical Safety Program
- Provide assistance in identifying electrical safety issues and safety training
- Review electrical equipment safe operating procedures as necessary

Managers and Supervisors

- Ensure staff are trained, qualified, and authorized to work on electrical equipment
- Conduct periodic hazard analysis of work areas and correct identified safety hazards
- Provide the proper tools, equipment, and PPE necessary for employee protection and enforce its use
- Ensure the proper inspection of equipment

Employees

- Comply with safe operating procedures when working with electrical equipment
- Attend safety training as required for job position
- Ensure all tools, equipment, and PPE is in good condition prior to each use, and report defective equipment as necessary

DEFINITIONS

De-energized – Electrical devices that are disconnected from all energy sources including direct electric connections, stored electric energy such as capacitors, motors, alternate power sources including solar, and stored non-electrical energy in devices that could reenergize electric circuit parts

Energized Electrical Work – Work conducted by an employee on or near an exposed energized circuit greater than 50 volts and less than or equal to 600 volts.

GFCI – Ground Fault Circuit Interrupter, provides additional protection from shocks by shutting off current to equipment when a change in electricity when amperage flow is sensed, preventing leakage of current through the human body..

Grounding - Provides a safe controlled path between electricity and the earth preventing leakage of current through the human body. The creation of a conductive path for electricity between a circuit or the equipment to ground.

High Voltage – Electrical systems or equipment operating at or intended to operate at a sustained voltage of more than 600 volts.

Low voltage - Electrical systems or equipment operating at or intended to operate at a sustained voltage of 600 volts or less.

Polarized Plug - Helps reduce the potential for shock with easily identifiable plugs. One prong is wider than the other and can only be inserted into outlets one way.

Voltage - Electric potential or potential difference assigned to a circuit or system expressed in volts.

GENERAL REQUIREMENTS

Precautions for all employees:

- Use extension cords only as temporary power sources
- Do not overload circuits with excess electrical devices
- Plug strips, such as those used on computers, should be plugged directly into outlets and not into extension cords or other plug strips
- Inspect all equipment periodically for defects or damage
- All cords that are worn, frayed, abraded, corroded or otherwise damaged or missing the ground plug must be replaced immediately
- Never repair a damaged extension cord with electrical tape; replace it instead
- Replace older extension cords if one of the prongs in the plug is not "polarized." In a polarized plug, one prong will be wider than the other
- Grasp the plug to remove it from a socket. Never pull on the cord itself
- Keep all cords away from heat, liquids, or sharp edges
- Always follow the manufacturer's instructions for use and maintenance of all electrical tools and appliances
- Always unplug electrical appliances before attempting any repair or maintenance,
- Keep cords out of the way of foot traffic so they don't become tripping hazards or become damaged by traffic
- Ensure energized parts of electrical equipment operating at 50 volts or more are guarded against accidental contact
- Only properly trained employees are permitted to work on electrical equipment,
- Maintain a minimum three-foot clearance around all electrical panels

TYPES OF EMPLOYEES

The City of Hillsboro has 2 types of employees in this program:

1. Unqualified Employees can be defined as employees who have not been trained or authorized to conduct electrical work on any type of electrical equipment or panel. However, if employees have been trained on the City of Hillsboro Controlling Hazardous Energy Program, they are allowed to lockout/tagout and perform non-electrical service or maintenance on a piece of equipment.

2. Qualified Employee is one who possesses a valid State of Oregon Electrical License or is enrolled in an approved Apprenticeship Program and has demonstrated the skills and knowledge in the:

- Construction/operation of electric equipment and installations; and
- Distinguishing exposed live parts from other parts of electrical equipment; and
- Ability to determine the nominal voltage of exposed live parts; and
- Clearance distances and the corresponding voltages to which the qualified person will be exposed; and
- PPE requirements outlined in the NFPA 70E standards.

Note 1 to the definition of "Qualified Employee:" Whether an employee is considered to be a

"qualified person" will depend upon various circumstances in the workplace. For example, it is possible and, in fact, likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment.

SAFE WORK PRACTICES

Employees working with electrical equipment shall follow the City of Hillsboro safe work practices. These include: de-energizing electric equipment before servicing or repairs, using electric tools that are in good condition, using good judgment when working near energized lines or equipment, and wearing appropriate personal protective equipment and using GFCI's when required. Employees should be aware of additional hazards in close proximity to energized electrical power.

An electrical shock happens when electrical current passes through the body. This can burn both internal and external tissue, cause organ damage and disrupt the electrical rhythms of the heart. Any employee who has experienced a shock should seek immediate medical attention

CONTROLLING HAZARDOUS ENERGY (LOCKOUT/TAGOUT, LOTO)

De-energizing and isolating equipment energy sources shall be the primary method of protecting employees from electrical shock hazards. See "City of Hillsboro Controlling Hazardous Energy Program" for more details. There are a few exceptions to this rule. When it can be justified that energized work must be performed, only qualified employees,

who have received training on the hazards associated with their specific job tasks, shall perform energized work in accordance with this program.

All live electrical parts shall be put into an electrically safe condition before an employee works on or near them, unless the qualified employee can demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operations limitations. If de-energizing is not feasible, other means of safe guarding need to be developed and applied by the qualified operator and their immediate supervisor per NFPA 70E. (See Arc Flash Electrical Safety Program for additional information)

If live parts are not placed in an electrically safe work condition, work shall be performed by written permit only. **Exception:** Diagnostics, testing, troubleshooting, and voltage measuring shall be permitted to be performed without an electrical work permit, provided appropriate safe work practices and PPE are used.

Note: For voltages less the 50 volts, the decision to de-energize should include the consideration of the capacity of the source and any over-current protection between the energy source and the employee.

(See Lock-out Tag-out Program for additional information)

PERSONAL PROTECTIVE EQUIPMENT (PER NFPA 70E)

Qualified employees working in areas where electrical hazards are present shall be provided with, and shall use, personal protective equipment that is designed and constructed for the specific part of the body and for the class of electrical work being performed. Personal protective equipment shall be maintained in a safe, reliable condition and shall be visually inspected before each use. Electrical rubber gloves and sleeves shall be tested every 3 months as required, with documentation.

TOOLS

All electrical tools shall be inspected prior to each use. All defective tools or equipment shall be removed from service and repaired or replaced. Tools and other equipment shall be regularly maintained and must be designed and constructed to withstand the voltages or stresses to which they are exposed.

DAMAGED TOOLS OR DEFECTIVE ELECTRICAL EQUIPMENT

Any electrical tools or equipment not operating properly shall be taken out of service and tagged or labeled as “Do Not Use” or equivalent. Typical issues may include:

- Damaged cords, plug ends, or outlets
- Receiving a shock when touching the equipment; and
- Arcing, sparking, smoking, or otherwise malfunctioning equipment

Employees shall report malfunctioning equipment or devices to their supervisor and the Facilities Maintenance Department. Only “Qualified Employees” are permitted to make electrical repairs.

GROUND FAULT CIRCUIT INTERRUPTERS (GFCI)

The City of Hillsboro is required to protect employees from electrical shock hazards by utilizing GFCI's while operating electrical portable power tools with temporary power sources, or permanent sources without GFCI protection. Branch circuits require ground-fault circuit interrupters on all 125 volt, single phase, 15-20 ampere receptacles that are not part of the permanent wiring of a building or structure.

GFCI PROTECTION METHODS

There are three common methods used to protect employees from accidental electrical shock hazards. The GFCI may be;

- Built in the overall circuit
- As part of the electrical receptacle; or
- In protected cord sets (extension cords) or GFCI devices

If a permanently wired receptacle (not equipped with GFCI) is used for temporary electric power in a construction related project, a GFCI must be provided at the user end. Portable plug-in type or cord-type are the most practical for workers whom use cord sets for temporary power when there is no protection at the source. Portable generators may have GFCI protection built into the receptacle. If not, a protected cord set or GFCI shall be utilized.

GFCI INSPECTION REQUIREMENTS

GFCI's must be inspected and tested at the following intervals;

- Initially before first use
- Before first use after a repair
- Before use after any event that could have caused damage (ie: cord run over with fork truck or tractor
- At least every three months; or
- Every six months for **fixed** cord sets or GFCI devices that has not been damaged

EQUIPMENT GUARDING

Live parts of electric equipment operating at 50 volts or more must be guarded against accidental contact. Guarding of live parts may be accomplished by:

- Location in a room, vault, or similar enclosure accessible only to qualified persons
- Use of permanent, substantial partitions or screens to exclude unqualified persons
- Location on a suitable balcony, gallery, or platform elevated and arranged to exclude unqualified persons; or
- Elevation of 8 feet (2.44 meters) or more above the floor for 50V-300V and 8.5 feet for 301V-600V

Entrances to rooms and other guarded locations containing exposed live parts must be marked with conspicuous warning signs forbidding unqualified persons to enter.

Indoor electric wiring more than 600 volts and that is open to unqualified persons must be made with metal-enclosed equipment or enclosed in a vault or area controlled by a lock. In addition, equipment must be marked with appropriate caution signs.

OVERHEAD POWER LINES

To protect those working near overhead power lines from accidental contact, the Oregon Legislature passed into law the *High Voltage Overhead Line Safety Act*.

The law provides that no work activities take place within 10 feet of a high voltage overhead power line until the following two requirements are met:

- The responsible party must *notify the utility* operating the line of the intended work activity.
- The responsible party and the utility must *complete mutually satisfactory precautions* for the activity.

NOTE: OSHA Crane rules require 20’ clearance between the crane and overhead power lines.

As soon as you inform your local utility of your intended work activity, you’re taking the first step to ensure your safety and the safety of your crew. When and where necessary, the following can then occur:

- Coordination of work schedules.
- Identification of temporary mechanical barriers to prevent contact with the lines.
- Temporary de-energizing and grounding of lines.
- Temporary raising or moving of lines.

Failure to comply

Any party working within 10 feet of an overhead line without notifying the proper utility and establishing required safety precautions, will be *held directly responsible for all financial consequences of an electrical accident*. Failure to comply with this rule can carry a penalty of up to $70,000 for each offense in addition to the cost of injuries and repairs.

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Frequently Asked Questions

What is an Excavation?
An excavation is any man-made hole in the ground. The hole may be round, square, or a trench. A trench is defined as a long, narrow excavation. While working in or around such conditions, proper safe work procedures and shoring techniques shall be utilized.

When is shoring required?
Shoring is required in any excavation that is 5 feet or greater in depth, or if the competent person on the jobsite deems it necessary due to poor soil or surrounding conditions indicate the excavations needs to be shored at less than 5 feet. .

Who is a competent person?
A competent person is the one on the crew who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

What are the soil classifications?
There are four classifications of soil. The first being hard rock. This is the most stable ground and often shoring is not required. Class A soil is a very cohesive, native soil such as undisturbed clay. Class B soils are moderately cohesive with some granular soil. Class C is the loosest or least cohesive soil class and typically requires the use of a protective system.

Will I have the opportunity to receive this training?
Yes, if your job requires you to work in, on, or around excavations.

EXCAVATION SAFETY

Purpose

OSHA Regulation 1926.650

To establish safe work practices for work in and around excavations, including trenches and ditches. This program provides guidance concerning excavation, trenching, and cave-in protection to all employees within the City of Hillsboro.

RESPONSIBILITIES

Risk Management

- Provide initial and refresher training to employees whose job requires them to work in or around excavations
- Review the Excavation Program and revise it to reflect changes in OR- OSHA rules and/or Departmental procedures

Managers and Supervisors

- Implement and enforce the Excavation Safety Program
- Ensure affected employees are trained
- Ensure that the excavation equipment is in good working condition and used properly

Employees

- Comply with the components of this program
- Ensure proper use of all protective systems
- Report equipment damage to the supervisor so repairs or replacement may take place
- Use proper PPE while working in or around an excavation site

GENERAL REQUIREMENTS

An excavation is any man-made hole or trench in the ground. Hazards of excavations include cave-ins, which can occur when are unstable. While working in or around such conditions, the proper safe work and shoring techniques shall be utilized.

Pre-Planning

Prior to breaking ground on any excavation, careful planning is required so hazards can be eliminated or controlled. Considerations for planning an excavation shall include:

- *Underground utilities*. A utility locate must be performed on the site before any digging occurs.

- *Soil type and moisture content*. At least two tests should be performed by a competent person on the soil at the dig site; one visual and one manual. A competent person has the training and experience to recognize types A, B, C, and C60 soils. Moisture in the soil also impacts safety of the excavation.

- *Previous disturbance of soil.* Ground that has been excavated previously is often less stable than ground that has never been disturbed by excavation or construction.

- *Size of the excavation*. The size of the excavation and the tabulated data will assist in determining what protective equipment to use and spacing requirements for that equipment.

- *Time the excavation will be open*. If the excavation is left overnight, barricades, plates, and/or other security measures must be taken to prevent accidental fall through by pedestrians.

- *Surface encumbrances*. Anything that may fall into the excavation or cause other hazards must be removed or supported.

- *Proximity of structures*. Support systems may be required to control or eliminate effects on footings, foundations, and other adjacent structures.

- *Equipment required*. Heavy items that closely parallel an excavation adds to the stress applied to the sides of the excavation creating a surcharge. Operating certain equipment inside the excavation could affect the stability of the sides, or the air quality.

- *Placement of spoils*. Ensure adequate room for the spoils pile. The spoils must be placed at least two feet away from the edge of the excavation. Large rocks, soil clumps, lumber, and other items that could roll down the pile and into the excavation must be controlled or removed.

- *Water*. Reasonable efforts will be made to prevent the accumulation of water in an excavation entered by city personnel. This may include the use of water removal equipment, diversion ditches or dikes. When water accumulation within the excavation cannot be prevented or eliminated, precautions must be taken to protect employees against the hazards posed by water accumulation, such as; special shield systems or safety harnesses with lifelines. These precautions will vary with each situation and will be determined and closely monitored by the competent person.

- *Traffic*. A traffic control plan will be needed if the flow of traffic will be affected by the excavation. Traffic causes vibration, which affects the stability of excavations. Any employee exposed to vehicular traffic must wear a warning vest or other reflectorized garment.

- *Fall protection*. Guardrails or other fall protection is required for any structure that allows a person or equipment to work or cross over the excavation. Fall protection is required for any person working over impalement or other serious hazards.

- *Personal Protective Equipment.* Hardhats, protective footwear, personal fall restraints, gloves, and/or eye protection may be required, depending on the excavation and the activities in and around the excavation.

- *Hazardous atmosphere*. If there is any reason to believe that a hazardous atmosphere may occur (i.e.: Hot Work) in an excavation four feet or more in depth, the air within the excavation must be tested for oxygen content, flammability, and expected toxic materials. If atmospheric hazards exist, treat the excavation as a confined space, and comply with all permitting and planning requirements in the **Confined Space Entry Program**. A hazardous atmosphere may be anticipated if the excavation is over a landfill, near an abandoned or leaking underground fuel tank, or there has been other evidence of chemical ground contamination.

- *Rescue Plan*. In the event an employee is trapped in an excavation and self rescue is not possible, the City of Hillsboro Fire Department shall be summoned immediately.

Competent Person - A competent person must be assigned to every excavation project. The competent person has the authority to stop work whenever s/he sees a problem with an excavation that could pose a hazard to workers, and to correct conditions that may be hazardous.

Ideally, the competent person is onsite for the entire project. At minimum, the competent person must inspect the excavation daily and after any change of conditions that may affect the stability of the excavation. Such conditions include but are not limited to heavy rain, earthquake, blasting or other construction activities, and any cave-in event—even if it occurs in an unoccupied portion of the excavation.

Protective Systems - Whenever an excavation exceeds a depth of five feet *or* if the competent person determines that the risk of injury from cave-in exists at a lesser depth, a protective system is required. Protective systems include; sloping, benching, speed shoring, and shields or trench boxes.

Note: A registered professional engineer must design any protective system used in an excavation over 20 feet in depth.

Access and Exit - A ladder, ramp, or other means of access and exit is required for any excavation greater than four feet in depth. If a protective system is to be used, the means of exit must be within the structure of the protective system. There must be a means of exit no more than 25 lateral feet from any person in the excavation. A ladder must be secured and extend three feet above the top of the excavation.

EMPLOYEE TRAINING

All affected employees shall be informed of the hazards associated with excavations, and safe practices and procedures prior to working in or around excavations. The training will consist of classroom and/or one-on-one discussion of this document and the *Excavation Standard*.

Any employee designated as a competent person shall receive additional hands-on training and demonstrate knowledge in;

- Soil analysis
- The use of protective systems
- The requirements of the *Excavation Standard*
- Identifying existing and predictable hazards
- Hazard abatement

Documentation of competent person training will be kept for three years. Each employee who is designated as a competent person needs to attend training provided by a qualified instructor. Retraining is required for any employee who demonstrates a lack of understanding of this document and general safe practices.

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Frequently Asked Questions

When do I need to use fall protection?
Anytime you are working from an unguarded work surface or platform that is greater than four feet above a lower level, working out of an aerial lift, or when there is a fall hazard of 6 feet or greater, fall protection is required.

What kind of fall protection do I use for a confined space 24 feet deep or greater?
A tripod or davit arm with a full body harness shall be used for this type of entry. Also, you will need to guard the opening of the space to prevent an accidental fall in.

Are there any inspection requirements for fall protection equipment?
Yes. All fall protection equipment shall be inspected by the user prior to each use. The harnesses or body belts shall be inspected for cuts, tears, frays, or abrasions in the stitching and the “D” rings should be blemish free, without cracks or signs of wear. All lanyards, lifelines and equipment shall be inspected to ensure proper functionality and that all equipment is in good condition. All equipment shall be inspected annually by a Competent Person.

What is a personal fall arrest system?
A personal fall arrest system prevents an employee from free falling more than 6 feet without contacting a lower level. If any of the fall protection equipment is exposed to a fall or shock loaded, it shall be taken out of service and replaced as necessary.

Will I be trained on using fall protection equipment?
Yes. You will receive training at time of hire and every 3 years thereafter. You will also receive additional training if there is a change in fall protection equipment or if new hazards are introduced into the work site.

FALL PROTECTION

Purpose

OSHA Regulation 1926.502
Division 2 Walking Working Surfaces
Division 2 PPE
Division 3 Fall Protection

This program provides the necessary guidelines and safe work practices required to protect City of Hillsboro employees from potential fall hazards from elevated platforms, floor openings, boom trucks, and fixed industrial ladders.

RESPONSIBILITIES

Risk Management

- Provide Fall Protection training for employees whose job tasks involve potential fall hazards
- Conduct inspections to ensure all walking and working surfaces are free from slip, trip, and fall hazards

Managers and Supervisors

- Provide adequate personal fall prevention and arrest equipment
- Ensure employees comply with the Fall Protection Program
- Conduct periodic inspections on the employees fall protection equipment
- Ensure all fall hazards within the department have been adequately addressed

Employees

- Attend Fall Protection training as required
- Use appropriate personal fall prevention and arrest equipment
- Inspect all personal fall prevention and arrest equipment prior to each use
- Report and remove from service, any damaged personal fall prevention and arrest equipment to Supervisor

HAZARD CONTROL

The City of Hillsboro utilizes the following engineering controls to eliminate or reduce potential fall hazards:

- When feasible, standard guardrails along leading edges, ramps, or platforms
- Well-maintained aerial lift trucks and other powered platforms
- Use of hand, knee, and toe rails where required
- Proper construction of elevated platforms, fixed ladders, and stairs
- Adequate lighting in all areas

The City of Hillsboro utilizes the following administrative controls to eliminate or reduce potential fall hazards:

- Maintain appropriate personal fall prevention and arrest equipment
- Training for all employees who work on elevated locations and platforms
- Routine inspections of ladders, stairs, walking and working surfaces
- Good housekeeping practices
- Immediate cleanup of material spills

PERSONAL FALL PROTECTION SYSTEMS

Employees working from bucket trucks, raised platforms, roof tops, etc. shall utilize personal fall protection that will either prevent or arrest a fall from an elevated surface. Such systems consist of anchor points, connectors, and body harnesses, and may include a deceleration device, lifeline, or suitable combinations.

Fall Arrest Systems must:

- Limit maximum arresting force on an employee to 1,800 pounds
- Be rigged so that an employee can neither free fall more than 6 feet nor contact any lower level
- Bring an employee to a complete stop and limit the maximum deceleration distance an employee travels to 3.5 feet
- Have sufficient strength to withstand twice the potential impact energy of, a) an employee free fall distance of 6 feet, or b) the free fall distance permitted by the system, whichever is less
- Be secured to an anchorage capable of supporting at least the potential impact load of 5,000 pounds
- Develop a rescue plan prior to performing the work

Positioning Systems must: (i.e. inside the bucket of an aerial lift truck)

- Prevent the user from falling more than 2 feet
- Anchorage points must be capable of supporting at least twice the potential impact load of an employee’s fall, or 3,000 pounds whichever is greater

Fall Restraint Systems must:

- Prevent the user from falling any distance
- Anchorage points used for attachment of personal fall restraint equipment shall be independent of any anchorage being used to support or suspend platforms and shall be capable of supporting 3,000 pounds per employee attached

Emergency Rescue

When personal fall arrest systems are used, employees are required to develop a rescue plan to reach the victim within ten minutes of the fall. S/he may be able to perform self-rescue, depending on the situation. A boom truck or other means may be used if feasible and does not create other potential hazards for the victim or the rescuer. If self-rescue or a

lifting device is not possible, the City of Hillsboro Fire Department may respond. Rescue options include:

- Tiller/Ladder truck to extend and remove victim
- Top Side Haul System (rope rescue)
- Lower-Lower Rescue (rope rescue)

Note: The checklist in **Appendix A** may be used to determine the need for a plan, and aid in its development. Please contact Risk Management for assistance if necessary.

Inspection Criteria
Personal fall protection equipment must be inspected prior to each use for defects, damage, and other deterioration. In addition, all vital components are to be inspected by a qualified technician annually. Defective components must be removed from service and repaired or replaced immediately. Any component of a personal fall protection system that has been impact loaded (subjected to a fall), shall be removed from service and replaced or reconditioned. Those items which cannot be reconditioned by the manufacturer must be destroyed and disposed of properly so employees do not attempt to re-use.

WALKING WORKING SURFACES

Housekeeping
Simple housekeeping methods can prevent slip-trip-fall hazards:

- All work areas, passageways, storerooms, and service rooms shall be kept clean and in a sanitary condition
- The floors of all work areas shall be maintained in a clean and, so far as possible, dry condition. Where wet processes are used, drainage shall be maintained and gratings, mats, or raised platforms shall be provided
- Every floor, work area, and passageway shall be kept free from protruding nails, splinters, holes, loose boards or other obstructions

Aisles and Passageways
Aisles and passageways shall be kept clear and in good repair with no obstructions across or in aisles that could create a hazard. Permanent aisles and passageways shall be appropriately marked.

Floor Loading Protection
Load rating limits shall be determined and conspicuously posted on loft floors. Over loading of a floor is prohibited.

Protection for Stairways
Standard railings shall be provided on all exposed sides of a stairway opening, except at the stairway entrance. A standard railing consists of top rail, mid rail, and posts, and shall have a vertical height of 42 inches from the upper surface of top rail to floor, platform, runway, or ramp level. The height of mid rail is 21 inches.

