

# CITY OF DuPONT

## SAFETY AND ACCIDENT PREVENTION PLAN

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## **COMMITMENT TO SAFETY**

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The personal safety and health of each employee within the City of DuPont is of primary importance. The City is committed to providing a safe work environment for all staff, as indicated in the City Policy and Procedure Manual Sec. 9.10. Management will ensure the implementation of this program by dedicating time and resources to comply with all present and future safety & health codes and regulations. We want each employee to have a safe and productive work setting, and return home each day to family and friends free from injury.

In fulfilling this commitment, we will provide and maintain a safe and healthful work environment. We will strive to eliminate any foreseeable hazards, which may result in personal injuries/illnesses, fires, security losses, and damage to property.

All activities will be conducted in accordance with the Department of Occupational Safety and Health/Washington Industrial Safety and Health Administration (DOSH/WISHA) requirements. The City will provide adequate training, proper equipment, and develop safe work procedures and practices to assure all activities will be performed safely and efficiently.

The responsibility for implementing this policy is Management's. However, the City of DuPont expects its staff and supervisory personnel to share and champion these goals. Supervisors are responsible for the safety of their employees, and as a part of their daily duties, must check the workplace for unsafe conditions, watch employees for unsafe actions, and take prompt action to eliminate any hazards. They are trained and expected to be leaders, setting a proper example by showing dedication and support in compliance with all policies, laws, rules & regulations, and good practice. In addition, all employees are responsible for performing their jobs in accordance with the established facility safety rules, regulations, and procedures.

We encourage all employees to continually be committed to our goals, to show leadership by setting good examples, and to actively participate in identifying ways to make the City of DuPont a safer place to work.

## SAFETY AND HEALTH RESPONSIBILITIES (WAC 296-800-110)

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### Management Responsibilities

All leaders should create an atmosphere that clearly demonstrates to employees that safety is a vital part of their personal and professional activities. Leaders are responsible for implementing systems and programs that convey the City's safety philosophy to employees.

- ◆ Assume the responsibility for the safety and health program and ensure that the program remains successful and effective in practice.
- ◆ Report all fatalities and multiple hospitalizations within 8 hours to the nearest Department of Labor and Industries office. (1-800-4BE SAFE)
- ◆ Make certain that a city wide Safety Committee is formed and is carrying out its responsibilities as described in this program.
- ◆ Ensure that sufficient employee time, supervisor support, and funds are budgeted for safety equipment, training, and to carry out the safety program.
- ◆ Evaluate supervisors each year to make sure they are carrying out their responsibilities as described in this program.
- ◆ Make sure that incidents are fully investigated and corrective action is taken to prevent the hazardous conditions or behaviors from happening again.
- ◆ Ensure that a record of injuries and illnesses is maintained and posted as described in this program.
- ◆ Set a good example by following established safety rules and attending required training.
- ◆ Make subcontractors aware of the importance of complying with the City's contractor site safety program.
- ◆ Safety performance is included in each employee's performance evaluation, including each department director's performance appraisal process each year.
- ◆ Acknowledge and reward safe practices.

### Supervisor Responsibilities

- ◆ Ensure that each employee you supervise has received an initial orientation of the Accident Prevention Program *before* beginning work.
- ◆ Make certain that each employee you supervise is competent or receives training on safe operation of equipment or tasks *before* starting work on that equipment or project.
- ◆ Take care that each employee receives required personal protective equipment (PPE) *before* starting work on a project requiring PPE.
- ◆ Do a daily walk-around safety-check of the work area. Promptly correct any hazards you find.
- ◆ Observe the employees working. Promptly correct any unsafe behavior. Provide training and take corrective action as necessary. Document employee evaluations.
- ◆ Set a good example for employees by following safety rules and attending required training.
- ◆ Investigate all incidents in your area and report your findings to management.
- ◆ Talk to management about changes to work practices or equipment that will improve employee safety.
- ◆ Enforce all safety rules.

## **SAFETY AND HEALTH RESPONSIBILITIES** *continued*

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### **Employee Responsibilities**

The health and safety of each employee is a major responsibility. All employees share this obligation. Employees should treat safety as one of their most important job responsibilities, watching for potential hazards, and thinking about what could go wrong before it goes wrong. Employee's safety responsibilities include:

- ◆ Observe and comply with all safety signs, rules, and regulations described in this program.
- ◆ Report all on-the-job injuries promptly.
- ◆ Identify, correct, or report potential or unsafe conditions.
- ◆ Report all near-miss incidents to your supervisor promptly.
- ◆ Incorporate safe practices into all activities.
- ◆ Attend and participate in safety meetings in their own department.
- ◆ Always use personal protective equipment (PPE) in good working condition where it is required.
- ◆ Do not remove or defeat any safety device or safeguard provided for employee protection.
- ◆ Operate equipment safely. Do not operate equipment you are not trained for or qualified to operate.
- ◆ Report all equipment damage or failure to your supervisor immediately.
- ◆ Feel free to talk to management about problems that affect your safety or working conditions.
- ◆ Make suggestions to your supervisor, safety committee representative, or management about changes you believe will improve employee safety.

## GENERAL SAFETY RULES

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The following are **general** safety rules and regulations that have been established to help make the City of DuPont a safe and efficient place to work. For a specific list of additional rules and regulations, refer to your departmental safety manual. Failure to comply with these rules may result in disciplinary action.