For infrequently used stairways, where traffic across the opening prevents the use of a fixed standard railing, the guard shall consist of a hinged floor opening cover of standard strength

and construction with removable standard railings on all exposed sides, except at the stairway entrance.

Protection for Floor Openings
Floor openings shall be protected to prevent employees or other personnel from accidentally falling into the space. Floor openings shall be guarded by either:

- A floor hole cover of standard strength and construction and marked as such,
- A standard railing with toeboard; a standard toeboard is four inches in height, with not more than ¼-inch clearance above floor level,
- Portable guardrails, barricades, or cones,
- A competent standby person to warn all pedestrians of the fall hazard.

Protection of Open-Sided Floors and Platforms
All open-sided floors or platforms four feet or more above an adjacent floor or ground level shall be guarded by a standard railing on all open sides, except where there is an entrance to a ramp, stairway, or fixed ladder. The railing shall be provided with a toeboard wherever:

- Persons can pass beneath the open sides
- There is moving machinery beneath the open sides
- There is equipment with which falling materials could create a hazard

Stairway Railings and Guards
Every flight of stairs with four or more risers shall have standard stair railings or standard handrails.

Employee Training
Employees who are required to use personal fall protection shall be trained in the recognition of hazards, the protective systems, equipment inspection, care, and maintenance. Those expected to use a personal fall arrest system shall also be trained on various rescue techniques.

Training shall be provided prior to a new employee's initial assignment. Additional training will be provided anytime new hazards are introduced to the work area, the program or equipment changes or if an employee demonstrates a lack of understanding of the requirements. At minimum, refresher training will be offered every 3 years.

APPENDIX A: Fall Emergency Response Checklist

YES	NO	
☐	☐	Is there a fall hazard that cannot be eliminated?
☐	☐	Will one or more individuals be using a personal fall arrest system?

If the answer to both questions above is YES, develop a **Fall Emergency Response Plan** for the task(s) that present the hazard.

YES	NO	
☐	☐	Can workers on site perform rescue using an aerial lift truck, ladders, or other available equipment?
☐	☐	Are there individuals present trained to use available equipment for rescue? Name of Individual(s)_____ _____
☐	☐	Have arrangements been made with Hillsboro Fire Department to provide rescue services?
☐	☐	Is there a radio or cellular phone on site to call for emergency services (911)?
☐	☐	Has the individual(s) using the personal fall arrest system been trained to perform self-rescue?
☐	☐	Does everyone on the work site know the procedure and his/her role in the event of an emergency?
☐	☐	Is there someone on site who is certified in first aid and CPR? Name:_____

Frequently Asked Questions

What is Hot Work?
Hot Work is any activity that creates heat, flame, sparks, or smoke. Examples of Hot Work include but are not limited to: welding (gas or arc), torching, cutting, grinding, brazing, or soldering.

Do I need to use a Hot Work Permit?
Yes, anytime you are performing hot work in areas other than a designated maintenance area, you are require to use a hot work permit and follow the procedures outlined in this program.

How do you use a fire extinguisher?
Remember the acronym P.A.S.S., Pull pin, Aim hose, Squeeze handle, and Sweep at the base of the fire.

When do I use a fire extinguisher?
A fire extinguisher should only be used after the fire alarm has been pulled, employee evacuation has begun, and the Fire Department notified. If at that time the fire is still in the incipient stage and it is safe to do so, you may use the extinguisher to put out the fire.

Do I need to be trained on fire extinguisher use?
Yes, before you use an extinguisher to fight a fire, you must receive initial training. Employees are also required to be trained on fire extinguisher use an annual basis.

FIRE PREVENTION PROGRAM

Purpose

OSHA Regulation 1910.39

The purpose of the Fire Prevention Program is to reduce or eliminate the potential of a fire or explosion. This program provides guidance concerning fire prevention and emergency procedures for City of Hillsboro employees. All emergency procedures may be applicable to earthquakes, terrorist activity, or other natural or man-made disasters.

RESPONSIBILITIES

Risk Management

- Provide or coordinate fire extinguisher training
- Provide assistance to supervisors and managers in the proper storage and labeling of flammable and combustible materials
- Attend and report on regional emergency management training and events pertaining to terrorism awareness, disaster preparedness, and fire prevention
- Review and revise this program to reflect applicable regulations and industry best practices

Managers and Supervisors

- Ensure all fire prevention methods are established and enforced
- Ensure fire suppression systems such as sprinklers and extinguishers are regularly inspected and maintained
- Monitor the use and storage of flammable and combustible materials and liquids

Employees

- Use, store, and transfer flammable materials in accordance with provided training
- Do not mix flammable materials
- Immediately report violations of this written program to appropriate supervisor
- Attend provided training regarding fire safety, earthquake preparedness, terrorism awareness, and other emergency response as appropriate to jobs

HAZARDS

Fire and explosion-- Fire and explosion hazards can exist in almost any work area. Potential hazards include:

- Improper storage or use of flammable liquids and other combustibles
- Smoking in prohibited areas
- Accumulation of trash and debris
- Unauthorized hot work operations
- Faulty electrical equipment
- Vandalism

HAZARD CONTROL

Elimination of Ignition Sources - All nonessential ignition sources must be eliminated where flammable liquids and other materials are used or stored. The following is a list of some of the more common potential ignition sources:

- *Open flames*, such as cutting and welding torches, furnaces, matches, and heaters should be kept away from flammable and combustible materials
- *Mechanical spark* resulting from friction. Only non-sparking tools should be used in areas where flammable liquids are stored or handled
- *Static sparks* generated as a result of electron transfer between two contacting surfaces. Every effort should be made to eliminate the possibility of static sparks

Note: All employees are responsible for controlling ignition sources while performing their job tasks throughout the workday. If an employee has a question or concern regarding ignition sources and fire hazards in general, the work shall not be performed until the questions or concerns have been addressed by their supervisor or designee. Please contact Risk Management for consultation if necessary.

Precautions for Hot Work – Hot Work is any activity that creates heat, flame, sparks, or smoke. Examples of Hot Work include but are not limited to: welding (gas or arc), torching, cutting, grinding, brazing, or soldering.

Prior to performing hot work, all flammable and combustible materials shall be moved at least 35 feet from the area. If removing the materials is not feasible, the materials shall be covered or contained with some nonflammable means such as a fire retardant blanket or other guards to confine heat, spark, and/or slag.

Wherever there are openings or cracks in flooring that cannot be closed or plugged, precautions shall be taken to prevent sparks, heat, or slag to fall through onto combustible materials on the floor below. The same precautions shall be observed with regard to cracks or holes in walls, open doorways, and windows.

Performing hot work on equipment that contains flammable liquids is prohibited unless the equipment has been properly emptied and purged with nitrogen.

Note: If the precautions noted above cannot be met, the hot work shall not be performed until it can be completed safely.

Hot Work Permits – The person performing the hot work shall complete and post the hot work before the work begins. Permits shall be maintained within the department for a minimum of 1 year from the date of the permit. See Appendix A: Hot Work Permit.

Fire Watch Person - For all hot work that requires a permit, a designated fire watch person shall be assigned by the person performing the work. The fire watch person is responsible to monitor the area for smoke, smoldering, or small fires that may occur. The fire watch person shall also monitor the area 30 minutes after the hot work has been completed to ensure there is no fire potential and be trained on fire extinguisher use. A fire extinguisher shall be in the immediate area and ready for use if needed.

Hot Work Permit Exception – A Hot Work Permit or fire watch person is not required in maintenance shops or in designated areas where hot work is routinely performed. However, all safety precautions must still be considered to ensure a safe work environment.

Bonding and Grounding – Where flammable liquids are stored, transferred, or transported, containers shall be properly bonded and grounded. When transferring flammable liquids into smaller (i.e., up to five gallons) containers, place the container on the ground to dissipate any static charge then proceed with the transfer.

Separation of Incompatibles - Materials that can contribute to a fire should not be stored with flammable liquids or other incompatible chemicals. Examples are oxidizers and organic peroxides, which can generate large amounts of oxygen as they decompose. Always check the applicable material safety data sheets for chemical compatibility.

Control of Flammable Gases - Many of the safeguards for flammable liquids also apply to flammable gases. Other properties such as toxicity, reactivity, and corrosivity also must be taken into account. Also, a gas that is flammable could produce toxic combustion products.

Proper Storage of Flammables – All flammable storage cabinets must meet the criteria set forth in applicable fire codes shall be used to store or transport flammable liquids. The vendor where the containers are purchased will be able to provide UL (or equivalent) approved safety containers, and documentation concerning their status. Oily rags shall be placed in covered, approved waste cans and discarded or laundered regularly.

FIRE EXTINGUISHERS

Portable fire extinguishers have been installed in the workplace regardless of availability and rapid response of the local fire department. The extinguishers could be used by personnel to allow for escape from a fire or extinguishing a fire that is in the incipient stage.

Classification of Fires and Selection of Extinguishers - Extinguishers shall be selected according to the potential fire hazard, the construction and occupancy of facilities, and other factors pertinent to the situation. Fires are classified into four general categories, depending on the type of material or fuel involved. The type of fire determines the type of extinguisher that should be used to extinguish it.

- *Class A* fires involve materials such as wood, paper, and cloth which produce glowing embers or char
- *Class B* fires involve flammable gases, liquids, and greases, including gasoline and most other hydrocarbon liquids which must be vaporized for combustion to occur
- *Class C* fires involve fires in live electrical equipment or in materials near electrically powered equipment
- *Class D* fires involve combustible metals, such as magnesium, potassium, and sodium

***Location and Marking of Extinguishers* -** Extinguishers shall be conspicuously located along normal paths of travel and readily accessible for immediate use. In locations where visual obstruction cannot be completely avoided, directional arrows or other markings shall indicate the location of extinguishers.

If extinguishers intended for different classes of fire are located together, they shall be conspicuously marked to ensure that the proper class extinguisher selection is made at the time of a fire. Extinguisher classification markings will be located on the front of the shell above or below the extinguisher nameplate. Markings are of a size and form to be legible from a distance of 3 feet.

***Condition* -** Portable extinguishers shall be maintained in a fully charged and operable condition. Extinguishers not is use, shall be stored in their designated locations at all times. When extinguishers are removed for maintenance or testing, a fully charged and operable replacement unit shall be provided.

***Mounting and Distribution of Extinguishers* –** When feasible, fire extinguishers shall be installed on hangers or brackets. Extinguishers having a gross weight less than 40 pounds shall be installed so that the top of the extinguisher is not more than 5 feet above the floor, while those weighing more than 40 pounds shall be mounted so that the top is no more than 3 ½ feet above the floor.

Extinguishers mounted in cabinets, wall recesses, or set on shelves must be placed so that the operating instructions face outward. The location of such extinguishers will be made conspicuous by marking the cabinet or wall recess in red, which will distinguish it from the normal decor.

***Inspection and Maintenance* –** All extinguishers shall be inspected monthly to ensure adequate charge, that hoses and connections are tight, and that they have not been tampered with or physically damaged. In addition, fire extinguishers shall be serviced and inspected annually by a qualified vendor. The tag attached to the extinguisher shall list the date of the monthly inspection and initials of person completing the inspection. The invoice received for the contracted annual inspection shall act as documentation of completion and stored within the department for 3 years.

Training – Annual Fire Extinguisher Training shall be completed by all City of Hillsboro employees who may have the potential of using an extinguisher. The training may consist of a combination of classroom lecture, video media, and/or hands-on where each employee will use an extinguisher to put out a controlled fire. Documentation of training shall be maintained for 3 years within the Risk Department.

Appendix A: Hot Work Permit

Date _____/_____/ _____ Time _____AM PM

Building/Confined Space_____

Department _____

Work to be done _____

Special Precautions _____

Fire Watch Required? _____ Yes _____ No

Name of Fire Watch Person _____

The location where work is to be done has been examined by me, the necessary precautions have been taken, and permission is granted for this work.

Signed_____
Individual responsible for work authorization

Time Started _____ Time Completed _____

Permit Expiration Date_____ Time _____AM PM

CHECK LIST

□ Employees involved are trained and authorized to complete work.

□ Hot work equipment is in good working condition (i.e. welder, torches, tools, etc.)

□ Floors/ground free of debris

□ Flammables/Combustibles removed from area (35 feet)

□ If not, non-combustible covers used to protect nearby combustibles and/or equipment.

□ All floor and wall openings are protected.

□ Containers, tanks, ducts, and other enclosures have been cleaned and purged of flammable vapors, liquids, dusts, and other hazardous materials.

□ Fire extinguisher is onsite and readily available.

□ All operations have been discontinued in area.

□ Employees have proper PPE for the job task.

□ Natural or mechanical ventilation

Fire Watch Person (after hot work is complete)

The hot work area was continuously monitored while the cutting, welding, or other hot work was being performed. The hot work area was also monitored 30 minutes after the work was completed and no fire conditions were noted.

Signed_____

Risk Management

HAZARDOUS MATERIALS SPILL RESPONSE

Frequently Asked Questions

What are the limitations to responding to an auto accident?
For non-Fire Department personnel, response and cleanup shall be limited to; 10 gallons or less of gasoline, diesel that can be contained with available equipment and absorbent materials, or transmission, hydraulic, and other engine or crankcase fluids.

Will I receive training on Hazardous Spill Response?
Yes. If your job duties require, you will receive training initially and annually thereafter.

If I am trained, what level of training will I receive?
You will be trained to the Awareness and Operations Level for routine chemicals for which you have been trained to handle under the Hazard Communication Standard. This level of training will teach you how to establish a perimeter and respond in a defensive fashion. This response is very limited in scope, otherwise a 911 and Hillsboro Fire response is required.

How would I respond if I have not received training?
Untrained personnel shall not approach, contain, nor attempt to control any material at a traffic crash scene when the possibility of a release of a hazardous cargo exists, if any part of the incident scene is smoking or on fire or if there is any other perceived risk to personnel involved in the response.

What happens if the spill is threatening a wetland area?
When possible and safe to do so, storm drains and wetlands shall be protected by containing the spill, per Operations Level training and guidelines. The Hillsboro Fire Department shall be notified immediately if hazardous materials threaten environmentally sensitive areas, leave the confines of the facility, or begin to smoke or burn.

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HAZARDOUS MATERIALS SPILL RESPONSE

Purpose

OSHA Regulation 1910.120

To establish training and procedures to minimize employees' risk of exposure to hazards associated with the accidental release of hazardous materials within the City of Hillsboro.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Hazardous Spill Response Program
- Support affected departments during an incidental release emergency
- Coordinate and/or provide training for authorized employees

Supervisors

- Ensure employees are properly trained and work within the scope of their abilities
- Ensure employees follow the proper safety procedures and where the appropriate PPE as required

Employees

- Follow proper safety procedures and wear the appropriate PPE
- Follow the directions of the Incident Commander
- Report any injuries or illnesses that resulted from an emergency response situation

HAZARDOUS MATERIAL SPILL RESPONSE LEVELS OF TRAINING

Awareness Level- Employees who are trained at this level of response must be competent and have the ability to:

- Recognize a spill and use available resources to identify the material(s) involved
- Report the incident to the proper authorities
- Establish a perimeter when feasible without putting oneself or others in danger of exposure to hazardous materials, traffic, or other potentially hazardous or IDLH situations

Operations Level – Employees trained to this level shall have Awareness level training plus instruction in:

- Hazard identification
- Selection and use of personal protective equipment
- Establishing a perimeter and responding in a <u>defensive</u> manner
- Containment/confinement operations

- Limited cleanup methods of materials familiar to the employees and comparable to those covered within the Hazard Communication Program
- De-contamination procedures

For non-Fire Department Personnel, Operations Level response and cleanup to an incident involving a hazardous material release from a traffic crash shall be limited to;

- 10 gallons or less of gasoline
- diesel that can be contained with available equipment and absorbent materials
- Transmission, hydraulic, and other engine or crankcase fluids

Unauthorized personnel shall not approach, contain, nor attempt to control any material at a traffic crash scene when:

- the possibility of a release of a hazardous cargo exists
- if any part of the incident scene is smoking or on fire; or
- if there is any other perceived risk to personnel involved in the response

Incident Command – An Incident Commander shall assume control of every hazardous spill response to ensure that all cleanup, reporting, and review are completed. Initially, whoever responds to the scene first is the Incident Commander; however, this role will be passed to the Fire Department or other response agency on scene that has appropriately trained personnel.

SMALL SCALE SPILLS WITHIN CITY FACILITIES

When feasible, small scale spills shall be handled per the *Hazard Communication Program* or other applicable *Emergency Response Plan*. If the release is too large or is of such a nature that it falls outside the above guidelines, all personnel shall be kept out of the area.

When possible, storm drains and wetlands shall be protected by containing the spill, per Operations Level training and guidelines. The Hillsboro Fire Department shall be notified immediately if hazardous materials threaten environmentally sensitive areas, leave the confines of the facility, or begin to smoke or burn.

CLEAN UP AND DISPOSAL

Clean up and disposal shall be at the discretion of the Incident Commander. The City of Hillsboro utilizes several environmental agencies to pick up and dispose of any contaminated materials. Consult the appropriate safety data sheets (SDS) for disposal of hazardous materials other than those mentioned above. For highly toxic or environmentally hazardous materials, or for large quantities of recovered materials, call Spencer Environmental to properly record, report, and dispose of the waste.

REPORTING PROCEDURES AND RECORDKEEPING

Any City of Hillsboro personnel involved in the containment and/or cleanup of a hazardous material release is expected to cooperate fully with the Incident Commander and his/her staff, the Police Department, and others making reports and gathering evidence. The Incident Commander shall ensure the necessary reports are filed with the Department of

Environmental Quality (DEQ), the United States Environmental Protection Agency (EPA), and/or other agencies that must be notified of a particular incident.

TRAINING FREQUENCY

Awareness and Operation Level training shall be completed initially and annually thereafter. The training requirement shall be completed by the Hillsboro Fire Department or other authorized agency. The Risk Management department shall retain the training records for 3 years.

Frequently Asked Questions

When should I wear hearing protectors?
Whenever you are exposed to occupational noise levels exceeding 85 dB.

How will I know if I am being exposed?
Risk Management will work with your Department in identifying environments, equipment or job conditions that may potentially expose workers to an unacceptable level of noise.

Will I receive training?
All affected employees will be provided training on **1**) the effects of noise on hearing, **2**) the purpose of hearing protectors, and **3**) the purpose of audiometric testing.

What is audiometric testing (or audiogram)?
An audiogram is a test that monitors your hearing over time. You will receive a baseline audiogram within 6 months of your first exposure to occupational noise. You will then be tested on an annual basis. This test will be performed by a licensed audiologist or a certified technician.

What happens if there is a change from my prior test?
If your audiogram indicates you have experienced a Standard Threshold Shift (STS), you will be informed in writing within 21 days of the determination. One of two things could happen: **1**) you could be re-fitted with different hearing protectors, or **2**) you could be referred for further evaluation and/or testing.

HEARING CONSERVATION

Purpose

OSHA Regulation 1910.95

The purpose of this program is to establish training and education guidelines and necessary procedures to protect employees hearing while in the workplace.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Hearing Conservation Program, including training
- Maintain training records for at least three years
- Maintain all noise exposure measurements for at least two years
- Monitoring program to ensure effectiveness and compliance within applicable departments
- Schedule mobile audiometric testing for affected City personnel
- Retain audiologist reports of affected employees for the duration of their employment plus five years
- Identify employees who experience a standard threshold shift (STS) and that required written notification of STS is made to employees, and that arrangements have been made for follow-up evaluation
- Ensure proper recording on the OSHA 300 log of verified hearing loss

Managers and Supervisors

- Ensure that hearing protectors are available to all employees who are exposed to noise in excess of 85 dBA, and require their use by any employee who has a known hearing loss
- Ensure that annual audiometric testing is made available to all affected employees
- Work with Risk Management in the implementation, training, and testing components

Employees

- Compliance with this program
- Use hearing protectors whenever working in an environment where the noise level exceeds 85 dBA. Employees who have a known hearing loss (Standard Threshold Shift) shall use hearing protection whenever performing tasks which expose them to noise in excess of 85 dBA

MONITORING

Risk Management will assist Departments in identifying work environments, equipment, or job conditions which may potentially expose workers to an unacceptable level of noise. (Exceeding 85 dBA, Time Weighted Average) Monitoring must be representative of each affected employee's job and will be designed to identify employees for inclusion in the Hearing Conservation Program. As soon as any monitoring report is available, all employees who took part in the monitoring will be informed of the results by Risk Management. A copy of the completed surveys shall be kept within the department and in Risk Management.

All noise dosimetry and other measurements will be kept for a minimum of two years from the date of completion. Sound level readings will be taken on new equipment as soon as feasible. Supervisors shall contact Risk Management to inform them that new equipment has been purchased and that noise sampling needs to be completed.

Only individuals who have been trained in the use of specific instruments and testing methodology will be called upon to perform any monitoring. Only properly calibrated and functioning instrumentation will be used for any monitoring.

AUDIOMETRIC TESTING

All affected employees will receive annual audiometric testing. Baseline testing will be provided to each new affected employee within six months of hire. Testing will be provided at no cost to employees by a licensed audiologist or qualified technician. All testing will be done in accordance with OR OSHA and industry standards, using properly calibrated and recognized instrumentation and equipment.

Employees will be advised to avoid activities that expose them to high levels of noise and to avoid non-occupational exposure (or use hearing protection) with 14 hours prior to the test.

If an employee's audiometric test, or audiogram, indicates a standard threshold shift (STS) of 10 dB (Sound Pressure level) or more at 2000, 3000, or 4000 Hz (Octave Band Center Frequency) in either ear, or if detection of these frequencies is 25 dB or more above audiometric zero, s/he will be notified in writing by Risk Management within 21 days, and be retested within 30 days. The audiologist evaluating the test will determine if further management of the affected employee's noise exposure and hearing is needed and make medical referrals as appropriate. The audiologist will be provided with all available sound level and dosimeter data upon request.

Employees with documented hearing loss will be fitted with hearing protectors, trained in their use and care, and required to use them. Employees who are already using hearing protectors and have a STS of 10 dB or more, must be refitted and retrained. Some employees may need to be referred to a qualified specialist for additional evaluation.

RECORDKEEPING

Risk Management will maintain dosimeter and sound level readings for a minimum of two years. All audiograms are considered medical records and will be kept confidential. Each employee has the right to see his/her medical records upon request. Summaries of the audiograms will be kept by the Risk Management Department for the duration of employment plus five years.

OSHA 300 Log—if an employee's audiogram indicates that s/he has experienced a verifiable occupational standard threshold shift of 10 dB and the hearing level in the affected ear(s) is 25 dB above audiometric zero; it will be documented as an illness on the department OSHA 300 log.

HEARING PROTECTORS

As with any personal protective equipment (PPE), hearing protectors are to be considered a last resort, when engineering and administrative controls fail to reduce noise in the work environment.

All employees will be encouraged to use hearing protection whenever performing a task or operating equipment that is sufficiently loud to require raising one's voice to communicate with co-workers in close proximity. Generally, if you must shout to be heard, the level of noise is above the action level of 85 dB. Any employee operating equipment or performing a task that exposes him/her to 85 dB or more will be required to use hearing protection for the duration of the task. Any employee with a documented hearing loss shall wear hearing protection whenever exposed to noise at or above 85 dB.

Employees will be given the opportunity to select individual protection from a variety of suitable hearing protectors provided by the City. Selection of hearing protection should be based on the noise level in the environment, the noise reduction rating (NRR) of the protectors, practicality of the style of protector when used with other PPE, and comfort of the wearer. The goal is to reduce the noise affecting employees to 85 dB or less. When determining attenuation of a particular hearing protector, subtract 7 dB from the manufacturer's listed NRR.

> *For example:* A chainsaw running at full throttle creates 100 dB. If the employee uses a disposable ear plug with an NRR of 32, the attenuation factor would be calculated as such: (*NRR) 32* – 7 = 25 dB. The chainsaw creates *100 dB, therefore 100 dB* – 25 dB = 75 dB. If the disposable plug is used properly, it should attenuate the 100 dB down to around 75 dB.

NOISE WARNING SIGNS

All work areas where noise levels exceed the action level of 85 dB will be posted with warning labels or signs. Where the noise level exceeds 90 dB, the sign or label will indicate that hearing protection is required. Signs and labels are available from safety supply vendors. Examples of warning signs are:

- **CAUTION NOISE AREA** may cause hearing loss. Use proper ear protection for extended exposure
- **CAUTION WEAR EAR PROTECTION**
- **WARNING** Hearing Protection Required in This Area

NON-ROUTINE TASKS

Any employee expected to work in an unfamiliar area or perform non-routine tasks will be instructed by the responsible Supervisor or designee of the noise hazards associated with the area and/or task. The employee will also be informed about the availability of hearing protectors and the best work practices to reduce noise exposure as much as possible.

CONTRACTORS

Supervisor will inform the contractor of the noise hazards associated with the area and the required protective measures.

EMPLOYEE TRAINING

The Risk Management Department will see that each affected employee receives annual training in the following:

- The effects of noise on hearing
- The purpose of hearing protectors; the advantages, disadvantages, attenuation of various types; and instructions on the selection, fitting, use, and care
- The purpose of audiometric testing, and an explanation of the test procedures

Annual refresher training will be completed during audiometric testing week in late fall of each year. All new hires that may be included in the program will receive Hearing Training as part of the Loss Control Manual training session they attend as new hire employees.

ACCESS TO INFORMATION

Upon request, the employer shall make available to affected employees or their representatives copies of this standard, employee records, training material and information pertaining to OAR chapter 437 division 1 subdivision 0700.

Appendix A: *Noise Monitoring*

SAMPLE

The following list includes monitored equipment and tasks that were measured at 85 dBA or greater.				
Noise survey conducted, using a Quest Model 211A SLM (ANSI Type S2A).				
Dept./Facility	**Equipment**	**Sample Description**	**Conditions/Tasks**	**dBA**
Water Dist./Rural Road Work Zone	222 Dump; Cat #416B Backhoe	At flagger's ear level, 50 ft. from WZ	Traffic noise; operating backhoe and dump.	75 - 90
			.	

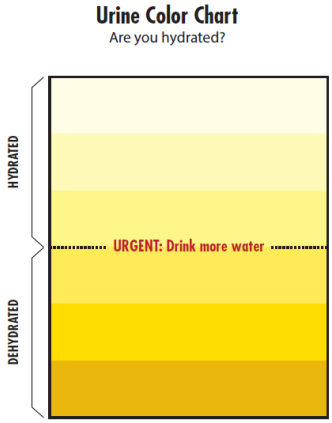
Frequently Asked Questions

What is a Heat Illness?
Heat-related illnesses is when the body's temperature control system is overloaded. The body normally cools itself by sweating. But under some conditions, sweating just is not enough. In such cases, a person's body temperature rises rapidly. Very high body temperatures may damage the brain or other vital organs. Several factors affect the body's ability to cool itself during extremely hot weather. When the humidity is high, sweat will not evaporate as quickly, preventing the body from releasing heat quickly. Other considerations that can limit the ability to regulate temperature include old age, youth (age 0-4), obesity, fever, dehydration, heart disease, mental illness, poor circulation, sunburn, and prescription drug and alcohol use.

What are the potential hazards for a Heat Illness?
Heat related illness poses a serious hazard caused by the body's inability to effectively cool itself. The potential hazards include weakness, nausea, headaches, cramps, fainting, loss of consciousness, permanent brain damage, and death.

How much water should I drink?

- Encourage employees to frequently drink small amounts of water before they become thirsty to stay hydrated. During moderate activity, in moderately hot conditions, employees should drink about 8 ounces of liquid every 15 to 20 minutes. Employees can monitor their hydration with a urine chart. Urine should be clear or slightly colored; dark urine is a warning sign! See urine color chart.
- Eating regular meals and snacks as they provide enough salt and electrolytes to replace those lost through sweating if enough water is consumed.
- Drinking extreme amounts of water can also be harmful (more than 12 quarts in a 24-hour period).



What is a Heat Index?
Heat index also known as apparent temperature is a combination of the ambient temperature and relative humidity that indicates what it feels like to the human body.

HEAT ILLNESS PREVENTION

Purpose

OSHA Regulation 437-002-0156

The purpose of this plan is to protect our employees from the hazards of hot working environments, in both indoor and outdoor environments. These procedures describe the minimum essential heat illness prevention steps when the heat index equals or exceeds 80°F applicable to most work settings. In work environments where there is a higher risk for heat illness (such as during a heat wave or other severe working or environmental conditions), we must exercise greater caution and employ greater protective measures as needed to protect our employees.

RESPONSIBILITIES

Risk Management

- Provide or coordinate initial and annual training for heat-related illness prevention and maintain employee training records for a minimum of three years
- Assist and support the Departmental Managers and Supervisors in the administration and maintenance of the Heat Illness Prevention Plan.
- Review Department's prevention plan as needed.

Managers and Supervisors

- Implement and monitor compliance with the *Heat Illness Prevention Program*
- Ensure that employees are trained to recognize symptoms of heat-related illness, initial actions to take for those affected by a heat-related illness, and way to prevent heat related illness.
- Check current and forecasted heat index for work period.
- For projects where the heat index is equal to greater than 80°F, initiate a tailgate meeting to review locations of cool/cold potable water, shaded/air-conditioned break area, symptoms of heat-related illness, and how to take appropriate action.
- Monitor employees for signs and symptoms of heat-related illness.
- Provide at least 32 oz of cool/cold water per employee per hour and is available at the worksite.
- Ensure effective two-way communication is available with at least one person on-site able to contact emergency services (911) if needed.
- Ensure shaded/air-conditioned break areas are available and heat illness prevention rest breaks are utilized.
- Adjust work schedules, reschedule tasks, or stop work based upon forecasted or existing conditions that may expose employees to excessive heat.

Employees

- Comply with this program in its entirety and follow all steps to prevent heat illness.
- Any employee who observes others failing to follow safety procedures shall report their observations to a supervisor. If an employee is in imminent danger every employee has the right and obligation to stop work related to the hazardous task.
- All employees are empowered to take initial action to aid employees suffering from the effects of heat illness and encouraged to contact emergency services (911) if needed.
- Notify a supervisor of hazardous tasks/conditions as soon as possible
- Complete annual heat illness prevention training
- Ask questions if you do not fully understand the requirements of the Heat Illness Prevention Program.

Definitions

Acclimatization – Temporary adaptation of the body to work in high heat that occurs gradually when an employee is exposed to it. Acclimatization peaks in most employees within 7 to 14 days of regular work.

Drinking Water – Potable water that is suitable to drink that is cool (66°F - 77°F) or cold (35°F to 65°F).

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

Heat Index – A measure indicating what it feels like to the human body or an apparent temperature when relative humidity is combined with the air temperature.

Shade – Blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in blocked sunlight.

Temperature Controlled Environment – An indoor setting where the temperature is maintained with a mechanical cooling system.

Work – A physical activity done by an employee classified as light, moderate, or heavy.

Light – Sitting or standing with minimal arm and leg work.
Moderate – Continuous modest intensity, such as light pushing/pulling or normal walking.
Heavy – Intense arm and trunk activity such as carrying loads or sawing.

Background

Every year, people die from exposure to excessive heat and many more suffer a heat-related illness; most of these are preventable. Heat-related illnesses can happen if workplace activities in a hot environment overwhelm the body's ability to cool itself. This becomes more likely if any of the risk factors below, are present.

Risk Factors

The following are **environmental risk factors** for heat illness:

- Air temperature above 90 degrees F (32.2 degrees C).
- Relative humidity above 40 percent
- Radiant heat from the sun and other sources
- Conductive heat sources such as dark-colored work surfaces
- Lack of air movement
- Physical effort needed for the work
- Use of nonbreathable protective clothing and other personal protective equipment

The following are **personal risk factors** for heat illness:

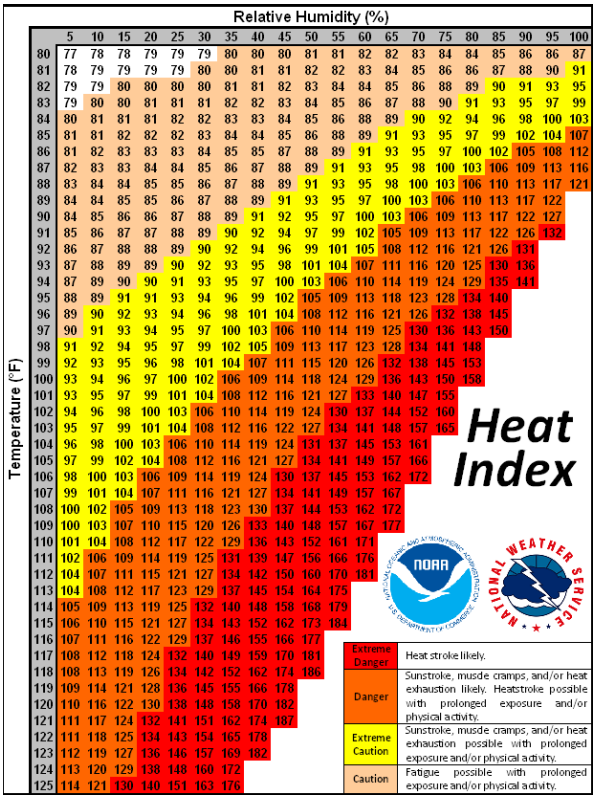
- Lack of acclimation to warmer temperatures
- Poor general health
- Dehydration
- Alcohol consumption
- Caffeine consumption
- Previous heat-related illness
- Use of prescription medications that affect the body's water retention or other physiological responses to heat such as beta blockers, diuretics, antihistamines, tranquilizers, and antipsychotics.

Employees are responsible for knowing and educating themselves about their own personal risk factors that may increase their chance for suffering a heat-related illnesses.

Heat Index / NIOSH Heat Stress App

The heat index is a measure indicating what it feels like to the human body or an apparent temperature when relative humidity is combined with the air temperature. All supervisory and management are required to be able to retrieve or determine the heat index. The heat index can be determined utilizing the U.S. National Weather Service's (NWS) Heat Index Graph (below) with the ambient temperature and relative humidity obtained from the NWS website.

For all supervisors and management, it is recommended that The National Institute for Occupational Safety and Health (NIOSH) *Heat Stress App* at https://www.cdc.gov/niosh/topics/heatstress/heatapp.html be downloaded to be able to efficiently determine the heat index and keep our employees safe. Employees should also be encouraged to download the application as well (available for iPhone and Android devices)



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Heat-Related Illness

Heat cramps

Heat cramps usually affect workers who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Heat exhaustion

Heat exhaustion can best be prevented by being aware of one's physical limits in hazardous environment on hot, humid days. The most important factor is to drink enough clear fluids (especially water, not alcohol or caffeine) to replace those lost to perspiration. Signs and symptoms of heat exhaustion typically include:

- Profuse sweating
- Weakness and fatigue
- Nausea and vomiting
- Muscle cramps (associated with dehydration)
- Headache
- Light-headedness or fainting; fainting or loss of consciousness is potentially serious and should be treated as a medical emergency.

When you recognize heat exhaustion symptoms in an employee, you must intervene, stop the activity, and move the employee to a cooler environment. Cooling off and rehydrating with water (or electrolyte replacing sports drinks) is the cornerstone of treatment for heat exhaustion. If the employee resumes work before their core temperature returns to normal levels, symptoms may quickly return. If there is no intervention and the body's temperature regulation fail, heat exhaustion can rapidly progress to heat stroke, a life-threatening condition!

Heat stroke

Heat stroke requires an immediate emergency medical response. The person may stop sweating, become confused or lethargic, and may even have a seizure! The internal body temperature may exceed 106 degrees F. Signs and symptoms of heat stroke typically include:

- Absence of sweating
- Dry skin
- Agitation or strange behavior
- Dizziness, disorientation, or lethargy
- Seizures or signs that mimic those of a heart attack

Ensure that emergency responders are summoned immediately if heat stroke is suspected. While waiting for emergency responders to arrive, cool the employee; move the employee to an airconditioned environment or a cool, shady area; and help the employee remove any unnecessary clothing. Do not leave the employee unattended. Heat stroke requires immediate medical attention to prevent permanent damage to the brain and other vital organs that can result in death.

Preventing Heat Related Illness

These are some best practices at preventing heat-related illnesses:

- Gradually increase workloads and allow more frequent breaks during the first week of work so that employees become acclimatized to higher temperatures.

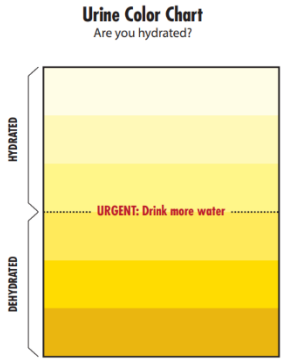
- Encourage employees to frequently drink small amounts of water before they become thirsty to stay hydrated. During moderate activity, in moderately hot conditions, employees should drink about 8 ounces of liquid every 15 to 20 minutes. Employees can monitor their hydration with a urine chart. Urine should be clear or slightly colored; dark urine is a warning sign! See urine color chart.
- Encourage employees to eat regular meals and snacks as they provide enough salt and electrolytes to replace those lost through sweating if enough water is consumed.
- Provide a buddy system where employees encourage each other to drink water, use shade to stay cool, and to watch each other for symptoms of heat-related illness.
- Educate employees that drinking extreme amounts of water can also be harmful (more than 12 quarts in a 24-hour period).
- Schedule frequent rest periods with water breaks in shaded or air-conditioned recovery areas.
- Ensure employees are aware of the signs of heat-related illnesses and encourage them to report immediately they or their co-workers show symptoms.
- Monitor weather reports daily and reschedule jobs with high heat exposure to cooler times of the day, if possible. Be extra vigilant when air temperatures rise quickly. When possible, schedule routine maintenance and repair projects for the cooler parts of the year.
- Provide shade or cool areas for breaks
- Wear heat-reflective work clothing such as light-colored, breathable clothing.
- Use cellphone text orders from supervisor to stop and rest in shade and drink.

For our employees that work in buildings or structures that do not have a mechanical cooling system we will use the NIOSH Heat Index app to determine the heat index outdoors and assume that it is the same indoors and inform our employees of the heat index and the risk of experiencing a heat-related illnesses.

Water

We will ensure plumbed potable water is available on-site or furnish 32 ounces of water per employee, per hour, when the heat index is equal to or greater than 80°F. Employees will be given adequate time to drink water and should be encouraged to drink small amounts of water throughout the hour and day to prevent dehydration and feeling thirsty.

Refer to the Urine Color Chart to ensure that you are adequately hydrated.



Although the urine chart is a good indicator of hydration status for most workers with normal pale yellow to deep amber urine, urine color can also be affected by diet, medications, and illnesses or disorders.

Shade

We will furnish shade or air-conditioned areas when the heat index is equal to or exceeds 80 degrees Fahrenheit and the amount of shade be must enough to accommodate the number of our employees that are on a heat illness prevention rest break; the shade areas will be immediately and readily available at all worksites. Your rest/lunch break does not begin until you are in the shade.

Acclimatization

According to the Centers for Disease Control (CDC), acclimatization is the beneficial physiological adaptations that occur during repeated exposure to a hot environment. These physiological adaptations include:

- Increased sweating efficiency (earlier onset of sweating, greater sweat production, and reduced electrolyte loss in sweat).
- Stabilization of the circulation.
- The ability to perform work with lower core temperature and heart rate.
- Increased skin blood flow at a given core temperature.

The level of acclimatization each worker reaches are relative to the initial level of physical fitness and the total heat stress experienced by the individual.

Workers can maintain their acclimatization even if they are away from the job for a few days, such as when they go home for the weekend. However, if they are absent for a week or more then there may be a significant loss in the beneficial adaptations leading to an increased likelihood of heat-related illness and a need to gradually reacclimate to the hot environment.

Employees that require acclimatization are those that:

- Have had no experience working in high heat environments
- Returned to work after an absence of one week or more
- Have recently been working in a cool climate and are beginning work in a warm or hot environment
- Had a change in their work activities, location, or conditions that exposes them to warm or hot environment they are not accustomed to

Acclimatization Plan

Day	Percent of work (No prior high heat work)	Percent of work (Priors high heat work)
1	20% or 1.6 hours (96 minutes)	50% or 4 hours (240 minutes)
2	40% or 3.2 hours (192 minutes)	60% or 5 hours (300 minutes)
3	60% or 4.8 hours (288 minutes)	80% or 6 hours (360 minutes)
4	80% or 6.4 hours (384 minutes)	100% or 8 hours (480 minutes)
5	100% or 8 hours (480 minutes)	

Non-physically fit individuals may require approximately an additional 50% of time to acclimatize

Heat Illness Prevention Rest Breaks

This applies whenever an employee performs work activities, whether in indoor or outdoor environments, where the heat index (apparent temperature) equals or exceeds 90 degrees Fahrenheit.

The purpose of heat illness prevention rest breaks is to allow the body to cool down and recover from working when the heat index equals or is greater than 90 Fahrenheit. The heat illness prevention rest break schedule is below.

Heat illness prevention rest break schedule:

Heat Index (°F)	**Rest break durations and intervals**	
	Light/Moderate Work	**Heavy Work**
90 or greater	10 minutes every two-hours	10 minutes every two-hours
95 or greater	10 minutes every two-hours	15 minutes every hour
100 or greater	15 minutes every hour	30 minutes every hour

This time can be used to complete light duty work in the shaded or air-conditioned area or as a break

Emergency Medical Plan

All employees will have to ability to contact a supervisor or summon emergency medical services (911) by cell phone. When onsite supervisors observe or receive a report of heat illness symptoms, they must take immediate action:

- In all cases, activity and employee exposure must be discontinued when the following symptoms occur:
    - Complaints of sudden and severe fatigue, nausea, dizziness, lightheadedness, or fainting.
    - Periods of inexplicable irritability or flu-like symptoms.
    - Sweating stops, and the skin becomes hot and dry
- The employee must not be left alone or sent home until the employee is offered first aid and the symptoms have passed.

Emergency medical services must be called (911) if the symptoms are severe.

Training Requirements

All employees who are or could possibly be exposed to heat as a workplace hazard and their supervisors/leads will receive awareness training. The topics to be discussed include but are not limited to the following:

- Heat-related illnesses protections for employees
- The environmental and personal risk factors for heat-related illness
- The importance of hydration
- The importance of acclimatization
- The different types of heat-related illness and their common symptoms
- The importance of immediately reporting to the supervisor any symptoms of heat-related illness in themselves, or in co-workers
- Appropriate responses to symptoms of possible heat-related illness
- The effects of nonoccupational factors (medications, alcohol, obesity, etc.) on tolerance to occupational heat stress.

Training must be completed annually by all employees that may work in a heat index 80°F or above.

Frequently Asked Questions

What is Hot Work?
Hot Work is any activity that creates heat, flame, sparks, or smoke. Examples of hot work include but are not limited to: welding (gas or arc), torching, cutting, grinding, brazing, or soldering.

Do I need to use a Hot Work Permit?
Yes, anytime you are performing hot work in areas other than a designated maintenance area, you are require to use a hot work permit and follow the procedures outlined in this program.

What does a fire watch person do?
A fire watch person is assigned to monitor the area during and after the hot work is performed and completed. The primary responsibility is to ensure there is no smoke, smoldering, or fire potential that may have been created by the hot work operations.

Where do I get the hot work permit?
The permits may be obtained within your department. Completed permits shall also be filed in your department for a minimum of one year.

As a fire watch, do I need to be trained on fire extinguisher use?
Yes, all fire watch persons must be trained on fire extinguisher use prior to the hot work beginning.

HOT WORK PROGRAM

Purpose

OSHA Regulation 1910.252
NFPA Standard 51B

The intent of the Hot Work Program is to eliminate the potential of creating a fire or explosion while performing operations that create sparks, open flames, or similar fire hazards.

RESPONSIBILITIES

Risk Management

- Provide or coordinate hot work training
- Revise this program to reflect applicable regulations and industry best practices

Managers and Supervisors

- Ensure all hot work procedures are established and enforced
- Ensure all employees who perform hot work as part to their job are trained on the contents of this program

Employees

- Adhere to the contents of this program
- Complete the permits as required
- Attend hot work training as needed

GERNERAL INFORMATION

Hot Work is any activity that creates heat, flame, sparks, or smoke. Examples of Hot Work include but are not limited to: welding (gas or arc), torching, cutting, grinding, brazing, or soldering.

Prior to performing hot work, all flammable and combustible materials shall be moved at least 35 feet from the area. If removing the materials is not feasible, the materials shall be covered or contained with some nonflammable means such as a fire retardant blanket or other guards to confine heat, spark, and/or slag.

Wherever there are openings or cracks in flooring that cannot be closed or plugged, precautions shall be taken to prevent sparks, heat, or slag to fall through onto combustible materials on the floor below. The same precautions shall be observed with regard to cracks or holes in walls, open doorways, and windows.

Performing hot work on equipment that contains flammable liquids is prohibited unless the equipment has been properly emptied and purged with nitrogen.

Note: If the precautions noted above can not be met, the hot work shall not be performed until is can be completed safely.

Hot Work Permits
The person performing the hot work shall complete and post the hot work before the work begins. Permits shall be maintained within the department for a minimum of 1 year from the date of the permit. See Appendix A: Hot Work Permit.

Fire Watch Person
For all hot work that requires a permit, a designated fire watch person shall be assigned by the person performing the work. The fire watch person is responsible to monitor the area for smoke, smoldering, or small fires that may occur. The fire watch person shall also monitor the area 30 minutes after the hot work has been completed to ensure there is no fire potential and be trained on fire extinguisher use. A fire extinguisher shall be in the immediate area and ready for use if needed.

Hot Work Permit Exception
A Hot Work Permit or fire watch person is not required in maintenance shops or in designated areas where hot work is routinely performed. However, all safety precautions must still be considered to ensure a safe work environment.

Contractors
All contractors who perform hot work operations are required to adhere to the City of Hillsboro Hot Work Program or equivalent.

Appendix A: Hot Work Permit

Note: Work is not permitted unless this permit is completed and posted in work area.

Date _____/_____/ _____ Time _____AM PM

Building/Confined Space_____

Department _____

Work to be done _____

Special Precautions _____

Fire Watch Required? _____ Yes _____ No

Name of Fire Watch Person _____

The location where work is to be done has been examined by me, the necessary precautions have been taken, and permission is granted for this work.

Signed_____
Individual responsible for work authorization

Time Started _____ Time Completed _____

Permit Expiration Date_____ Time _____AM PM

CHECK LIST

□ Employees involved are trained and authorized to complete work.

□ Hot work equipment is in good working condition (ie welder, torches, tools, etc.)

□ Floors/ground free of debris

□ Flammables/Combustibles removed from area (35 feet)

□ If not, non-combustible covers used to protect nearby combustibles and/or equipment.

□ All floor and wall openings are protected.

□ Containers, tanks, ducts, and other enclosures have been cleaned and purged of flammable vapors, liquids, dusts, and other hazardous materials.

□ Fire extinguisher is onsite and readily available.

□ All operations have been discontinued in area.

□ Employees have proper PPE for the job task.

□ Natural or mechanical ventilation

Fire Watch Person (after hot work is complete)

The hot work area was continuously monitored while the cutting, welding, or other hot work was being performed. The hot work area was also monitored 30 minutes after the work was completed and no fire conditions were noted.

Signed_____

Frequently Asked Questions

Will I be trained on the Industrial Equipment I am required to use?
Yes, you will be trained and authorized to operate the equipment necessary to complete your job safely. You will not be allowed to operate the equipment without immediate supervision until you have been able to demonstrate your proficiency in the safe operation of the equipment. You may also be required to obtain a Commercial Drivers License (CDL) as part of your training.

If I have to obtain my CDL, will my supervisor allow me to practice my driving?
Yes, you will have ample opportunities to practice with the equipment you will be using as part of your job duties.

Am I required to wear fall protection in a bucket truck?
Yes, all employees who work out of a bucket truck are required to wear a body harness and a fall arresting lanyard. Also, other PPE may be necessary, depending on the job task you are doing.

How long is the fork truck certification valid for?
Fork truck certification is good for 3 years. Re-certification and training is only required if there are deficiencies noted in an operators driving, if a new fork truck or hazards are introduced in to the department, or if there is a serious injury caused by fork truck use.

Am I required to inspect the equipment before I use it?
If you are a CDL holder, you are required to complete an inspection on the equipment that warrants the special license. If you are not a CDL holder, inspections are still required as needed per your department or as required by the equipment manfacturer.

INDUSTRIAL EQUIPMENT

Purpose

To establish safe practices for the use and maintenance of all City owned and operated industrial equipment used within the City of Hillsboro. The basic concepts, rules, and policies covered in the *Vehicle Safety Program* apply to the equipment discussed herein.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Industrial Equipment Program
- Maintain active insurance policies on all department vehicles
- Annually review program effectiveness and update as necessary

Managers and Supervisors

- Allow only trained and authorized employees to operate equipment
- Immediately remove from service any piece of equipment with a recognized safety defect
- Prohibit the operation of any piece of equipment by an employee taking medication that warns of drowsiness or other impairment
- Enforce requirement for pre-trip inspections on equipment

Authorized Employees

- Operate equipment in a safe, responsible manner and obey all applicable rules and traffic laws
- Maintain competency and eligibility to operate equipment by completing training and maintaining CDL, where required
- Follow safe fueling procedures and conduct pre-trip inspections before first daily use, or when taking equipment over from another employee
- Immediately report safety defects or vehicle problems to your supervisor or the Fleet Maintenance Shop
- Report moving violations and/or license suspension to the appropriate supervisor when required to do so
- Report use of all prescription and non-prescription medication that may affect driving ability, and do not operate any vehicle under the influence of medication which may cause impairment

POLICY: Only licensed drivers over the age of eighteen with acceptable driving records are allowed to operate department-owned/leased vehicles, or drive a personal vehicle on department business. Specific training is required prior to operating any vehicle other than a sedan, pickup, mini-van, or sports-utility vehicle.

Employees who operate vehicles requiring a commercial driving license (CDL) are subject to substance testing protocol as determined by the Department of Transportation and

Hillsboro Human Resources Department. It is the responsibility of each CDL holder to maintain his/her license and CDL Medical Certificate.

Each employee is obligated to inform his/her supervisor of a driver's license suspension or restriction prior to any work-related driving. An employee who maintains a CDL shall inform his/her supervisor that their driver's license or CDL has been suspended for any reason.

GENERAL INFORMATION

Overhead Power Lines
Industrial equipment shall not be used within 20 feet of any live overhead power line. If a task must be done which requires work within 20 feet of the line, PGE or other appropriate utility shall be notified. No work will be done until the utility has controlled the hazardous energy by deactivating or moving the hazardous power line.

Ground Safety
Prior to beginning work, the equipment operator shall walk around equipment and look for hazards. Make eye contact with persons on the ground and operators of other vehicles before moving the vehicle, cab, scoop, boom, or other extension. Ground spotter(s), barricades or cones shall be used if the operator does not have full field of vision and the work area is not fully secured to keep bystanders or other workers away from the equipment.

Passenger Accommodations
Only the operator shall be permitted to ride on the vehicles or equipment unless safe riding facilities are provided for each additional person. Employees are prohibited from riding on a bucket, scoop, articulating arm, fender, tailgate, bed, plough, trailer tongue, other extension or attachment of any vehicle or piece of equipment.

Safety Equipment
Each fleet vehicle will be equipped with a serviceable fire extinguisher and first aid kit. The extinguisher shall be securely stowed but accessible by the operator. Monthly checks are required for all fire extinguishers. First aid kits shall be restocked has needed.

Backup Alarms
Fleet vehicles and equipment that do not allow a clear field of vision behind the operator shall be equipped with audible backup alarms that are loud enough to be heard above ambient noise. The alarm shall not be disabled for any reason by department personnel. The backup alarm shall be tested as part of the pre-trip inspection.

Roll Over Protective Structures (ROPS)
Construction vehicles and equipment which were manufactured after July 1969 must be equipped with rollover protection structure (ROPS) unless its design prevents it from overturning. The ROPS shall meet performance criteria per the Society of Automotive Engineers (SAE) standards. If ROPS is removed or damaged, it shall be restored to be at least as effective as the original ROPS.

All vehicles which are equipped with ROPS and/or adequate canopy protection shall be equipped with safety belts for the driver and for any passengers for whom space is provided. If a safety belt is available, it shall be used.

Fork trucks
Employees who may be required to operate a fork truck shall be properly trained and certified prior to first use. Training shall include classroom lecture with video media followed with a written test. Employees will be required to successfully pass a driving test conducted by the authorized instructor. When feasible, the driving test will be completed on the forklift that will be driven in the workplace.

Refresher training and driving tests are required at least every three years. Refresher training is also required for any operator who is;

- Observed operating the forklift in an unsafe manner, or receives an evaluation that indicates s/he is not operating the forklift in a safe manner
- Involved in an accident or close-call incident
- Affected by a change in the workplace that alters the way the forklift is used

Aerial Lifts (bucket trucks, articulating boom lifts, or scissor lifts)
Only authorized employees who have been properly trained are allowed to operate or work out of an aerial lift device. Authorized employees shall perform a pre-use inspection on all lifting equipment prior to and during extended use of an aerial lift. All controls, alarms, and mechanical features must be operational prior to and during use. If the lift is not, it shall be tagged out of service and repaired. Operating a manlift that is not in good working order is prohibited.

You must follow the manufacturer's operating procedures and recommendations at all times.

Personal fall protection is required when working from a bucket truck or articulating boom lift. Such devices shall include a full body harness and shock absorbing lanyard attached to the designated anchor point on the platform or bucket. Tying the lanyard or standing on the guardrails is prohibited. Personal fall protection is not required while working from a scissor lift, unless the jobsite employees are working on require it or the manufacturer of the lift recommends it.

If employees are working from a bucket or platform over water (ponds, basins, waterways, etc.), personal fall protection should be evaluated by the Competent Person. Employees should wear a personal flotation device.

Dump Trucks
Vehicles with dump bodies shall be equipped with a positive means of support, permanently attached, and capable of being locked in position to prevent accidental lowering of the dump body. This device shall be used to support the body when it is raised and left unattended, during inspection, and while maintenance work is being performed. Trip handles for tailgates of dump trucks shall be arranged so that in dumping process, the operator will be in the clear.

Specialized Attachments and Accessories
Only attachments and accessories that have been authorized by the manufacturer of the vehicle shall be used. All attachments shall be inspected prior to first use. Only authorized operators shall be allowed to install attachments and accessories. Equipment, attachments or accessories shall not be modified or altered in any way unless modifications are approved by the manufacturer.

Equipment Trailers
The weight capacity of a trailer shall clearly be posted on the trailer and shall never be exceeded. Perform a safety check on all lights, connections, chains, and load binders prior to driving with the trailer. Equipment and other cargo transported on the trailer shall be secured. For any equipment exceeding 10,000 lbs, 4 direct tie downs are required with 70 grade chain or higher, and certified tie down binders.

Equipment Maintenance
Only Fleet Maintenance or other qualified mechanic designated or contracted by Fleet Maintenance, shall perform maintenance and repairs on department owned and operated equipment. Routine inspections and changing or removing accessories and attachments may be performed by qualified operators.

CDL Pre-trip Inspection
Any equipment for which a Commercial Driver's License is required shall be inspected per DOT protocol, and/or the manufacturer's recommendation prior to each day's use. Employees assisting other crews shall be briefed on the appropriate pre-trip inspection procedure for any equipment they are expected to operate, but do not routinely use.

Loads
It is the operator's responsibility to ensure the equipment is operated within its capacities and not overloaded

EMPLOYEE TRAINING

Except where otherwise specified, on-the-job or hands-on equipment training is conducted by a supervisor, lead worker, or qualified peer.

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Frequently Asked Questions

How can I reduce my risk of falling off a ladder?
There are several things you can do to reduce the likelihood of falling off a ladder. The most important is selecting the proper ladder for the job task being performed. Another is conducting a pre-use inspection of the ladder to ensure it is in good working condition and properly maintained. Finally, using 3 points of contact is a common safe work practice which ensures optimal contact with the ladder while ascending and descending.

Can I use a standard stepladder like a straight ladder?
It is prohibited to use a standard stepladder like a straight ladder because in a closed position it's more likely to slip on surfaces such as concrete and wood. Standard stepladders are designed to be used only when the spreader arms are open and locked.

How often do I need to inspect the ladders I use?
Portable ladders shall be visually inspected prior to use. If any defects are noted, the ladder should be tagged out and repaired or replaced. A regularly scheduled inspection of all ladders is recommended.

Do I need fall protection when using a portable ladder?
Fall protection is typically not required while using portable ladders. If a ladder is permanent, or fixed, and is over 24' high, fall protection is required.

Are there weight limitations to portable ladders?
Yes, all portable ladders have a rating based on their weight capacity.

LADDER SAFETY

Purpose

Oregon Administrative Rule 1910.23
OSHA Standard 1926.1053

This program provides the necessary guidelines and safe work practices needed to protect City of Hillsboro employees from potential fall hazards while using portable or fixed ladders.

RESPONSIBILITIES

Risk Management
- Provide Ladder Safety training for employees who use portable ladders
- Review and update program as needed

Managers and Supervisors
- Ensure employees have been properly trained on ladder safety and use
- Ensure employees comply with the Ladder Safety Program
- Ensure defective ladders are replaced and/or repaired in a timely manner

Employees
- Attend Ladder Safety training as required
- Use the appropriate ladder for each task
- Inspect all ladders prior to each use
- Remove any damaged ladder from service and report it to their Supervisor

HAZARD CONTROL

The primary hazard when using a ladder is falling. A poorly maintained or improperly used ladder may collapse under the load placed on it and cause the employee to fall. Proper selection and ladder maintenance is critical to reduce the likelihood of a fall from any type of ladder. Listed below is the variety of ladders that City of Hillsboro employees may encounter within the scope of their jobs.

Portable Ladders
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 must be less than the duty rating. In selecting 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:

- Special Duty (IAA) – 375 pounds
- Extra Heavy Duty (I-A) – 300 pounds
- Heavy Duty (I) – 250 pounds
- Medium Duty (II) – 225 pounds
- Light Duty (III) – 200 pounds

The load capacity shall be clearly marked with the manufacturer's label on the ladder, and that capacity shall not be exceeded. Ladders shall be inspected prior to first use and properly maintained at all times. A ladder that develops defects shall be immediately removed from service and tagged or marked as "Dangerous, Do Not Use." Defective ladders shall either be repaired or replaced as necessary.

Various types of portable ladders include:

- Stepladder - A self-supporting portable ladder, non-adjustable in length, having flat steps and a hinged back. Portable stepladders longer than 20 feet shall not be used. Stepladders shall be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in the open position. Stepladders should be used only on surfaces that offer firm, level footing such as floors, platforms, and slabs. Stepladders are intended to support only one worker at a time. Employees are prohibited from standing on or working from the top step.

- Single Portable or Straight Ladder - A non-self-supporting portable ladder, nonadjustable in length, consisting of one section. Its size is determined by overall length of the side rail. Single ladders longer than 30 feet shall not be used. This type of ladder must have slip resistant feet or be secured to prevent it from sliding. Rubber or neoprene ladder shoes are recommended for smooth, dry surfaces, and spikes are recommended for snow or ice. They are intended to support only one worker at a time.

- Extension Ladder - A non-self-supporting portable ladder adjustable in length. Metal and fiberglass ladders may have up to three sections, but cannot exceed 72 feet. Each extension shall be limited to 30 feet in length. Adequate overlap of the sections must be maintained when the ladder is extended:
    - Up to and including 36 feet — Overlap 3 feet
    - Over 36 through 48 feet — Overlap 4 feet
    - Over 48 through 60 feet — Overlap 5 feet

  Extension ladders are for use by only one person at a time. Rubber or neoprene ladder shoes are recommended for smooth, dry surfaces, and spikes are recommended for snow or ice.

  Be especially careful if you use an extension ladder on oily, metal, or concrete surfaces. Place the ladder securely and tie it off to prevent it from slipping.

Portable Ladder Safety Precautions:

- Ladders shall be placed with a secure footing. Slip resistant feet (or ladder shoes) may be needed on slippery surfaces
- Ladders used to gain access to a roof or landing shall extend at least three feet above the point of support
- The foot of a ladder shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the support)
- The worker shall always *face* the ladder when climbing up or down
- Short ladders shall not be spliced together to make long ladders
- Ladders shall never be used in the horizontal position as scaffolds or work platforms unless they are specifically designed for this purpose
- The top of a regular stepladder shall not be used as a step
- Use 3 points of contact when ascending or descending a ladder. (one foot and 2 hands, or 2 hands and one foot)
- Raise and lower heavy, awkward loads with a line or hoist
- Wear a tool belt to transport hand tools up and down the ladder
- Metal ladders shall never be used near electrical lines or equipment
- Wooden ladders shall not be used

Extension Ladder Positioning: Use the 4-to-1 rule for extension ladders: for each 4 feet of distance between the ground and the upper point of contact (such as the wall or roof), move the base of the ladder out 1 foot**.** For example; if using a 12 foot ladder, the base should be 3 feet out from the structure.

Portable Ladder Inspection and Maintenance: Ladders should be inspected prior to each use. A more thorough inspection and routine maintenance should be done on ladders monthly. Tighten step bolts and other fasteners, clean steps and ensure that slip-resistance is adequate and replace other parts when needed. Ensure the steps and side rails are free of cracks, bends, or other visible damage. Do not paint ladders, as that hides defects. The checklist in *Attachment A* may be used for monthly ladder inspections.

Transporting Ladders: When you hand-carry a ladder, keep the front end elevated, especially around blind corners, in aisles, and through doorways to reduce the risk of striking another person. For longer extension ladders, consider 2-person carry. If transporting a ladder in a truck or trailer, place it parallel to the bed and avoid tossing, throwing, or dropping the ladder while loading. Drive slowly over rough terrain. Tie the ladder securely to eliminate damaging the ladder.

Fixed Ladders*:* Fixed ladders are found in manholes, utility vaults, water reservoirs, and to access lofts or attic spaces in some facilities. Like their portable counterparts, fixed ladders must be inspected regularly to ensure that they are in good condition and safe to use. They must be kept clean, and well-maintained. The safety precautions listed above concerning ascending and descending ladders shall be applied to fixed ladders.

Cages, wells, or ladder climbing safety systems are required on all fixed ladders where the length of climb is more than 24 feet, or the top of the ladder is more than 24 feet above the nearest landing surface.

Note: Effective Nov 1, 2019 new fixed ladders that extended more than 24' above a lower level shall be equipped with personal fall arrest system, ladders safety system, cage or well.

Note: Replacement. When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system is installed in at least that section of the fixed ladder, cage, or well where the replacement is located; and by November 18, 2036, all fixed ladders shall equipped with a personal fall arrest system or a ladder safety system.

Fixed ladders, access hatches, cages, wells, and ladder climbing safety systems must be constructed to meet the requirements in 1910.23

Storage:

You'll extend a ladder's life by storing it properly:

- Use a well-ventilated storage area.
- Store wood and fiberglass away from excessive moisture, heat, and sunlight.
- Keep them away from stoves, steam pipes, or radiators.
- Store non-self-supporting ladders in flat racks or on wall brackets that will prevent them from sagging.
- Store stepladders vertically, in a closed position, to reduce the risk of sagging or twisting.
- Secure them so that they won't tip over if they are struck.
- Keep material off ladders while they are stored.

Attachment A: Portable Ladder Inspection Form

Inspected by: _____ Date of Inspection: _____

1.	Y	N	Are ladders in good condition?
	Y	N	Joints between steps and side rails tight?
	Y	N	All hardware and fittings securely attached?
	Y	N	Movable parts operating freely without binding or excessive play?
2.	Y	N	Are non-slip safety feet on each single or multiple-section portable rung-type ladder
3.	Y	N	Are ladder rungs and steps kept free of grease, oil, or mud?
4.			Are ladders removed from service that have
	Y	N	missing steps?
	Y	N	missing rungs?
	Y	N	missing cleats?
	Y	N	broken, bent, or twisted side rails?
5.	Y	N	Is the ladder load rating clearly visible on the ladder?
6.	Y	N	Are metal ladders marked with “CAUTION-Do not use around electrical Equipment.”

List ladders removed from service and describe defects:

_____

List ladders repaired at time of inspection, and repairs made:

_____

Risk Management

LOCKOUT/TAGOUT (CONTROL OF HAZARDOUS ENERGY)

Frequently Asked Questions

When do I need to perform a lockout?
Anytime you are performing service or maintenance to a machine, a system, or a piece of equipment, or when any other activities such as set-up, inspections, and modifications could potentially expose an employee to hazardous energy sources.

What types of hazardous energy could I possibly be exposed to?
There are several types of hazardous energy, including: electrical, pneumatic, mechanical, hydraulic, chemical, or thermal energy. Each piece of equipment, machine, or system may have one or any combination of energy sources, all at various energy levels.

What do I use to lockout a machine?
You will have a written procedures outlined in this program to follow and have immediate access to the lockout devices necessary to perform the process. Such devices shall include lockout locks, circuit breaker devices, ball or gate valve lockout devices, and scissor locks.

What if more than one person is involved in a lockout situation?
If more than one person is involved in the lockout process, each individual will need to attach their own lock to each energy source. This can be accomplished with the use of a scissor lock. Each employee would then attach their lock to the scissor lock to complete the lockout process.

Will I be trained on using the lockout system?
Yes, employees will be trained at the time of hire if your job task requires you to perform such tasks. Additional training is required if an employee cannot demonstrate that he/she has a full understanding of the lockout requirement, if there is an equipment or process change, or if the current program is deemed inadequate.

LOCKOUT/TAGOUT
(CONTROL OF HAZARDOUS ENERGY)

Purpose

OSHA Regulation 1910.147

The purpose of this program is to ensure all City of Hillsboro employees are protected from accidental or unexpected activation of mechanical, pneumatic, stored energy, and/or electrical equipment during maintenance, repairing, cleaning, servicing, or adjusting of prime movers, machinery, or equipment.

RESPONSIBILITIES

Risk Management

- Provide training to employees affected by lockout procedures
- Review Lockout Program annually and revise it to reflect changes in OR-OSHA rules and/or Departmental procedure or policy

Managers and Supervisors

- Ensure that each employee and contractor engaging in work requiring the lock out of energy sources understands and adheres to the lockout procedures
- Assure that employees have received training in energy control procedures prior to operating the machinery or equipment
- Provide and maintain necessary equipment and resources, including accident prevention signs, tags, padlocks, seals and/or other similarly effective means

Employees

- Comply with specific procedures as outlined in this program for tasks that require the use of lockout procedures as defined
- Maintain lockout supplies to ensure good working condition

Definitions

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

Authorized employee
An employee who locks out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance.

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, a gate valve; ball valve; and any similar device used to block or isolate energy.

Note: Push buttons, 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
A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in a safe position and prevent energizing of a machine or equipment.

Servicing/Maintenance
Workplace activities such as constructing, installing, setting up, major adjustments, modifying, maintaining and/or servicing machines or equipment.

LOCKOUT DEVICES

Lockout locks must be standardized by color, size, or shape to make recognition of the devices and their purpose evident. Lockout locks are to be used for lockout purposes only. Each lock must have a means of identifying the employee to whom it belongs, such as a tag with the individual’s name clearly printed on it. There must be only one unique key for each lock so that only the authorized user can remove the lock.

Other lockout devices include gate and ball valve lockout devices, circuit breaker devices, and scissor locks. All devices used during a lockout situation shall be used as recommended by the manufacturer and must be durable enough to withstand all environmental conditions under which they are used. They must not be easily broken or cut and warning and identification tags must remain legible even when used in wet or corrosive conditions.

ENERGY CONTROL PROCEDURES

Preparation for Lockout

Visually locate all energy isolating devices to be locked out. More than one energy source (electrical, mechanical, stored energy,) may be involved.

Sequence of Lockout System Procedure

1. Notify affected employee(s) that a lockout to the equipment is going to occur and clear the area until completed.
2. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
3. Verify the operating controls are in the off or neutral position and dissipate any stored energy such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure.
4. Apply lockout devices.
5. Check for Zero Mechanical State (ZMS) by operating the push button or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating control(s) to the off or neutral position after the test.
6. The equipment is now locked out and the maintenance, service, or repairs can be made.

Restoring Machines or Equipment to Normal Operations

1. After the servicing and/or maintenance is complete, visually inspect the area around the machine(s) or equipment and clear debris, reinstall all machine guards, and remove all tools.
2. Ensure all affected employees are clear.
3. Verify the operating controls are in the off or neutral position.
4. Remove all lockout devices.
5. Operate the energy isolating devices to restore energy to the machine or equipment.
6. Notify affected employees that the equipment is ready for use.

Temporary Removal of Lockout/Tagout Devices

In situations where lockout devices must be temporarily removed to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:

1. Remove non-essential items and ensure that machine or equipment components are operationally intact.
2. Notify affected employees that lockout devices are going to be removed and clear the area.
3. Remove the lockout devices, energize and proceed with testing or positioning.
4. De-energize all energy isolating devices and dissipate any stored energy.
5. Reapply lockout devices.
6. Re-check for ZMS.
7. Continue with service or maintenance.

Procedure Involving More Than One Person
In the preceding steps, if more than one individual is going to be assisting with the maintenance or repair, each employee shall place his/her own personal lockout device on each energy isolating device(s). This can be accomplished with the use of a hasp or scissor lock where all authorized employee's locks may be attached.

Procedure for Transferring Locks
If the equipment is locked out for service or repairs and the work is not completed by the initial employee(s), the locks may need to be transferred to the next in-coming employee(s). To ensure continuity of the lockout, all affected and authorized employees must be notified that a transfer of locks is going to occur and that all employees are prohibited from attempting to operate the equipment. The exiting employee must remove his/her lock while the new in-coming employee attaches their lock. This process shall be repeated for each energy isolating device that is locked out, until all locks have been transferred.

Maintenance Requiring Undisrupted Energy Supply
Where maintenance, repairing, cleaning, servicing, adjusting, or setting up operations cannot be accomplished with the prime mover or energy source disconnected, such operations may only be performed under the following conditions:
1. The operating station (e.g. external control panel) where the machine may be activated must at all times be under the control of a qualified operator.
2. All participants must be in clear view of the operator or in positive communication with each other.
3. All participants must be beyond the reach of machine elements that may move rapidly and present a hazard.
4. Where machine configuration or size requires that the operator leave the control station to install tools, and where there are machine elements which may move rapidly if activated, such elements must be separately locked out.
5. During repair procedures where mechanical components are being adjusted or replaced, the machine shall be de-energized or disconnected from its power source.

EMPLOYEE TRAINING

Employees shall be trained at the time of hire with refresher training sessions thereafter on the contents of the City of Hillsboro Lockout Program and procedures that apply to their job duties. Training documentation will be kept by Risk Management for a minimum of three years. Documentation will include an outline of topics covered and a sign in sheet of those employees attending.

The training shall include the following:

- 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
- Each affected employee shall be instructed in the purpose and use of the energy control procedure

- 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

Employee Retraining

- 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
- Additional retraining shall also be conducted whenever the City of Hillsboro has reason to believe there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures
- The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary

PERIODIC INSPECTIONS

Energy control procedures and practices shall be audited at least annually to ensure that general and specific lockout procedures are being followed. The completed inspections shall be retained in the department for a minimum of two years. The following criteria shall be followed to complete this requirement:

- Authorized persons other than those employees directly utilizing energy control procedures must carry out inspections
- Inspections will include a review between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure being inspected
- Annual inspections shall be documented and contain the following information:
    - Which equipment is being evaluated
    - The inspection date
    - The workers included in the inspection
    - The person who did the inspection

LOCK REMOVAL PROTOCAL

In the event an authorized employee inadvertently leaves their lockout device(s) on a machine or piece of equipment and leaves the workplace for the day, the devices may be removed under the immediate direction of the department supervisor. In order for this to occur, the following steps need to be followed and documented on the Lock Removal Form. The completed document shall be retained in the department for one year.

The supervisor or designee shall:

- Verify the authorized employee who applied the device(s) is not at the facility
- Make all reasonable efforts to contact the authorized employee to inform him/her that their lockout device(s) has/have been removed; and
- Ensure that the authorized employee has this knowledge before he/she resumes work at the facility

If contact with the employee is not made prior to removing the lockout devices, the responsible supervisor must make contact with the authorized employee prior them starting their next assigned work shift. The authorized employee shall be issued new locks to replace the locks that were destroyed during the removal process.

See Appendix B at the end of this document.

Appendix A: Equipment Identification

LOCKOUT PROCEDURE FOR: _____
LOCATION OF EQUIPMENT: _____

Lockout Steps
Read the written lockout procedure and visually locate all energy isolating devices to be locked out. More than one energy source (electrical, mechanical, stored energy,) may be involved.

Sequence of Lockout Procedure
1. Notify all affected employee(s)
2. If the machine or equipment is operating, shut it down by the normal stopping procedure.
3. Verify the operating controls are in the off or neutral position and dissipate any stored energy.
4. Apply lockout devices to the following energy sources:

Energy Isolating Device	Lockout Device Required	Type of Hazard	Magnitude of Hazard

5. Check for Zero Mechanical State (ZMS) and return controls to the off or neutral position.
6. The equipment is now locked out and the maintenance, service, or repairs can be made.

Steps to Re-energize:
1. Visually inspect the area around the machine(s) or equipment and clear debris, reinstall all machine guards, and remove all tools
2. Ensure all affected employees are clear
3. Verify the operating controls are in the off or neutral position
4. Remove all lockout devices.
5. Operate the energy isolating devices to restore energy to the machine or equipment
6. Notify affected employees that the equipment is ready for use

Testing or Positioning Provision
1. Remove non-essential items and ensure that machine or equipment components are operationally intact
2. Notify affected employees that lockout devices are going to be removed and to clear the area
3. Remove the lockout devices, energize and proceed with testing or positioning
4. De-energize all energy isolating devices and dissipate any stored energy
5. Reapply lockout devices
6. Re-check for ZMS
7. Continue with service or maintenance

GROUP LOCKOUT PROVISIONS
If more than one employee is involved in the servicing or maintenance, each must have their own locks attached to each energy source. This can be accomplished with a scissor lock device.

Appendix B: Lock Removal Protocol

To be completed by Department Supervisor or Designee

Authorized employee's name _____Date_____

Department_____

Machine or Equipment affected by Lockout Devices_____

Dept. Supervisor or Designee removing the Lockout Devices_____

Number of locks to be removed_____

The following steps need to occur prior to authorizing the removal of any lockout device(s) that was/were inadvertently left attached by the authorized employee noted above.

	Yes	No
1. Verified the authorized employee who applied the lockout device(s) is not at the facility.	___	___
2. Made all reasonable efforts to contact the authorized employee to inform him/her that their lockout device(s) has/have been removed?	___	___
3. Ensured that the authorized employee has this knowledge before he/she resumes work at the facility.	___	___

If contact with the Authorized Employee was not made prior to removing locks, how is the employee going to be notified prior to them starting their next shift?

_____

_____

The Authorized Employee and Supervisor shall complete this section prior to the employee starting their next assigned work shift.

The Authorized Employee was issued _____ new lock(s) to replace the lock(s) that was/were destroyed during the removal process.

Authorized Employee's Signature_____Date_____

Supervisor's Signature_____Date_____

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Risk Management

PERSONAL PROTECTIVE EQUIPMENT

Frequently Asked Questions

What does Personal Protective Equipment do?
Personal Protective Equipment such has gloves; boots, ear plugs, or face shields protect you from the physical, chemical, thermal, or biological hazards that cannot be eliminated from a certain job task or group of tasks.

How do I know what Personal Protective Equipment (PPE) to wear and when?
A Job Safety Analysis (JSA) has been performed that identifies the hazards associated with your job tasks. Most departments have an updated PPE Matrix that describes the required PPE for specific tasks

Where do I get my PPE?
Your supervisor will issue the appropriate PPE to you at the time of hire or before you perform the tasks that require PPE use.

What do I do if my PPE gets damaged, or is in an unusable condition?
If your PPE is damaged or in a state that does not offer the intended protection, you should notify your supervisor and have if replaced immediately.

Will I receive training on using PPE?
Yes, you will be trained at time of hire. Retraining will occur if the hazards associated with your job position change, there is a change in PPE used, or if an employee is observed not using their PPE properly or at the appropriate times.

PERSONAL PROTECTIVE EQUIPMENT

Purpose

OSHA Regulation 437-002-0134

This Personal Protective Equipment (PPE) Program provides guidance to managers, supervisors and employees regarding selection, use, care, and disposal of personal protective equipment.

RESPONSIBILITIES

Risk Management

- Provide training to employees affected by the PPE Program
- Review the PPE Program periodically and revise it to reflect changes in OR-OSHA rules and/or Departmental procedure or policy
- Perform JSA's as necessary if hazards or job requirements change

Managers and Supervisors

- Implementation and enforcement of the *Personal Protective Equipment Program*
- Periodic inspection of employees' PPE to ensure that it is being properly worn and maintained, and is appropriate for the tasks performed
- Ensuring that PPE is issued to any employee required to perform tasks requiring PPE, that the PPE fits the employee for whom it is intended, and that new PPE is issued with instruction as to its use, limitations, care, and fit

Employees

- Complying with all aspects of the PPE program
- Conducting pre-use inspections prior to use
- Reporting defective, outdated, and worn out PPE to the supervisor
- Replacing PPE that is defective, outdated, worn out, or which does not fit properly

GENERAL REQUIREMENTS

Personal protective equipment (PPE) is to be used only when it is impractical or impossible to eliminate a hazard through a change in engineering design, administrative means, or elimination of the hazard.

When required, PPE is to be provided by the employer at no expense to the employee, unless it is of a highly personal nature, such as prescription lenses for safety glasses. When an employee provides his/her own PPE, it must be adequate for the purpose for which it will be used. As for all PPE, it must be sanitary and properly maintained and shall be worn and used in a manner which will make full use of its protective properties.

Jewelry or loose clothing which could contact electrical circuitry or become entangled in moving machinery shall be prohibited. Long hair should be restrained to prevent

entanglement in moving machine parts or a potential fire hazard in the presence of an ignition source.

The American National Standards Institute (ANSI) sets criteria for the durability and performance of many personal protective items. Where applicable, OR-OSHA standards or other regulations directly reference ANSI standards. The PPE used within the City of Hillsboro will meet or exceed ANSI.

JOB SAFETY ANALYSIS/PPE MATRIX

The City of Hillsboro utilizes a Job Safety Analysis (JSA) (*Appendix A*) to assess the hazards City of Hillsboro employees may be exposed to while on the job. The JSA also certifies that the assessments have been completed and acts as documentation of employee training and PPE distribution.

The PPE Matrix illustrates what PPE needs to be donned during each particular type of activity. See below for key terms:

- **Required:** PPE that is required based on the presence of a hazard
- **As-Needed:** When conditions or activities increase the existing hazard or introduce a new hazard, additional PPE is required to be donned to protect against the exposures. This may also be based upon a task specific operating procedures or established work practice
- **Voluntary:** PPE is not required to be worn but donned to provide additional comfort or protection

EMPLOYEE TRAINING

Training and PPE distribution shall be accomplished by reviewing the JSA's with the employees in their respective departments.

The City of Hillsboro employees shall also receive general PPE training which includes;

- Types of PPE available
- How the PPE can provide protection
- How to don/doff the PPE
- How to select and fit PPE
- How to inspect, clean, and store the PPE
- The limitations and useful life of the PPE
- How to dispose of defective, old, and obsolete PPE
- Replace PPE as necessary to provide ultimate protection

Retraining shall be required for any employee who demonstrates that s/he does not have a full understanding of the PPE training or when new tasks or hazards and/or new styles or models of PPE are introduced to the City of Hillsboro.

Note: When PPE in not being immediately used, it shall be stored in an orderly fashion in employee lockers, hooks, or cabinets, and kept in a clean, sanitary condition.

GENERAL WORK CLOTHING

Every employee must be appropriately attired for the tasks s/he is performing. For field maintenance personnel, inspectors, surveyors, and other field employees, this includes;

- *Long pants* – Should be made of sturdy material (i.e. denim jeans), and cover entire leg and ankle
- *Shirt* – Will cover the entire torso from the point of the shoulder. No tank tops or shortened midriff shirts
- *Work boots* – Lace up boots for ankle support while walking on uneven ground. No open heels, toes, or tops. Foot wear should have non-skid sole and heel with tread for traction and be constructed of leather or other sturdy material. See FOOT PROTECTION for additional protective footwear information
- *Adverse weather clothing* as appropriate for conditions, including rain gear, utility type jacket and gloves

Note: See your departments Annual Boot, Clothing, and Raingear Policy for more information on what the City of Hillsboro will provide to you to fulfill the General Work Clothing portion of this program.

HIGH VISIBILITY CLOTHING

A high visibility, Type II Safety Vest or equivalent attire, shall be worn by all City of Hillsboro employees while working in the public right-of-way outside the confines of the shop yard, office, or while directing traffic. The upper body garment shall be rated to make the wearer visible at 1000 feet. The reflective properties must be visible in the wearer's full range of motion and the clothing material shall be strong orange or yellow-green chartreuse in color.

Additional considerations should be given for night work.

EYE AND FACE PROTECTION

The presence of flying particles, molten metals, hot liquids, chemical liquids or gases, or injurious light radiation presents a risk of eye and/or face injury. When any of these hazards are present, appropriate eye and face protection shall be worn. Potential hazards and required eye protection are;

- *Flying particles* – Safety glasses with side shields or impact resistant goggles, or a combination of a face shield and eye protection
- *Molten metals* – Eye protection plus a face shield made of a material that can withstand heat
- *Chemical liquid and gas hazards* – Chemical goggles. A face shield may also be necessary for highly corrosive materials (such as chlorine) or if splash potential exists
- *Light radiation* – Eye protection of the appropriate shade for the arc current or gas process while welding, torch cutting, or brazing

Eye and face protection, like all other PPE, must be routinely inspected for scratches, cracks, dents, missing parts, and other defects. Safety glasses should fit the face as to not leave more than a ¼" gap around the eyes and nose. Any PPE that is defective must be removed from service and replaced immediately.

HEAD PROTECTION

A hardhat shall be worn anytime an overhead hazard is present to protect employees against impact hazards to the head. Such hazards include flying/falling objects, overhead machinery and equipment, overhead fixed obstacles such as pipes and beams or while directing traffic. Otherwise, a City of Hillsboro baseball cap may be worn.

Some departments may require a hard hat and Hi Vis clothing as part of the professional attire while performing work within the right-of-way
Any stickers or labels on a hardhat must be applied with an adhesive that will not degrade the material the shell is made of. Do not cover the hardhat with stickers or labels to such a degree that small cracks and dents cannot be identified. Painting, carving, or burning any identification or decorations onto a hardhat is prohibited.

The hardhat must be inspected regularly and removed from service if;

- It has been impacted by an object that cracked, dented, or significantly marred the shell
- It does not pass the "squeeze" test. Gently compress the sides one to two inches. The hat should not make popping or cracking noises, and upon release should return to its original shape
- The shell material has been compromised by chemical, thermal, or radiant exposure
- It is past the useful life span, according to the manufacturer

The suspension system must also periodically be replaced when it shows signs of wear, or cannot be adequately cleaned or adjusted for proper fit.

FOOT PROTECTION

Protective footwear shall be worn by those employees that are exposed to foot injuries due to objects falling on or rolling over the foot, objects piercing the sole or electrical hazards to the feet. High rubber boots are required when exposed to hot substances or chemical spills. All required protective footwear shall meet ANSI Z41-1991 or ASTM F2413-05 standards. Foot protection includes;

- Steel or composite toe protection for impact hazards to the toes and front of foot
- If necessary, metatarsal guards to protect the top of the foot from impact
- Puncture and slip resistant soles
- Electrical hazard protection from limited voltage under dry conditions

Note: Meter Readers are exempt from this protective footwear portion, unless they assist other work groups that are not exempt from this section.

HAND PROTECTION

Gloves shall be worn to protect against hazards to the hands. Hazards and protective gloves include;

- *Thermal extremes* – Insulated gloves will help protect against significant skin injury due to extreme hot or cold, including thermal chemicals.
- *Chemical exposure* – Corrosives and chemicals that can be absorbed through the skin require specialized hand protection. The glove material and structure must be such that chemicals will not degrade, permeate, or penetrate the glove and reach the skin.
- *Mechanical hazards* – sharp objects and rough surfaces can cause cuts and scrapes to hands. General work gloves made of leather or cloth material, or a combination of the two will protect against many mechanical hazards. Employees shall not wear gloves around moving equipment in which the glove could become entangled in the equipment.

PERSONAL FLOTATION DEVICES

Employees who are working in, over, or near water, which is deeper than five feet will be provided with U.S. Coast Guard approved buoyant protective devices and rescue equipment. Some situations where this may apply are;

- Work boats
- Unguarded walkways around basins
- Unguarded filters or tanks full of water

***Note**: See the City of Hillsboro's Working on Water Program*

MISCELLANEOUS PPE

Miscellaneous PPE includes any shield, barrier, restraint, or equipment for protection of any part of the body. Some of the other items that meet this definition include;

- Driver and passenger restraints in vehicles. Wearing a seatbelt and shoulder harness is required under Oregon law on public roads
- Chaps, gauntlets, and other body protection worn while operating a chainsaw and other handheld equipment
- Ergonomic braces, supports, and belts as prescribed by a physician, physical therapist or other qualified healthcare professional. These items must be used correctly to be effective and under the instruction of a Certified Health Care Professional

JOB SAFETY ANALYSIS

This form is used to assess the hazards associated with the job and to determine required PPE and training.

Title of JOB being assessed:_____

STEP OR TASK	HAZARD	REQUIRED PPE	APPLICABLE SAFETY POLICY and/or TRAINING

JSA Completed by:_____

Date Completed:_____

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Risk Management

RESPIRATORY PROTECTION (Mandatory Use)

Frequently Asked Questions

What is appropriate respiratory protection?

Only NIOSH-certified respirators can be used. This certification establishes filter efficiency and filter efficiency degradation classifications. Respirators must be used in compliance with the conditions of their certification.

What is the requirement for medical evaluations?

Medical evaluations are required prior to the fit-test and before respirator use. Beyond the initial medical evaluation, there are no annual or periodic requirements. However, certain conditions could trigger medical re-evaluation: an employee reports signs or symptoms related to the ability to wear a respirator; the physicians or other licensed health-care professional (PLHCP), program administrator, or supervisor determines it is necessary; the respiratory-protection program indicates a need for re-evaluation; or substantial changes in workplace conditions increase the physiological burden of wearing a respirator.

What are the training requirements?

The City of Hillsboro must provide training to each employee that may be required to use a respirator. The training shall be conducted annually and the employee(s) must be able to demonstrate respirator use competency and an understanding of the training components.

What are the fit-testing requirements for full face respirators?

Mandatory use of negative or positive pressure tight-fitting, full-face respirators (including dust masks) require fit testing. Fit testing is required prior to initial use; whenever a different size, style, or manufacture's respirator face piece is used; and at least annually thereafter. Employees must pass an appropriate fit test administered in accordance with accepted protocols and procedures contained in 1910.134 Fit Testing Procedures (Mandatory). Fit-test records shall be maintained until the next fit test.

What are the cleaning, inspection, and storage requirements?

Prior to use, each employee shall visually inspect the respirator to ensure a safe working condition. Respirators shall also be cleaned and sanitized after each use and stored in a sealed container to prevent further contamination.

RESPIRATORY PROTECTION
(Mandatory Use)

Purpose

OSHA Regulation 1910.134

The purpose of this program is to outline the mandatory respiratory protection guidelines to better protect employees from respiratory hazards that cannot be engineered out of the workplace. This program covers all City of Hillsboro employees who may have potential of being exposed to airborne contaminants. See Appendix A

This program does not cover the voluntary use of a dust particulate mask. For more information on voluntary dusk mask use, see the Filtering Facepieces Program in the Loss Control Manual.

Note: Due to the unique and extreme exposure potential, the City of Hillsboro Fire Department has developed a Respirator Program that meets their specific needs. They are exempt from this written program.

RESPONSIBILITIES

Risk Management

- Administer and maintain the City of Hillsboro Respirator Program
- Continue to identify and evaluate respiratory hazards within the City of Hillsboro
- Coordinate annual fit testing and training as needed
- Support departments that require the use respirators and make recommendations as needed
- Evaluate program effectiveness annually with departments that participate in the respiratory program

Managers and Supervisors

- Implement and monitor the respirator program within their department
- Ensure employees are using the respirators properly and at appropriate times
- Notify Risk Management if there are any program deficiencies noted or if a change in process or procedures warrants the current program invalid
- Allocate time for employee training and fit testing as needed

Employees

- Participate in the annual fit testing and training
- Use the respirators as directed by the manufacturer and at appropriate times or job tasks
- Report any concerns or changes in processes or procedures that warrants the current program invalid
- Report any safety or health related issues that occur as a result of using a respirator

DEFINITIONS

Air-purifying respirator means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air purifying element.

Canister or cartridge means a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

End-of-service-life indicator (ESLI) means a system that warns the respirator user of the approach of the end of adequate respiratory protection.

Fit test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.

High efficiency particulate air (HEPA) filter means a filter that is at least 99.97 percent efficient in removing monodisperse particles of 0.3 micrometers in diameter.

Immediately dangerous to life or health (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Physician or other licensed health care professional (PLHCP) means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by this standard.

Qualitative fit test (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Service life means the period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

User Seal Check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

GENERAL REQUIREMENTS

Respirator Selection

The City of Hillsboro bases its respirator selection on the potential exposure to particulate and/or various gas and vapor contaminants. All of which can be filtered out by the respirators and cartridges chosen by the City. Departments are allowed to select the respiratory equipment necessary to protect the employees from harmful exposures. All equipment used must be compliant with OR-OSHA and meet or exceed the NIOSH requirements. If necessary, contact Risk Management for assistance with equipment selection, fit testing and employee training.

Fire Department (Only)
Due to the potential for TB exposures while responding to emergency calls, EMS personnel may be required to don disposable respirators to protect themselves. EMS personnel will need to determine the need based on the signs and symptoms displayed by the patient(s).

Medical Certification
All City of Hillsboro employees who may be expected to, or voluntarily wear a full face respirator to complete their job duties shall be certified by a Physician or other Licensed Health Care Professional (PLHCP) prior to first use. To obtain medical certification, employees are required to complete a Respirator Medical Evaluation Questionnaire, Attachment C. Upon completion, the employee shall fax their questionnaire to the PLHCP listed on the cover page of the medical evaluation packet.

Based on the answers given on the questionnaire, the PLHCP will determine if the employee is capable of wearing a respirator. If an employee does not get certified by the PLHCP, the employee will be required to schedule a follow up appointment with the PLHCP for further examination. Upon certification, employees can be fit tested and trained on respirator use.

Respirator Fit Testing
A respirator fit test is performed once a worker has properly donned the respirator and checked for any obvious gaps or leaks in the seal. The fit test is conducted while the wearer performs a series of exercises, including breathing, deep breathing, moving their head in all directions, and talking. The qualitative or quantitative procedures used are compliant with OR-OSHA fit testing protocols.

If an employee does not pass the fit test with the original respirator, then other styles or sizes may be used, until a proper fit is made.

Fit Testing Records shall contain the following information:

- Name of employee being tested
- Type of test performed (QLFT or QNFT)
- Specific make, model, style, and size of respirator
- Date of test
- The pass/fail results of test

Note: Fit testing records shall be retained for respirator users until the next fit test is administered (annually).

Cleaning/Maintenance/Storage
Proper respirator cleaning, maintenance, and storage is essential to ensure that the respirator will function properly when needed. Respirators need to be dismantled, cleaned with a disinfectant, rinsed, and air dried in a clean atmosphere. Respirators require regular inspection of the facepiece, exhalation valves, and straps for wear, deterioration, and defects. If any defects are noted, the respirator shall be immediately removed from service and repaired with manufacturer’s parts or replaced entirely. See Appendix B for additional inspection criteria.

Respirators shall be stored in a cool, dry, and clean location free from contaminants. Air-purifying respirators at the worksite should be stored in a sealed plastic bag or a Tupperware like container. If improperly stored, the inside of the respirator may become contaminated and the chemical cartridges may continue to absorb chemicals, shortening the service life.

Cartridge Change Schedule
The cartridges are immediately activated when removed from the manufacturer's packaging. The service life of the cartridge is dependent on several criteria. The cartridges are no longer acceptable for use when:

- The shelf life of the cartridge expires as indicated by the manufacturer
- Six months after opening the cartridge package
- The contaminant penetrates the filter so that the respirator user can detect the chemical odor
- When breathing becomes difficult

Note: Employees shall be required to write the future six month date (Sharpie) on the cartridges immediately after opening a new package. The cartridges shall be disposed of by the written date or as indicated by the manufacturer, whichever occurs first.

Employee Training
All employees who are required to wear a respirator shall be properly trained prior to first use and annually thereafter. Training topics shall include:

- Why respirators are necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator
- Capabilities and limitations
- How to inspect, don/doff, use, and seal check the respirator
- How to recognize the medical signs and symptoms that may limit or prevent the effective use of the respirators

Note: Retraining is necessary if an employee demonstrates the lack of knowledge of the training requirement, if new respiratory hazards are introduced to the workplace, or if there is a change in respirators styles or cartridges.

Facial Hair
Respirators that are required to be worn cannot be donned with facial hair that interferes with the seal. Respirator users need to be clean shaven.

Communication
Respirators can interfere with verbal communication in some work environments. Respirators are not to be removed in a contaminated atmosphere when speaking.

Temperature extremes
Extreme temperatures may interfere with respirator performance. At low temperatures, a full-face respirator may fog, exhalation valves may freeze and supply-air pressure connectors may leak. Face pieces may stiffen and distort when stored at low temperatures.

At high temperatures there is additional stress on the wearer, and breathing air may need cooling. Storage at extreme temperatures may distort facepieces and accelerate facepiece degradation. The user of the respirator will be responsible to monitor these conditions and evacuate the area they are working in if the respirator is malfunctioning.

Appendix A: Respirator use requirements by Department and Job Title/Task

Department	Job Title	Job Task	Frequency of Use	Duration of Use	Physical Effort	Additional PPE	Environ-mental
Water Treatment	Maintenance and Operations	Chlorine Tank Change	Weekly	60 minutes or less	Light to Moderate	Nitrile gloves, long sleeves	Ambient
Slow Sand Filter Plant	Maintenance and Operations	Chlorine Tank Change	Every 6 months	60 minutes or less	Light to Moderate	Nitrile gloves, long sleeves	Ambient
Aquatic Center	Pool Operators	Adding Chlorine pellets and handling acid	2-3 Xs/Week	30-60 minutes or less	Light to Moderate	Rubber gloves, long sleeves	85-90 degrees
Facilities Maintenance	Maintenance Operators	Handling chlorine pellets and acids during fountain maintenance	3 Xs/Week Spring - Fall	30 minutes	Light to Moderate	Rubber gloves, long sleeves, apron	Varies
Parks Maintenance	Maintenance Personal	Handling chlorine pellets and acids during fountain maintenance	2-3 Xs/Week Spring-Fall	30 minutes	Light to Moderate	Rubber gloves, long sleeves, apron	Varies
Fire Department	Fire/EMS	Emergency response	Daily/Weekly	Varies		N95 Mask	Varies
Police Department	Police Staff	Emergency response	Yearly (potentially)	Varies		N95 Mask	Varies

Appendix B: Inspection Criteria (Half/Full Face piece)

Employees that use full face respirators must care for, inspect, and maintain their respirator before and after each use. The following is a list of items that need to be maintained and inspected to ensure a clean, sanitary, and properly functioning respirator:

Rubber facepiece should be checked for:

- ✓ Excessive dirt, cracks, tears, or holes
- ✓ Broken or missing mounting clips
- ✓ Tightness of connections

Head straps should be checked for:

- ✓ Breaks, tears, or loss of elasticity
- ✓ Broken or malfunctioning buckles or attachments

Inhalation and exhalation valves should be checked for:

- ✓ Detergent residue, dust particles or dirt on valve seat
- ✓ Cracks, tears or distortion in the valve material or valve seat
- ✓ Missing or defective valve covers

Filter elements should be checked for:

- ✓ Proper filter for the hazard
- ✓ Tightness of connections
- ✓ Overall condition of filter canister

Note: All rubber and elastic parts of the respirator need to be inspected for signs of deterioration or loss of elasticity.

Risk Management

RESPIRATOR FILTERING FACEPIECES (Non-Mandatory)

Frequently Asked Questions

What is a filtering facepiece respirator?
This type of respirator is commonly referred to as a disposable dust mask that protects the wearer from nuisance dust particulate, aerosolized mist, and foul odors.

If I want to use a dusk mask, do I have to get fit tested?
Fit testing is not required for those employees who choose wear this style of respirator on a voluntary basis. However, some training is required prior to first use.

What does the training consist of?
The training for this program includes how to properly don, doff and wear this style of respirator. Other topics include limitations, maintenance and care, and how to recognize when the dust mask is no longer protecting you from the contaminants.

What do I do if my dust mask gets damaged, or is in an unusable condition?
After removing yourself from the contaminated area, you simply doff the respirator, throw it away, and get a new one.

Who do I get the respirators from?
If you choose to wear a dust mask voluntarily, you need to inform your supervisor and the Risk Management department. Your supervisor shall make the masks available to you and Risk Management will provide the training and education.

RESPIRATOR FILTERING FACEPIECES
(Non-Mandatory)

Purpose

OSHA Regulation 1910.134

This program provides guidelines necessary for City of Hillsboro employees who voluntarily use filtering facepieces (disposable dust masks) for comfort and protection against nuisance dust, irritants, and odors in the workplace. Filtering facepieces are not to be used when airborne contaminant concentrations exceed OR-OSHA permissible exposure limits or other recognized regulatory exposure limits. In this case, employees shall evacuate the area and notify supervisor for further instructions and mitigation procedures.

This document does not apply to the voluntary or required use of any tight fitting cartridge or canister respirators, any other air purifying respirators, or any air supplying respiratory protection systems, which requires medical examination prior to first use.

RESPONSIBILITIES

Risk Management

- Administer and maintain this program as necessary for compliance with all applicable OR-OSHA rules
- Maintain training records for employees using respirators on a voluntary basis
- Provide training on respiratory and other personal protective equipment as necessary
- Periodically review job hazard analyses and tasks that may expose employees to airborne contaminants, and develop new written guidelines as appropriate

Managers and Supervisors

- Ensure all employees choosing to use a filtering facepiece have been trained in the proper use and care of a respirator

Employees

- Select and use the filtering facepiece in accordance with guidance provided by this program
- Review this entire document and read and understand Appendix A and the manufacturer’s literature that comes with the filtering face piece

Limitations

All City of Hillsboro employees are prohibited from entering or working in an environment where any of the following conditions exist:

- The concentration of any air contaminant is suspected or determined to be greater than the Oregon OSHA Permissible Exposure Limit (PEL)

- The concentration of any air contaminant is suspected or determined to be greater than the Oregon OSHA Action Level (AL), where applicable

- The concentration of any air contaminant is suspected or determined to be at or above a concentration considered to be Immediately Dangerous to Life and Health (IDLH) by accepted literature and professional opinion

If the concentration of any air contaminant exceeds the PEL, AL, or IDLH, employees shall exit the contaminated environment immediately. Work will not resume until concentrations of all air contaminants are within acceptable limits.

Under no circumstances will any employee enter an environment with a flammable atmosphere. An atmosphere is considered flammable if it contains a concentration of a flammable agent which standard instrumentation determines is equal to or greater than 10% of the lower explosive limits (LEL).

Note: When wearing appropriate PPE and Respiratory Protection, City of Hillsboro Fire Department may be exempt from the limitations noted above.

Respirator Selection
Filtering facepieces come in a variety of styles and sizes. Each employee should choose a facepiece that fits comfortably and has a seal that is adequate for the purpose for which it is used. Generally, disposable filtering facepieces should fit between the bottom of the chin and the middle of the bridge of the nose.

Appendix A: Choosing a Facepiece

FILTERING FACEPIECES (DISPOSABLE DUST MASKS)

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 you. If your department 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.

5. There are three levels of filter efficiency used to describe the facepieces:

- 95%
- 99%
- 100%

A 100% efficient filter will filter out much smaller dust particles than a 95% or 99% filter. However, it is also harder to breathe through.

There are three letters used to describe the facepiece's resistance to breakdown:

- N = Not resistant to oil
- R = Oil resistant, but should not be used for more than 8 hours
- P = Oil proof

Example: A 95% efficient filter that is resistant to oil breakdown would be designated R95.

The selection of N, R, or P particulate filtering facepieces is dependent upon the presence of oil particles in the dust you are exposed to.

- If no oil particles are present, any of the series will do
- If oil particles are present, use R or P series, but not N
- If oil particles are present and the facepiece is to be used for more than one shift, use the P series

Frequently Asked Questions

What is a Silica?
Silica is the second most common mineral on earth and makes up nearly all of what we call “sand” and “rock.” Silica exists in many forms – one of these, “crystalline” silica (including quartz) is most abundant and poses the greatest concern to human health.

What are common materials that could contain silica?
Rock and sand; topsoil and fill material; concrete, cement, and mortar; masonry, brick and tile; granite, sandstone, and slate; asphalt; some fibrous-cement board.

What makes is silica so hazardous?
Silica is a primary component of many common construction materials, and silica containing dusts can be generated during many construction and maintenance activities. Breathing that fine silica dust could cause significant health conditions.

What are the health hazards?
Inhaled Crystalline silica dusts can be disabling, sometimes a fatal disease called silicosis. When fine particles of silica dust are deposited deep in the lungs cause a thickening and scarring of the lung tissue. The scarring restricts the lungs ability to extract oxygen from the air, making it difficult to breathe. The damage is permanent and symptoms may not appear for years.

Will I need to wear a respirator?
Respiratory Protection may be required depending upon the exposure levels and only if elimination or substitution, Engineering Controls (ventilation, enclosure, water), or Administrative Controls (SOPs, work practices or procedures) are ineffective, then appropriate Personal Protective Equipment (PPE) will be required.

Silica Exposure Control Plan

Purpose

Oregon OSHA Regulation 437-002-1053 through 437-002-1065

Any employee exposed to respirable crystalline silica dust is at an increased risk of developing silicosis and other respiratory diseases, lung cancer, and kidney disease. This Silica Exposure Control Plan is written to protect City of Hillsboro employees from over exposure.

RESPONSIBILITIES

Risk Management

- Provide or coordinate training for any potentially exposed employee and conduct exposure assessment.
- Assist and support the Departmental Managers and Supervisors in the administration and maintenance of the Exposure Control Plan for Silica Program.
- Initiate employee exposure sampling for silica when there are non-standard work practices for which the control methods to be used are not approved and/or have not yet been proven to adequately protect employees.
- Conduct periodic review of the effectiveness of the program.
- Maintain records.

Managers and Supervisors

- Implement and monitor compliance with the Exposure Control Plan for Silica Program.
- Ensure that employees are trained to recognize tasks that could create an exposure to silica dusts.
- Ensure the equipment necessary to eliminate or control any potential exposure is available and is in use as required.
- Ensure the necessary and appropriate Personal Protective Equipment (PPE) is available and in use as required.
- Provide adequate instruction to employees on the hazards of working with silica-containing materials and the precautions specified in the job-specific plan for the tasks.
- Direct work in a manner that ensures the risk to employees is minimized and adequately controlled.

Employees

- Attend training to know the hazards of silica dust exposures and controls to prevent exposure.
- Attend pre-work briefings on the task specific silica exposure control plan
- Use the assigned PPE in an effective and safe manner.
- Comply with this program in its entirety.

- Follow established work procedures as directed by your supervisor or competent person.
- Report any unsafe condition or acts to the supervisor.
- Ask questions if you do not fully understand the requirements of the Exposure Control Plan for Silica Program.
- Know how and when to report an exposure incident.

SCOPE

This Exposure Control Plan for Silica applies to all employees who have the potential to be exposed to Respirable Crystalline Silica when covered by the OSHA Standard. The OSHA Respirable Crystalline Silica applies to all occupational exposures to Respirable Crystalline Silica in construction related work, except where employee exposure will remain below 25 micrograms of Respirable Crystalline Silica per cubic meter of air (25 $\mu g/m^3$) as an 8-hour time-weighted average (TWA) under any foreseeable conditions.

TASK SPECIFIC EXPOSURE BELOW THE AL (25 ug/m3)

Currently, all tasks identified for potential Silica exposures that have been monitored and have not exceeded the Action Level do not require respiratory protection. Risk Management will work with Supervisors to identify any new task where there is a potential for employee silica exposure. Supervisors must notify Risk of any new tasks with potential exposures to Silica or any modifications to tasks already monitored. Tasks that do not conform to existing safe work practices must not be performed until respirable silica exposure levels have been established and deemed to be below permissible exposure levels.

However, tasks that are at or below the PEL or conform to Table 1 of the Oregon OSHA Silica Code include the following:

- Cutting asphalt/concrete with a hand held power saw when the manufacturer has included a water-feed directly to the blade with the proper water pressure;
- A walk-behind saw when cutting is performed with water being continuously fed to the blade;
- Grinding asphalt with the walk behind grinding heads for striping (direct employee sampling has shown exposure to be below OSHA's PEL.)
- When breaking concrete/asphalt with a jackhammer/pavement breaker, water must be continuously fed at the point of impact if dust is visible for more than 5 continuous minutes;
- Dry sweeping is prohibited where such activity could contribute to employee exposure to Respirable Crystalline Silica dust;
- When roto-hammering, water must be continuously fed at the point of impact if dust is visible for more than 5 continuous minutes;
- All work must be done outside and not exceed four (4) hours per shift.

NOTE*:* All tools used according to the manufacturers specifications

When possible and applicable employees will conduct work activities with potential Silica exposure to be consistent with OSHA's Table 1. Supervisors will ensure each employee under their supervision and engaged in a task identified on OSHA's Construction Standard

Table 1 have fully and properly implemented the engineering controls, work practices, and respiratory protection specified for the task on Table 1 (Appendix A).

Where an employee performs more than one task included on OSHA's Construction Standard Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

ALTERNATAIVE CONTROL MEASURES

Alternative Exposure Control Methods apply to tasks not listed in OSHA's Construction Standard Table 1, or where The City cannot not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1.

The City will assess the exposure of each employee who is or may reasonably be expected to be exposed to Respirable Crystalline Silica at or above the Action Level in accordance with either the Performance Option or the Scheduled Monitoring Option as defined in the Oregon OSHA Silica code.

Performance Option – The City will assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to Respirable Crystalline Silica.

Scheduled Monitoring Option **-** The City will perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job classification, and in each work area. Where several employees perform the same tasks on the same shift and in the same work area, The City will plan to monitor a representative fraction of these employees. When using representative monitoring, The City will sample the employee(s) who are expected to have the highest exposure to Respirable Crystalline Silica.

If initial monitoring indicates that employee exposures are below the Action Level, The City may discontinue monitoring for those employees whose exposures are represented by such monitoring.

Where the most recent exposure monitoring indicates that employee exposures are at or above the Action Level but at or below the PEL, The City will repeat such monitoring according to the sampling schedule outlined in the OSHA Silica Standard.

Where the most recent exposure monitoring indicates that employee exposures are above the PEL, The City will repeat such monitoring following the protocols as outlined in the OSHA Silica Standard.

Where air monitoring is performed, The City will provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to Respirable Crystalline Silica. When observation of monitoring requires entry

into an area where the use of protective clothing or equipment is required for any workplace hazard, The City will provide the observer with protective clothing and equipment at no cost and shall ensure that the observer uses such clothing and equipment.

Once air monitoring has been performed, The City will determine its method of compliance based on the monitoring data and the hierarchy of controls. The City will use engineering and work practice controls to reduce and maintain employee exposure to Respirable Crystalline Silica to or below the PEL, unless The City can demonstrate that such controls are not feasible. Wherever such feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PEL, The City will nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them with the use of respiratory protection.

Control Methods

The City will provide control methods that are either consistent with Table 1 or otherwise minimize worker exposures to silica. These exposure control methods can include engineering controls, work practices, and respiratory protection.

The exposure assessment option is not required when non-construction employees, such as building maintenance personal is engaged in the following construction like activities:

- Indistinguishable from a construction tasked listed on Table 1; and
- The task is not performed regularly in the same environment and condition; and
- The engineering controls, work practices, and respiratory protection specified are fully and properly implemented for task on Table 1.

Respiratory Protection

Where respiratory protection is required by this program, The City will provide each employee an appropriate respirator that complies with the requirements of the City's Respiratory Protection Program and the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Respiratory protection is required where specified by the OSHA Construction Standard Table 1, for tasks not listed in Table 1, or where the City has not fully and properly implemented the engineering controls, work practices, and respiratory protection described in Table 1. Situations requiring respiratory protection include:

- Where exposures exceed the PEL during periods necessary to install or implement feasible engineering and work practice controls;
- Where exposures exceed the PEL during tasks, such as certain maintenance and repair tasks, for which engineering and work practice controls are not feasible; and
- During tasks for which an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce exposures to or below the PEL.

Housekeeping

The City does not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to Respirable Crystalline Silica unless wet sweeping, HEPA-filtered vacuuming, or other methods that minimize the likelihood of exposure are not feasible.

The City prohibits compressed air to be used to clean clothing or surfaces where such activity could contribute to employee exposure to Respirable Crystalline Silica unless:

- The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air and does not contribute to employee exposure; or
- No alternative method is feasible (Respiratory Protection is required).

Written SILICA Exposure Control Plan

When employee exposure on a construction-like project is expected to be at or above the Action Level, a Written Exposure Control Plan (ECP) will be established and implemented. This ECP will contain at least the following elements:

- A description of the tasks in the workplace that involve exposure to Respirable Crystalline Silica;
- A description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to Respirable Crystalline Silica for each task;
- A description of the housekeeping measures used to limit employee exposure to Respirable Crystalline Silica; and
- A description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to Respirable Crystalline Silica and their level of exposure, including exposures generated by other employers or sole proprietors.

The written ECP will designate a Competent Person to make frequent and regular inspections of job sites, materials, and equipment to ensure the ECP is implemented.

The written ECP will be reviewed at least annually to evaluate its effectiveness of it and update it as necessary. ECP's are project specific and most project durations do not exceed a year. The written ECP will be readily available for examination and copying, upon request, to each employee covered by this program and/or ECP, their designated representatives, and OSHA.

Medical Surveillance

It is highly unlikely that employee exposure would require medical surveillance. However, medical surveillance will be made available for each employee who will be required to use a respirator for 30 or more days per year due to their Respirable Crystalline Silica exposure. Medical surveillance (i.e. medical examinations and procedures) will be performed by a physician or other licensed health care provider (PLHCP) and provided at no cost to the employee at a reasonable time and place.

The City will ensure that the examining PLHCP has a copy of the OSHA Respirable Crystalline Silica Construction Standard, this program, and the following information:

- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to Respirable Crystalline Silica;
- The employee's former, current, and anticipated levels of occupational exposure to Respirable Crystalline Silica;
- A description of any personal protective equipment (PPE) used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and
- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of the City.
- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and/or
- Any other information required under the OSHA Silica Standard.

Hazard Communication

The City will include Respirable Crystalline Silica in the City's Hazard Communication Program established to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The City will ensure that each effected employee has access to labels on containers of Crystalline Silica and those containers respective Safety Data Sheets (SDS's).

All employees will be trained in accordance with the provisions of the OSHA Hazard Communication Standard and the Training Section of this program (See Hazard Communication Program). This training will cover concerns relating to cancer, lung effects, immune system effects, and kidney effects.

The City will ensure that each employee with the potential to be exposed at or above the Action Level for Respirable Crystalline Silica can demonstrate knowledge and understanding of at least the following:

- The health hazards associated with exposure to Respirable Crystalline Silica;
- Specific tasks in the workplace that could result in exposure to Respirable Crystalline Silica;
- Specific measures The City has implemented to protect employees from exposure to Respirable Crystalline Silica, including engineering controls, work practices, and respirators to be used;

- The contents of the OSHA Respirable Crystalline Silica Construction Standard;
- The identity of the Competent Person designated by The City; and
- The purpose and a description of the company's Medical Surveillance Program.

The City will make a copy of the OSHA Respirable Crystalline Silica Construction Standard readily available without cost to any employee who requests it.

Recordkeeping

The City will make and maintain an accurate record of all exposure measurements taken to assess employee exposure to Respirable Crystalline Silica. This record will include at least the following information:

- The date of measurement for each sample taken;
- The task monitored;
- Sampling and analytical methods used;
- Number, duration, and results of samples taken;
- Identity of the laboratory that performed the analysis;
- Type of personal protective equipment (PPE), such as respirators, worn by the employees monitored; and
- Name, social security number, and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.

The City will ensure that exposure records are maintained and made available in accordance with 29 CFR 1910.1020. Exposure records will be kept and maintained for at least 30 years.

The employer shall make and maintain an accurate record of all objective data relied upon to comply with the requirements of the OSHA Respirable Crystalline Silica Construction Standard. This record shall include at least the following information:

- The Crystalline Silica-containing material in question;
- The source of the objective data;
- The testing protocol and results of testing;
- A description of the process, task, or activity on which the objective data were based; and
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.

The City will ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020. Objective data records will be kept for at least 30 years.

The City will make and maintain an accurate record for each employee enrolled in the Medical Surveillance portion of this program. The record shall include the following information about the employee:

- Name;
- A copy of the PLHCPs' and/or Specialists' written medical opinions; and
- A copy of the information provided to the PLHCPs and Specialists.

The City will ensure that medical records are maintained and made available in accordance with 29 CFR 1910.1020. Medical records will be kept under lock and key for at least the duration of employment plus 30 years. It is necessary to keep these records for extended periods because Silica-related diseases such as cancer often cannot be detected until several decades after exposure. However, if an employee works for an employer for less than one year, the employer does not have to keep the medical records after employment ends, as long as the employer gives those records to the employee.

TRAINING

All employees deemed to have potential exposures to Respirable Crystalline Silica shall receive training before commencing work that includes:

- This written exposure control plan and silica program

- The safe work practices including Table 1, engineering controls, and appropriate Personal Protective Equipment
- Exposure assessments, sampling methods and results
- Health hazards associated with silica exposures
- The City's Hazard Communication Program and OSHA's Hazard Communication Standard

PROGRAM EVALUATION

This program will be reviewed and evaluated on an annual basis by the Risk Management unless changes to operations, the OSHA Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153), or another applicable OSHA Standard require an immediate re-validation of this program.

Appendix A: Table 1

Table 1: Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
1	Stationary masonry saws	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
2a	Handheld power saws (any blade diameter) when used outdoors	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
2b	Handheld power saws (any blade diameter) when used indoors or in an enclosed area	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
3	Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less) for tasks performed outdoors only	• Use saw equipped with commercially available dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.	None	None
4a	Walk-behind saws when used outdoors	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
4b	Walk-behind saws when used indoors or in an enclosed area	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
5	Drivable saws for tasks performed outdoors only	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
6	Rig-mounted core saws or drills	• Use tool equipped with integrated water delivery system that supplies water to cutting surface.	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		• Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
7	Handheld and stand-mounted drills (including impact and rotary hammer drills)	• Use drill equipped with commercially available shroud or cowling with dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	None	None
8	Dowel drilling rigs for concrete for tasks performed outdoors only	• Use shroud around drill bit with a dust collection system. • Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
9a	Vehicle-mounted drilling rigs for rock and concrete	• Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector.	None	None
9b	Vehicle-mounted drilling rigs for rock and concrete	• Operate from within an enclosed cab and use water for dust suppression on drill bit.	None	None
10a	Jackhammers and handheld powered chipping tools when used outdoors	• Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10b	Jackhammers and handheld powered chipping tools when used indoors or in an enclosed area	• Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10c	Jackhammers and handheld powered chipping tools when used outdoors	• Use tool equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10d	Jackhammers and handheld powered chipping tools when	• Use tool equipped with commercially available shroud and dust collection system.	N95 (or Greater Efficiency)	N95 (or Greater Efficiency)

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	used indoors or in an enclosed area	• Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.	Filtering Facepiece or Half Mask	Filtering Facepiece or Half Mask
11	Handheld grinders for mortar removal (i.e., tuckpointing)	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	Powered Air-Purifying Respirator (PAPR) with P100 Filters
12a	Handheld grinders for uses other than mortar removal for tasks performed outdoors only	• Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
12b	Handheld grinders for uses other than mortar removal when used outdoors	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	None	None
12c	Handheld grinders for uses other than mortar removal when used indoors or in an enclosed area	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
13a	Walk-behind milling machines and floor grinders	• Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
13b	Walk-behind milling machines and floor grinders	• Use machine equipped with dust collection system recommended by the manufacturer.	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		• Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.		
14	Small drivable milling machines (less than half-lane)	• Use a machine equipped with supplemental water sprays designed to suppress dust. • Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.	None	None
15a	Large drivable milling machines (half-lane and larger) for cuts of any depth on asphalt only	• Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. • Operate and maintain machine to minimize dust emissions.	None	None
15b	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	• Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. • Operate and maintain machine to minimize dust emissions.	None	None
15c	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	• Use a machine equipped with supplemental water spray designed to suppress dust. • Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.	None	None
16	Crushing machines	• Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points). • Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions. • Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.	None	None
17a	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	• Operate equipment from within an enclosed cab.	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
17b	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	• When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.	None	None
18a	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	• Apply water and/or dust suppressants as necessary to minimize dust emissions.	None	None
18b	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	• When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None	None

Frequently Asked Questions

How do I know how much a sling is capable of lifting?
Each sling is required to have its rated capacity designation affixed to it. Commonly, you will find a tag sewn into it or a metal tag with the capacity information.

How often do I have to inspect a sling?
Slings are required to be inspected prior to each use and at least annually. The inspection criterion is contained within this written program.

What if we only use our slings occasionally?
If the slings in your department are only used occasionally, you must complete a visual inspection prior to use and on an annual basis. The annual inspection must be documented and maintained within the department for one year.

Are we able to make any repairs to our slings or lifting devices?
Typically no. If there are alterations or repairs necessary, a new load test needs to be completed by the manufacturer or equivalent agency before the sling can be put back into service.

Will I receive training on sling safety?
Yes, you will be properly trained on sling safety and inspections prior to first use on the job.

SLING SAFETY

Purpose

OSHA Regulation 1910.184

The purpose of this program is to provide guidelines for proper inspection, maintenance, and use of slings and lifting devices within the City of Hillsboro. Only authorized employees are permitted to use any lifting devices, however, all employees are required to follow the safeguards in this program.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Sling Safety Program
- Provide support to departments as it pertains to this program
- Coordinate or conduct the required employee training
- Assist with the annual inspection of equipment

Managers and Supervisors

- Allow only trained and authorized employees to use slings or other lifting devices
- Ensure required safety inspections and preventive maintenance is done in a timely manner, and appropriate records maintained
- Ensure employees are following the components of this program

Employees

- Immediately report to the Supervisor any unsafe conditions of equipment,
- Tag the equipment so it will not be used until it is repaired
- Follow safe operating procedures and inspections for all lifting equipment
- Attend required training sessions

GENERAL REQUIREMENTS

Whenever a sling or lifting device is used, the following safe work practices shall be observed:

- Slings and lifting devices that are damaged or defective shall not be used
- Slings shall not be shortened with knots or bolts or other makeshift devices and the legs shall not be kinked
- Slings that are used in a basket hitch shall have the load evenly balanced to prevent slippage
- At no time, shall a sling or lifting device be overloaded beyond its rated capacity
- Slings shall always be securely attached to the load and padded when sharp edges are present
- Suspended loads shall be keep clear of obstructions and never left unattended
- Shock loading is prohibited. Shock loading occurs when there is slack in the sling and the operator lifts rapidly

- Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load
- All employees shall stay clear of a load about to be lifted. If an employee needs to guide or control a load, tag lines shall be used
- A sling shall not be pulled from under a load when the load is resting on the sling
- Makeshift links or fasteners from bolts or rods, or other such attachments shall not be used
- Slings shall never be used within close proximity to where hot work is being performed

Inspections
Each day prior to first use, each lifting device and all fastenings and attachments shall be inspected for damage or other defects by a competent person. A competent person is one that has working experience using slings and lifting devices and has received Sling Safety Training.

Additionally, each sling or lifting device shall be inspected by the competent person. Frequency of inspection is based on:

- Frequency of sling use
- Severity of service conditions
- Nature of lifts being made
- Experience gained on the service life slings used in similar circumstances

Note: This required inspection has to be completed at least once every 12 months.

Each inspection shall be documented and maintained within each department for a minimum of one year. Damaged or defective slings or lifting devices shall be immediately removed from service and repaired or replaced.

Proof (Load) Testing Certification
All new, repaired, or reconditioned steel alloy chain slings or lifting devices shall have Proof Testing documentation from the manufacturer or equivalent entity. If a synthetic web sling is repaired it shall be proof tested with documentation prior to placing back in service. In-house fabrication is acceptable if the materials used meets the OR-OHSA guidelines and the lifting device is certifiable by an outside, authorized agency. All proof test certifications shall be maintained for the life of the sling or lifting device.

Repairs and Maintenance
Typically, all repairs or reconditioning of any slings or lifting devices shall be completed by the manufacturer, or equivalent entity. If the repair affects the load capacity of the sling or lifting device, then a new load (proof) test needs to be completed by the manufacturer or other authorized dealer. Each department is responsible to collect and file the load test information as needed.

Note: If a City of Hillsboro fabricated sling is repaired or reconditioned, it too, must be proof tested by an equivalent entity.

Alloy Steel Chain Slings

1. Identification
   Each alloy steel chain sling shall have a permanently affixed durable identification tag stating size, grade, rated capacity, and reach. This tag shall remain legible at all times.
2. Attachments
   Hooks, rings, oblong links, pear shaped links, welded or mechanical coupling links or other attachments shall have a rated capacity at least equal to that of the alloy steel chain.
3. Inspection criteria
   All chain slings shall have the chain links and hooks inspected for excessive wear, defective welds, deformations, or increase in link length. Slings shall also be removed from service if the hooks are cracked, have been opened more than 15% of the normal throat opening measured at the narrowest point or twisted more than 10 degrees from the plane of the unbent hook.

Wire Rope Slings

1. Identification
   Each wire rope sling shall have a permanently affixed durable identification tag stating size, grade, rated capacity, and reach.
2. Attachments
   All welded end attachments shall not be used unless proof tested by the manufacturer or equivalent at twice their rated capacity prior to initial use.
3. Inspection criteria
   Wire rope slings shall be immediately removed from service if any of the following conditions are noted during an inspection.
   - Ten randomly distributed broken wires in one rope lay, or five broken wires in one strand in one rope lay
   - Wear or scraping of one-third the original diameter of outside individual wires
   - Kinking, crushing, bird caging or any other damage resulting in distortion of the wire rope structure
   - Evidence of heat damage
   - End attachments that are cracked, deformed, or worn
   - Hooks that have be opened more than 15% of the normal throat opening measured at the narrowest point or twisted more than 10 degrees from the plane of the unbent hook
   - Corrosion of the rope or end attachments

Synthetic Web Slings

1. Identification
   Each web sling shall be legibly marked or coded to show the rated capacities for each type of hitch and type of synthetic web material.
2. Inspection Criteria
   Synthetic web slings shall be immediately removed from service and discarded when any of the conditions are present:
   - Acid or caustic burns
   - Melting or charring of any part of the sling surface
   - Snags, punctures, tears, or cuts
   - Broken or worn stitches
   - Distortion of fittings

Other Lifting Devices
All other lifting devices such as hydrant pullers, pipe pickers, or any other type of fabricated lifting devices shall fall under the scope of this program. Lifting devices purchased from a vendor or manufacturer shall also have proof test certification. The employee who makes the purchase of the product is responsible for obtaining such certification documentation.

The criterion for the above slings can be in conjunction with the manufacturer's inspection recommendations all other lifting devices. If departments have any special lifting devices that do not fall under the scope of this program, then special inspection and proof testing requirements will be created by the department and Risk Management.

Appendix A: Annual Sling/Lifting Device Inspection Form

Department:	**Location:**
Date:	**Inspector's Name:**
Sling Identification:	

Alloy Steel Chain	**YES**	**NO**	**N/A**	*Removed From Service	**Comments**
Signs of stretching or wear					
Twisted or bent hooks					
Cracks					
Gouges					
Master Links and Hooks					
Hook throat opening (>15%)					
Hook twist (>10%)					
Wire Rope Slings	**YES**	**NO**	**N/A**	*Removed From Service	**Comments**
10 randomly distributed broken wire in one rope lay					
5 broken wires in one strand in one rope lay					
Signs of wear or scraping of 1/3rd the original diameter of outside wires					
Kinking, crushing, bird caging evident					
Evidence of heat damage					
End attachments are cracked, deformed					
Hooks (>15 % throat opening, >10% bent)					
Signs of corrosion to rope or ends					
Synthetic Web Slings	**YES**	**NO**	**N/A**	*Removed From Service	**Comments**
Signs of acid or caustic burns					
Melting or charring on sling surface					
Snags, punctures, tears, or cuts					
Broken or worn stitching					
Distortion of fittings					

***If removed from service, what corrective actions will be taken to repair the damaged device?**

_____

_____

_____

Frequently Asked Questions

What hazards could I encounter while using a powered hand tool?
Employees who use hand and power tools may be exposed to falling or flying debris, or exposed to harmful dusts, fumes, mists, vapors, or gases. Other hazards could include electrical, mechanical, physical exertion, or equipment malfunction, all of which could lead to an injury or illness.

How do I protect myself from the hazards?
There are several things you can do to protect yourself when working with powered hand tools. Among them are keeping all tools in good working condition and selecting the right tool for the job. Employees should also examine each tool for damage before each day's use; operate according to the manufacturer's instructions, and wear the proper personal protective equipment as necessary.

What do I do if my tools are not in good working condition?
If you discover the tools that you are using are not in a safe working condition, you should immediately pull them out of service and notify your supervisor. The tool should either be repaired by a qualified individual or replaced with a new tool.

What are the hazards associated with electric hand tools?
The main concern with electric hand tools is the electrocution potential. All power cords and ground plugs need to be in good condition and a ground fault circuit interrupter should be used when feasible. Also, as will all tools, the energy source should be isolated by unplugging or locking out the equipment prior to a tool change or other service related activity.

Will I receive training on this program?
Yes, you will receive training initially and refresher training as needed or as the program changes.

TOOL SAFETY

Purpose

OSHA Regulation 1910.241-243

To establish policies and procedures to minimize the risk of an employee sustaining injury due to unsafe use of hand and power tools.

RESPONSIBILITIES

Risk Management

- Coordinate or provide employee safety training
- Support departments when purchasing new equipment and tools
- Periodically review and maintain the tool safety program

Managers and Supervisors

- Provide correct tools for assigned tasks
- Ensure tools are maintained and stored safely
- Provide employee training
- Provide for equipment repair or replacement

Employees

- Follow proper tool safety guidelines
- Report tool deficiencies and malfunctions
- Properly store tools when work is completed

GENERAL SAFETY PRECAUTIONS

Hazards involved in the use of power tools can be prevented by following five basic safety rules:

- Keep all tools in good condition with regular maintenance
- Use the right tool for the job
- Inspect each tool for damage before use
- Operate according to the manufacturer's instructions
- Provide and use the proper protective equipment

Safety requires that floors be kept as clean and dry as possible to prevent accidental slips with or around dangerous hand tools. Around flammable substances, sparks produced by iron and steel hand tools can be a dangerous ignition source. When possible spark-resistant tools made from brass, plastic, aluminum, or wood shall be used or at minimum, develop a safety plan to account for the hazard.

HAND TOOLS

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper care or maintenance.

- Using a screwdriver as a chisel may cause the tip of the screwdriver to break and fly, hitting the user or other employees
- If a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker
- A wrench shall not be used if its jaws are sprung causing slippage
- Impact tools such as chisels, wedges, or drift pins are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments airborne
- Employers should caution employees that saw blades, knives, or other tools be directed away from aisle areas and other employees working in close proximity
- Dull tools can be more hazardous than sharp ones
- Caution in use and direction of force

POWER TOOL PRECAUTIONS

Power tools can be hazardous when improperly used. There are several types of power tools, based on the power source they use: electric, pneumatic, liquid fuel, hydraulic, and powder-actuated.

Employees should be trained on power tools use to understand the potential hazards as well as the safety precautions to prevent injuries from occurring.
The following general precautions should be observed by power tool users:

- Carrying power tools by the cord or hose is prohibited
- Firmly grasp the plug end or hose coupler to remove from power source
- Keep cords and hoses away from heat, oil, and sharp edges
- Disconnect tools when not in use, before servicing, and when changing accessories such as blades, bits and cutters
- All observers should be kept at a safe distance away from the work area
- Secure work with clamps or a vise, freeing both hands to operate the tool
- Avoid accidental starting. The worker should not hold a finger on the switch button while carrying a plugged-in tool
- Tools should be maintained with care and should be kept sharp and clean for the best performance. Follow instructions in the user's manual for lubricating and changing accessories
- Ensure adequate footing and balance while operating power tools
- The proper apparel should be worn. Loose clothing, ties, or jewelry can become entangled in moving parts
- All portable power tools that are damaged shall be removed from use and tagged with appropriate markings
- Notify Supervisor for replacement or repairs

Guards
Moving parts of a power tool need to be safeguarded. For example, belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if such parts are exposed. Guards, as necessary, should be provided to protect the operator and others from the following:

- Point of operation
- In-running nip points
- Rotating parts
- Flying chips and sparks

Safety guards shall never be removed while tool is being used. For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except when it makes contact with the work material. The lower guard must automatically return to the covering position when the tool is withdrawn from the work.

Safety Switches
The following hand-held powered tools must be equipped with a momentary contact "on-off" control switch: drills, tappers, fastener drivers, horizontal, vertical and angle grinders with wheels larger than 2 inches in diameter, disc and belt sanders, reciprocating saws, saber saws, and other similar tools. These tools also may be equipped with a lock-on control provided that turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.

The following hand-held powered tools may be equipped with only a positive "on-off" control switch: Platen sanders, disc sanders with discs 2 inches or less in diameter; grinders with wheels 2 inches or less in diameter, routers, planers, laminate trimmers, nibblers, shears, scroll saws and jigsaws with blade shanks ¼-inch wide or less.

Other hand-held powered tools such as circular saws having a blade diameter greater than 2 inches, chain saws, and percussion tools without positive accessory holding means must be equipped with a constant pressure switch that will shut off the power when the pressure is released.

ELECTRIC POWER TOOLS

Employees using electric tools must be aware of several dangers; the most serious is the possibility of electrocution. Among the chief hazards of electric-powered tools are burns and shocks which can lead to injuries or heart failure. Under certain conditions, small amounts of current can result in fibrillation of the heart. A shock also can cause the user to fall off a ladder or other elevated work surface.

To protect the user from shock, tools must either have a three-wire cord with ground and be grounded, be double insulated, or be powered by a low-voltage isolation transformer. Three-wire cords contain two current-carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool's metal housing. The other end is grounded through a prong on the plug. Removing the ground plug is prohibited.

Double insulation is more convenient. The user and the tools are protected in two ways; by normal insulation on the wires inside, and by a housing that cannot conduct electricity to the operator in the event of a malfunction.
These general practices should be followed when using electric tools:

- Electric tools should be operated within their design limitations
- Gloves and safety footwear are recommended during use of electric tools
- When not in use, tools should be stored in a dry place
- Electric tools should not be used in damp or wet locations
- Work areas should be well lighted

Powered Abrasive Wheel Tools
Powered and abrasive grinding, cutting, polishing, and wire buffing wheels create special safety problems because they may throw off flying fragments. Before an abrasive wheel is mounted, it should be inspected closely and sound or ring-testing to be ensure the wheel is free of cracks or defects. To test, wheels should be tapped gently with a light non-metallic instrument. An undamaged wheel will give a clear metallic tone or "ring." If not, the wheel shall not be used.

The wheel should fit freely on the spindle with the spindle nut tightened to hold the wheel in place, without distorting the flange. Follow the manufacturer's recommendations. Care must be taken to assure that the spindle wheel will not exceed the abrasive wheel specifications. Due to the possibility of a wheel exploding during start-up, employees should never stand directly in front of the wheel as it accelerates to full operating speed.

Bench Grinders
The tongue guard on a bench grinder shall be adjusted to within 1/4 inch from the abrasive wheel. The rest plate shall be adjusted within 1/8 inch from the abrasive wheel. In addition, when using powered grinders always wear appropriate PPE and turn off when not is use.

Pneumatic Tools
Pneumatic tools are powered by compressed air and include chippers, drills, jack hammers, tampers, and sanders. There are several dangers encountered in the use of pneumatic tools.
Key safety points when using pneumatic tools include the following:

- Ensure hose connectors are in good condition and functioning properly
- A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel
- When feasible, set up screens or other protective means to prevent nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills
- Compressed air guns should never be pointed toward anyone
- "Dead-ending" the tool is prohibited

HYDRAULIC POWER TOOLS

The fluid used in hydraulic power tools must be an approved fire-resistant fluid and must retain its operating characteristics at the most extreme temperatures to which it will be exposed. The manufacturer's recommended safe operating pressure for hoses, valves, pipes, filters, and other fittings must not be exceeded.

JACKS

All jacks - lever and ratchet jacks, screw jacks, and hydraulic jacks - must have a device that stops them from jacking up too high. Also, the manufacturer's load limit must be permanently marked in a prominent place on the jack and should not be exceeded.

A jack should never be used to support a lifted load. Once the load has been lifted, it must immediately be blocked up. Use wooden blocking under the base if necessary to make the jack level and secure. If the lift surface is metal, place a 1-inch-thick hardwood block or equivalent between it and the metal jack head to reduce the danger of slippage.

To set up a jack, make certain of the following:

- The base rests on a firm level surface
- The jack is correctly centered
- The jack head bears against a level surface
- The lift force is applied evenly

Proper maintenance of jacks is essential for safety. All jacks must be inspected before each use and lubricated regularly. If a jack is subjected to an abnormal load or shock, it should be thoroughly examined to make sure it has not been damaged. Hydraulic jacks exposed to freezing temperatures must be filled with an adequate antifreeze liquid.

Frequently Asked Questions

Can anyone use the welding equipment?
No. Only those who have had proper hands-on and classroom training may operate the welding and cutting equipment.

What kind of training do I need before I can use the equipment?
If welding and cutting are required as part of your job classification, you will need to complete at least 2 hours of classroom training and a minimum 4 hours hands-on experience under the direct supervision of a “certified” welder.

What type of work are we authorized to work on?
The scope of welding work allowed under the Welding and Cutting Program is limited to repair and maintenance of tools and equipment. It does not cover critical structural or load bearing component that would require an engineered design or certification: for example welding on a bracket to hold a mud flap on a vehicle versus welding an anchor point for fall protection. Some welding and cutting does require a specific certification, working on a pressure vessel for example, the expectation is that this work would be contracted out to an appropriate vendor or contractor.

WELDING, CUTTING or GRINDING SAFETY

Purpose

OSHA Regulation 1910.251-255

The purpose of the Welding and Cutting Safety Program is to establish guidelines and procedures by which employees receive appropriate training and proper equipment needed to promote a safer work environment and to prevent injuries to those performing the work or to employees who may be working in an area where hot work activities are being performed. All aspects of this program shall be within accordance and comply with OR-OSHA standards for General Industry.

This program shall apply to all employees responsible for the planning, supervising, and conducting welding and cutting operations.

RESPONSIBILITIES

Risk Management

- Administer and maintain the Welding and Cutting Safety program, periodically review the program and update as needed based on OR-OSHA regulations
- Provide support to department managers, supervisors, and employees in the implementation and maintenance of this program
- Coordinate training for all City of Hillsboro personnel
- Maintain training records for all City of Hillsboro employees

Managers and Supervisors

- Implementation and enforcement of the Program
- Ensure staff are trained, qualified, and authorized to perform welding and cutting tasks
- Provide the proper tools, equipment, and PPE necessary for employee protection, and enforce its use
- Conduct periodic hazard analysis and worksite inspections and correct any identified safety hazards.
- Designate specific areas where welding and cutting is approved
- Approve Hot Work permits for welding, cutting, and grinding operations that are conducted in non-designated areas

Employees

- Comply with all aspects of this program and the safe operating procedures
- Attend safety training as required for the position
- Ensure all tools, equipment, and PPE are in good condition prior to each use and report defective equipment as necessary
- Shall obtain an approved Hot Work permit prior to performing welding, cutting, and grinding operations in non-designated areas

GENERAL REQUIREMENTS

Precautions for all employees performing welding and cutting operations:

- Any supervisor or worker performing welding, cutting, and/or brazing operations shall be trained and informed in hazard identification, exposure evaluation and control to UV, IR, respirable metal fumes, total particulate, noise, fire protection and safe work practices, and follow the procedures in the Program
- Welding/cutting/grinding areas – Whenever possible, welding and/or cutting operations shall be performed in designated areas that are isolated for such use. Welding or cutting operations shall not be performed in any of the following areas:
    - In the presence of a hazardous atmosphere
    - In areas near storage of exposed ignitable materials
    - In sprinkled buildings while such protection is impaired
    - In areas not authorized by management or a hot work permit
- Whenever welding operations are interrupted for a substantial period of time such as a lunch break or overnight, or completed, “hot” metal areas must be identified, and the equipment must be shut off with all valves closed.

Equipment

All personnel performing welding/cutting/grinding operations are required to use approved equipment, and follow the manufacturer’s instructions for the equipment. It shall be the responsibility of supervisors to ensure that equipment is maintained in safe working order at all times. Personnel shall report any equipment defect or safety hazard to a supervisor. Use of damaged or defective equipment must be discontinued and replaced with known safe working equipment. All repairs must be made by qualified personnel.

Site Preparation

Prior to beginning any welding/cutting/grinding operations, workers must:

- Check the work area in a 35 foot radius to ensure that no fire hazards including oily or greasy materials or rags exist
- Remove all flammable and combustible materials within a 35 foot radius
- Check to ensure all equipment is in good, safe working order
- Inform all workers in the immediate area and display warning signs or barriers to alert others of potential hazards
- Install welding shields/curtains to protect other workers in the area from sparks and intense light associated with welding/cutting/grinding operations
- Obtain an approved hot work permit when performing welding/cutting operations in areas on or around hazardous materials.

Ventilation

A number of potentially hazardous materials are contained in many of the fluxes, coatings, and filler metals used in welding and cutting. Workers must receive and review precautionary labels provided by the supplier of these products and materials.

Welding/cutting/grinding operations must be performed in areas where adequate ventilation is present to keep fumes and gases within safe limits.

- Local exhaust ventilation must be used when potentially hazardous materials are being worked on. Examples of potentially hazardous materials include, but are not limited to manganese, chromium, fluorides, zinc, beryllium, cadmium, lead and mercury.
- Adequate exhaust ventilation must be used when using inert-gas welding, plasma arc cutting or carbon arc cutting. Also refer to OR-OSAH Div. 2/Q 437-002-0288 for additional information on health protection and ventilation.
- The metal surface of any material being worked on shall be free of all chlorinated solvents during any welding or cutting operations (this may be found in anti-splatter spray for welding nozzles and surfaces).
- If expected employee airborne exposure has not been assessed or controlled using mechanical ventilation, then personal employee exposure sampling should be conducted to ensure occupational exposures are net exceeded.

Noise Control

Grinding operations in confined spaces and open areas can generate a considerable amount of noise that can damage an employee's hearing. Employee noise exposure can only be controlled through using appropriately rated hearing protection devices. Employees noise sampling is necessary to evaluate the effective Noise Reduction rating (NRR) of the hearing protection device that will attenuate the noise levels below 85 dBA. Proper NRR hearing protection is to be used when grinding. See the Hearing Conservation Program for additional detail.

Personal Protective Equipment

Approved personal protective equipment (PPE) shall be worn by all employees performing or assisting in welding/cutting/grinding operations. See the Personal Protection Program for additional detail

Examples of PPE in welding operations include eye protection, hearing protection, helmets and hand shields, flame resistant gloves, limb/body protection, safety toed boots, and respiratory protection where required.

While performing overhead or vertical welding, personnel shall wear leather personal protective equipment including shoulder, head and ear covers.

All welders shall wear flame-resistant aprons, coveralls, gauntlet gloves and shirts with sleeves of sufficient length and manufacture to protect the arms from heat, UV radiation and sparks.

Wool and leather are the preferred clothing, as they are more resistant to deterioration and flame than cotton or various synthetic materials. Synthetic fiber clothing should not be worn unless is it specifically manufactured to be fire retardant (FR Rated).

Clothing should be kept reasonably free of oils or grease.

Front pockets and upturned sleeves or cuffs should not be worn. Sleeves and collars should be kept buttoned and preferably high boots worn under pant legs, or protective leggings worn, to prevent hot metal slag or sparks from the contacting the skin

Personnel must wear respiratory protection when ventilation is insufficient to prevent exposure above the defined occupational exposure limits of the material.

If welding/cutting operations involve coatings which generate toxic substances upon heating or working with materials that contain beryllium, cadmium, lead or mercury, personnel must wear air supplied respirators. See the Respiratory Protection Program for additional detail

When personnel weld on metal alloys (specific alloys should be evaluated before welding/cutting/grinding), they should wear coveralls or other full body coverings that are laundered each day. Lockers or another type of closed area should be provided to store work and street clothing separately.

Other personnel working in welding/cutting areas not protected by noncombustible or flameproof screens or light shields must wear appropriate eye protection.

Confined Space Operations
When personnel are welding/cutting/grinding in confined spaces additional hazards are created making the confined space a Permit Required Confined Space (See Confined Space Safety Program for additional detail), appropriate precautions must be taken. The Entry Supervisor must be contacted for instructions prior to performing any welding or cutting operations in a confined space.

Before welding/cutting/grinding tanks, cylinders, or other containers, a supervisor must complete a hot work permit and verify that such containers do not contain, or have contained, any flammable, toxic, or explosive materials. If containers have contained flammable, toxic, or explosive materials, they must be emptied, flushed, and otherwise purged and inspected and sampled prior to welding being permitted. Also refer to OR-OSHA Div. 2/Q 437-002-0288 for additional information on health protection and ventilation

Fire Protection
Fire protection equipment must be maintained ready for use at all times that welding or cutting operations are being performed.

Utility trucks supporting welding/cutting/grinding operations must be equipped with firefighting equipment, including a fire extinguisher of at least 10 ABC rating.

If welding/cutting/grinding is to be performed in areas where a fire hazard may exist, fire watch practices must be established and implemented, including annual training of personnel in the proper use of portable fire extinguishers.

When performing welding/cutting/grinding operations on coated surfaces that are highly flammable as determined by a flammability test, the coating must be stripped from the area to prevent ignition.

All surfaces covered with toxic preservatives, including coatings which generate toxic substances upon heating, must be stripped for a distance of at least 4 inches from the area of heat application.

Fire Suppression and Protection
Suitable fire protection equipment must be maintained ready for use at all times while welding/cutting/grinding operations are being performed.

A fire watch and a hot work permit are required when welding/cutting/grinding is performed where:

- Flammable and combustibles are closer than 35 feet to the point of operation, or where there are appreciable flammable and/or combustibles easily ignited by sparks.
- There are walls, floors, or other openings within a 35 foot radius that expose flammable and/or combustible materials to the welding/cutting/grinding operation
- Combustible/flammable materials are adjacent to the opposite side of the metal walls, partitions, ceilings, or roofs and are likely to be ignited by conduction or radiation.

When required, duties of the fire watch include:

- Using fire extinguishing equipment to extinguish fires within the capacity of equipment available, and City policy regarding attempting to extinguish fires.
- Sounding the alarm in the event of a fire.
- Watching for fires in all exposed areas.
- Maintaining a fire watch for at least ½ hour after completion of welding and cutting operations
- Reporting any injury, including suspected flash burns to their supervisor, and completing and submitting an appropriate witness report.

Hot Work Permit
Prior to performing welding/cutting/grinding operations under the following circumstances, a hot work permit must be completed and approved by the appropriate supervisor:

- In locations that have not been designated as welding/cutting/grinding locations.
- In confined spaces.
- Welding/cutting/grinding tanks, cylinders, or other containers.
- In areas where a fire hazard may exist, such as around weeds or grass, wood products, fabric, flammable gases or vapors, etc.
- In areas where there are flammable chemicals or materials closer than 35 feet or where flammable vapors or gases are susceptible to heat, spark, or other source of ignition from welding/cutting/grinding operations present.
- In areas where there are combustibles closer than 35 feet to the point of the operation.
- In areas where flammable and/or combustible materials are adjacent to the opposite side of metal walls, partitions, and ceilings, or roofs and areas likely to be ignited by conduction of radiation.

Copies of open permits must be maintained at the job site. Upon completion of the job, closed permits shall be maintained by the department for three (3) years.

Oxy-fuel Welding and Cutting

Prior to beginning a welding or cutting operation, personnel must inspect the cylinders, regulators, backflow prevention device, flame arrestors, hoses, clamps, and torches to ensure that they are in good, and safe, condition.

No oil or grease should come in contact with oxygen cylinders, valves regulators, or other fittings. Never handle oxygen cylinders or apparatus with oily hands or gloves, or greasy materials. Do not allow oxygen to contact oily or greasy surfaces of clothes, or enter a fuel oil or other storage tank.

Fuel gas and oxidizers must pass through a pressure-reducing regulator prior to being used. Pressure reducing regulators must be used only at or below the rated pressures and must be specific to the type of gas being used. Prior to connecting a pressure regulator, cylinder valves should be “cracked” to clear the dust or dirt that might otherwise enter the regulator. This procedure must be performed away from other welding work or sparks.

Personnel must close all cylinder valves and release the gas from the regulator prior to removing a regulator from a cylinder.

Personnel must follow the manufacturer’s operating procedures for lighting the torch. The following are generally accepted practices for startup and shut down:

Start Up

- Open the oxygen valve on the torch and adjust the oxygen regulator to the desired delivery range.
- Close the torch handle oxygen valve.
- Open the fuel valve on the torch handle and adjust the fuel regulator to the required delivery range.
- Close the torch fuel control valve.
- Hold the torch in one hand and the spark lighter in the other. Open the torch fuel valve approximately one-half turn and ignite the gas.
- Point the torch away from people and combustible materials.
- Keep opening the fuel valve until the flame stops smoking and bring the flame back to the tip.
- Open the torch valve until a bright neutral flame is reached.

Shut Down

- When shutting down the system, the oxygen must be shut off first, then the fuel gas. Finally, drain the gas pressures from the system.
- Cylinders must be kept far enough away from the actual welding and cutting operation so that sparks, hot slag, or flame will not reach them, or fire resistant screens must be provided.

Care of Compressed Gas Cylinders

Compressed gas cylinders must be legibly marked identifying the contents.

Compressed gas cylinders shall be stored and transported in the following manner:

- Valve end must be up.
- Outside storage areas must be protected from direct sunlight, external heat sources, electric arcs or high temperatures.
- Inside storage areas must be well-protected, well-ventilated, and in a dry location at least 20 feet from highly combustible materials.
- Cylinders containing flammable gases must be stored at least 20 feet from oxygen cylinders at all times.
- Cylinders shall not be stored in unventilated enclosures such as lockers and cupboards, or inside the cabs or passenger areas of vehicles.
- Valve protection devices must be in place when cylinders are not in use, and during storage and transport. Valve protection devices must **never** be used for lifting cylinders.
- Cylinders must be prevented from tipping, falling or rolling.
- All empty cylinders must be handled and stored as if they were still pressurized, which included valves fully closed.

If cylinders are found to have leaky valves or fittings which cannot be stopped by closing the valve, the cylinders shall be taken outdoors, away from sources of ignition, and slowly emptied. For safety reasons, if the leak is large, all personnel shall be evacuated from the area, and no attempt to move the cylinder shall be made. In all cases, the supervisor must be notified.

Pressurized cylinders must never be taken into confined spaces.

Electric Arc Welding and Cutting

Prior to beginning a welding/cutting operation, personnel must:

- Check that the machine, all electrode holders and cable are capable of carrying the maximum current, are properly insulated and grounded, and have been maintained in good, and safe, working condition.
- Check that any cable splices have been performed with insulating quality equal to that of the cable, and that there are no splices within 10 feet of the electrode.
- The area must be free of chlorinated solvent vapors with 50 feet of the exposed arc; surfaces prepared with chlorinated solvents shall be thoroughly dry before welding is performed on them.

When arc welding is performed in wet or high humidity conditions, personnel must wear additional personal protective equipment, such as rubber pads or boots, to protect against electric shock.

To protect workers or other personnel from arc rays in areas surrounding the welding/cutting operation, noncombustible or flameproof screens or shields shall be used, or personnel in the area shall wear appropriate protective eye protection.

Manual electrode holders must be specific to welding and cutting, and capable of handling the maximum current required for the operation. All current carrying parts gripped by the user must be insulated against the maximum voltage to ground.

Arc welding and cutting cables must be insulated, flexible, and capable of handling the maximum current required by the operation, taking into account the duty cycles, and must not have bare or worn conductors. Cables must be free of repair or splice from 10 feet of the electrode holder, unless insulated connectors or splices with insulating quality equal to that of the cable are provided.

Ground return cables must have current carrying capacity equal to or exceeding the total maximum output capacities of the welding/cutting unit. Electrical conduits or structures or pipelines containing gas or flammable liquids as part of the grounding circuit system shall not be used.

Arc welding and cutting machines must be grounded, either through a third wire in the cable containing the circuit conductor or through a separate wire at the source of the current. Grounding circuit resistance must be low enough to permit sufficient current to flow to cause the fuse or circuit breaker to interrupt the current.

When machines are not in use, the power supply switch shall be shut off, the electrodes removed and the holders placed to prevent injury to personnel.

Inert Gas Metal Arc Welding

Extreme caution shall be used when performing inert-gas-metal-arc welding, as inert gases can easily displace oxygen. The safeguards below must be followed at all times.

- The area must be free of chlorinated solvents vapors within 50 feet of exposed arc. Surfaces prepared with chlorinated solvents shall be thoroughly dry before welding is performed on them.
- Employees exposed to radiation must have their skin completely covered.
- If welding is on stainless steel, personnel must be protected by local exhaust ventilation or by wearing an air-supplied respirator.

Resistance Welding

Prior to performing resistance welding operations, personnel must inspect the machine to ensure:

- All machine guards are in position and in safe and proper working condition.
- Emergency stop button(s) are in working condition.

Resistance welding equipment must be inspected periodically by a qualified person, and a certification record maintained. The record shall include the date of the inspection, the signature of the person who performed the inspection, and the serial number or other equipment identification

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Risk Management
WORKING AROUND LIGHTNING

Frequently Asked Questions

Is lightning something we need to worry about?
Yes, a recent storm in the in Oregon recorded more than 4000 lightning strikes in a 24 hour period. Lightning is a dangerous natural force. Annually in the United States, cloud-to-ground lightning occurs 20 to 25 million times and over 300 people are struck by lightning. During the past 30 years, about 50 people, on average, have been killed by lightning strikes every year, and many more suffer permanent disabilities.

What is lightning?
Lightning is a giant spark of electricity in the atmosphere between clouds, the air, or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges builds up enough, this insulating capacity of the air breaks down and there is a rapid discharge of electricity that we know as lightning. The flash of lightning temporarily equalizes the charged regions in the atmosphere until the opposite charges build up again.

Should I worry about lightning if it far away?
Yes, lightning is unpredictable and can strike outside the heaviest rainfall areas or even up to 10 miles from any rainfall.

Many lightning victims are caught outside during a storm because they did not act promptly to get to a safe place, or they go back outside too soon after a storm has passed. If signs of approaching thunderstorms occur, workers should not begin any task they cannot quickly stop. Proper planning and safe practices can easily increase lightning safety when working outdoors.

WORKING AROUND LIGHTNING

Purpose

Lightning strikes can severely injure or kill workers whose jobs involve working outdoors. Lightning is often overlooked as an occupational hazard, but employees need awareness about lightning hazards to ensure their safety.

This program provides guidance concerning safety for employees at outdoor worksites with lightning safety recommendations from the Occupational Safety and Health Administration (OSHA) and the National Oceanic and Atmospheric Administration (NOAA). .

RESPONSIBILITIES

Risk Management

- Provide guidance to employees affected by these procedures

Managers and Supervisors

- To implement and enforce the *Working Around Lightning Program*
- Ensure the effected employees are trained in general awareness of the hazards, safe work procedures

Employees

- Comply with the components of this program

EMPLOYEE TRAINING

General awareness training shall be conducted initially and on the job by the appropriate supervisor or designee. All affected employees shall be informed of the hazards, safe work procedures, for working in severe weather conditions that could generate lightning.

Precautions should be taken to prevent worker exposure to lightning. Supervisors should recognize lightning as an occupational hazard. Crew Leaders and workers at outdoor worksites should take lightning safety seriously.

Employees whose jobs involve working outdoors in open spaces, on or near tall objects, or conductive materials (e.g., metal) have significant exposure to lightning risks.

Activities at higher risk for lightning hazards include:

- Heavy equipment operation
- Construction (e.g., scaffolding)
- Building maintenance and working on roof tops
- Parks and landscaping
- Pool lifeguarding
- Boating

Best Practices

Employees should understand lightning risks, characteristics, and precautions to minimize workplace hazards. Lightning is unpredictable and can strike outside the heaviest rainfall areas or even up to 10 miles from any rainfall.

Many lightning victims are caught outside during a storm because they did not act promptly to get to a safe place, or they go back outside too soon after a storm has passed. If signs of approaching thunderstorms occur, workers should not begin any task they cannot quickly stop. Proper planning and safe practices can easily increase lightning safety when working outdoors.

When thunder roars, go indoors! If you hear thunder, even a distant rumble, get to a safe place immediately. Thunderstorms always include lightning. Any thunder you hear is caused by lightning! National Oceanic and Atmospheric Administration (NOAA) advises that nowhere outside is safe when thunderstorms are in your area.

Prior to beginning any outdoor work, employers and supervisors should check NOAA weather reports and radio forecasts for all weather hazards. OSHA recommends that employers consider rescheduling jobs to avoid workers being caught outside in hazardous weather conditions. When working outdoors, supervisors and workers should continuously monitor weather conditions. Watch for darkening clouds and increasing wind speeds, which can indicate developing thunderstorms. Pay close attention to local television, radio, and Internet weather reports, forecasts, and emergency notifications regarding thunderstorm activity and severe weather.

Seek Shelter in Buildings. Supervisors should know and tell workers which buildings to go to after hearing thunder or seeing lightning. NOAA recommends seeking out fully enclosed buildings with electrical wiring and plumbing. Remain in the shelter for at least **30 minutes** after hearing the last sound of thunder.

Vehicles as Shelter. If safe building structures are not accessible, employers should guide workers to hard-topped metal vehicles with rolled up windows. Remain in the vehicle for at least 30 minutes after hearing the last sound of thunder.

Phone Safety. After hearing thunder, do not use corded phones, except in an emergency. Cell phones and cordless phones may be used safely.

If Caught Outside in a Thunderstorm

If you find yourself caught outside during a thunderstorm, there may be nothing you can do to prevent being struck by lightning. There simply is no safe place outside in a thunderstorm. This is why it is very important to get to a safe place at the first signs of a thunderstorm. If you are caught outside follow NOAA’s recommendations to decrease the risk of being struck:

- Lightning is likely to strike the tallest objects in a given area—you should not be the tallest object.
- Avoid isolated tall trees, hilltops, utility poles, cell phone towers, cranes, large equipment, ladders, scaffolding, or rooftops.
- Avoid open areas, such as fields. Never lie flat on the ground.

- Retreat to dense areas of smaller trees that are surrounded by larger trees, or retreat to low-lying areas (e.g., valleys, ditches) but watch for flooding.
- Avoid water, and immediately get out of and away from bodies of water (e.g., pools, lakes). Water does not attract lightning, but it is an excellent conductor of electricity.
- Avoid wiring, plumbing, and fencing. Lightning can travel long distances through metal, which is an excellent conductor of electricity. Stay away from all metal objects, equipment, and surfaces that can conduct electricity.
- Do not shelter in sheds, pavilions, tents, or covered porches as they do not provide adequate protection from lightning.
- Seek fully-enclosed, substantial buildings with wiring and plumbing. In modern buildings, the *interior* wiring and plumbing will act as an earth ground. A building is a safe shelter as long as you are not in contact with anything that can conduct electricity (e.g., electrical equipment or cords, plumbing fixtures, corded phones). Do not lean against concrete walls or floors (which may have metal bars inside).

Risk Management
WORKING ON WATER

Frequently Asked Questions

Do I need to have a boater certification if I use a boat during work activities?
Any employee, whose job requires them to operate and/or work out of a boat in the course and scope of employment, shall obtain their Boater Education Card through the Oregon State Marine Board. This certification must be completed prior to operating any powerboat (or motorized watercraft) greater than 10 hp. Employees must possess their boater education card while operating the watercraft.

What is a PFD?
Any City of Hillsboro personnel working in water deeper than five feet, or within any watercraft that's underway, or where the risk of drowning exists, shall wear a Coast Guard approved wearable, Personal Flotation Device (PFD). The PFD shall be inspected prior to use, in serviceable condition, and fit the employee properly according to manufacturer's requirements and recommendations.

Where do rescue devices need to be posted and readily accessible?
Rescue devices shall be available every 200 feet along a basin, tank, reservoir, or waterway where a risk of drowning and where water is in excess of five feet or more. An acceptable rescue device is a ring buoy and line, gaff pole, or throwable rescue device that may be deployed without requiring the rescuer to enter the water.

If we have to enter moving water, how many people do we need to have present?
Two people shall be available for any task that requires entry into moving water, one to enter the water, and other to stand-by for non-entry rescue or summon 911 for additional assistance. If the water is greater than five feet deep, the person entering the water shall wear a PFD.

Will I be trained on the requirements of this program?
Yes, if your job requires you to work around water, you will be trained initially and on the job. Refresher training will be offered as needed.

WORKING ON WATER

Purpose

Oregon Revised Statute Chapter 830-Small Watercraft

This program provides guidance concerning safety on and near water to all City employees who may have to work on, in, or near water.

RESPONSIBILITIES

Risk Management

- Provide training to employees affected by these procedures
- Review the Working on Water annually and revise it to reflect changes in OR-OSHA rules and/or Departmental procedure or policy

Managers and Supervisors

- To implement and enforce the *Working on Water Program*
- Ensure the effected employees are trained in general awareness of the hazards, safe work procedures and necessary PPE
- Ensure the effected employees are provided with Personal Flotation Devices (PFD) when required by this program

Employees

- Comply with the components of this program

EMPLOYEE TRAINING

General awareness training shall be conducted initially and on the job by the appropriate supervisor or designee. All affected employees shall be informed of the hazards, safe work procedures, and necessary PPE prior to working on, in, or around waterways, basins, reservoirs, drainage ditches, and culverts.

Mandatory Boater Education Program

Any employee, whose job requires them to operate and/or work out of a boat in the course and scope of employment, shall obtain their Boater Education Card through the Oregon State Marine Board. This certification must be completed prior to operating any powerboat (or motorized watercraft) greater than 10 hp. Employees must possess their boater education card while operating the watercraft.

This training requirement shall be completed either in a classroom setting or on-line through the Oregon Marine State Board. The certification is valid for life and documentation of the completion of the training shall be kept on file indefinitely at each department.

RESCUE DEVICES

Rescue devices shall be available every 200 feet along a basin, tank, reservoir, or waterway where a risk of drowning and where water is in excess of five feet or more. An acceptable rescue device is a ring buoy and line, gaff pole, or throwable rescue device that may be employed without requiring the rescuer to enter the water. The rescue line shall be strong enough to withstand the stress that may be applied to it

PERSONAL FLOTATION DEVICES (PFD)

Any City of Hillsboro personnel working in water deeper than five feet, or within any watercraft that's underway, or where the risk of drowning exists, shall wear a Coast Guard approved wearable, PFD. The PFD shall be inspected prior to use, in serviceable condition, and fit the employee properly according to manufacturer's requirements and recommendations. It is prohibited to use a PFD that requires manual manipulation to provide floatation.

Exception: If the waterway is protected with a standard guardrail, this PFD requirement is not applicable.

Note: Underway means when a boat is not at anchor, or moored, or made fast to the shore, or aground.

When working over or near water where there is a danger of drowning, ring buoys with at least 90' of line shall be provided and readily available for emergency rescue operations. The distance between ring buoys shall not exceed 200 feet. At least one lifesaving skiff shall be immediately available at locations where employees are working over or adjacent to water.

CLEARING DRAINS, DITCHES, CULVERTS

Clearing storm and flood debris from drains, ditches, and culverts presents the danger of being swept off balance and falling into rapidly moving water. Because conditions may change rapidly during emergencies such as floods and storms, the Supervisor and work crew shall assess the situation to determine the safest course of action. Whenever possible, mechanical means, such as a backhoe, should be used to clear debris.

Two people shall be available for any task that requires entry into moving water, one to enter the water, and other to stand-by for non-entry rescue or summon 911 for additional assistance. If the water is more than five feet deep, the person entering the water shall wear a PFD.

Any City of Hillsboro employee entering moving water shall also have a rescue device for emergency retrieval purposes. Such things could include a ring buoy with line, gaff pole, or other throwable rescue device. The stand by person shall not enter the water to perform a rescue, but shall use the retrieval equipment to the best of their ability and wait for rescue personnel to arrive.

Thunder Storms

Employees should understand lightning risks, characteristics, and precautions to minimize workplace hazards. Lightning is unpredictable and can strike outside the heaviest rainfall areas or even up to 10 miles from any rainfall. Proper planning and safe practices can easily increase lightning safety when working on the water. Monitor weather conditions. Watch for darkening clouds and increasing wind speeds, which can indicate developing thunderstorms. If storms develop, immediately get out of and away from bodies of water. Water does not attract lightning, but it is an excellent conductor of electricity. Remain off the water for at least 30 minutes after the storm has passed.