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Report all injuries or incidents to your supervisor immediately (within 8 hours), regardless of severity, including ergonomic/cumulative trauma issues.</li> <li>2. Any unsafe act or condition must be reported immediately to your supervisor.</li> <li>3. Always use proper body mechanics when lifting.</li> <li>4. Use good housekeeping practices in and around workstations. Keep debris, cords, loose paper, etc. off the floor.</li> <li>5. Keep drawers of desks and file cabinets closed when not in use. Only one drawer or file cabinet should be open at a time in order to prevent tipping over.</li> <li>6. Shelves will be stacked in a way that prevents heavy objects from falling off. Do not overload shelves!</li> <li>7. Keep aisle ways and fire extinguishers clear of blockage and equipment.</li> </ol> | <ol style="list-style-type: none"> <li>8. Do not place broken or sharp objects in the waste paper containers.</li> <li>9. Alcohol, weapons, and illegal drugs are not allowed on any City property.</li> <li>10. Smoking is not permitted in any building.</li> <li>11. All secondary chemical containers, such as cleaning bottles and fuel or solvent containers, must be labeled clearly with the name of the material and appropriate hazard warnings.</li> <li>12. Food and beverages are not allowed in work areas where hazardous chemicals are in use.</li> <li>13. Horseplay, scuffling, fighting, or similar inappropriate behavior is prohibited.</li> <li>14. Aisles and emergency exits must not be blocked for any reason.</li> </ol> |
|--|---|

Violation of the above listed safety guidelines may lead to corrective action and/or disciplinary action.

### **Disciplinary Policy**

Employees are expected to use good judgment when doing their work and to follow established safety rules. We have established a disciplinary policy to provide appropriate consequences for failure to follow safety rules. This policy is designed not so much to punish as to bring unacceptable behavior to the employee's attention in a way that the employee will be motivated to make corrections. Depending on the severity of the offense as determined by the Safety Committee, and on the recommendation of the Accident Investigation team, the following consequences apply to the violation of the same rule or the same unacceptable behavior:

**First Offense - Verbal warning and instruction on proper actions**

**Second Offense (*within 12 months of the 1<sup>st</sup> offense*) - Written reprimand, notation in personnel file, and instruction on proper actions**

**Third Offense (*within 12 months of the previous offense*) - Suspension without pay, written reprimand, and instruction on proper actions**

**Fourth Offense (*within 12 months of the previous offense*) - Termination of employment**

An employee may be subject to immediate termination when a safety violation places the employee or co-workers at risk of permanent disability or death.

## NEW EMPLOYEE ORIENTATION

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The Supervisor must orient new employees to on-the-job health and safety requirements, including those who are new to a location, as they relate to the job being performed. This must take place **before** the employee is allowed to do the work.

### Components of Orientation

- ◆ Total description of the City's Safety and Accident Prevention Program.
- ◆ Safety programs, policies and rules applicable to the job
- ◆ Recognizing hazards of the workplace.
- ◆ Procedures on how to report hazards and accidents.
- ◆ Proper lifting techniques and use of available lift aids.
- ◆ Ergonomics in the office and operations.
- ◆ Use of tools, equipment, and procedures necessary to carryout work assignments safely and efficiently.
- ◆ Housekeeping procedures.
- ◆ Fire protection and emergency evacuation, including who is on the fire evacuation team and actions to take in the event of a fire alarm.
- ◆ Locations, types, and use of fire extinguishers.
- ◆ Emergency numbers.
- ◆ First Aid kit locations and training.
- ◆ Driver training (if driving city vehicle)
- ◆ Purpose and techniques for use of any personal protective equipment required on the job.

## REPORTING ACCIDENTS & SAFETY HAZARDS

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Employees are required to report any injury or work related illness to their immediate supervisor regardless of how serious. Minor injuries such as cuts and scrapes can be entered on the minor/first aid injury log posted on the Safety Bulletin Board located in City Hall. The employee must use an "Employee's Injury/Illness Report" form, (*Appendix A*) to report more serious injuries.

### **Industrial Injury Reporting Procedures:**

**Note:** An employee who has an on-the-job injury must follow the steps below:

1. Immediately notify your Supervisor of the injury or accident.
2. Seek medical attention, as needed.
3. Complete any necessary paperwork.

### **The Supervisor will:**

1. Investigate a serious injury or illness using procedures in the "Accident Investigation" section.
2. Complete an "Accident Investigation Report" form (*Appendix B*).
3. Give the "Employee's Report" and the "Accident Investigation Report" to the Human Resources Analyst.

### **The Human Resources Analyst will:**

1. Determine from the "Employee's Report," "Accident Investigation Report," and any L&I claim form associated with the incident, whether it must be recorded on the OSHA Injury and Illness Log and Summary according to the instructions for that form.
2. Enter a recordable incident within seven (7) calendar days after the City becomes aware of it.
3. If the injury is not recorded on the OSHA log, add it to a separate incident report log, which is used to record non-OSHA recordable injuries and near misses.
4. Each month before the scheduled safety committee meeting, make any new injury reports and investigations available to the Safety Committee for review, along with an updated OSHA and Incident Report Log.

The Safety Committee will review the log for trends and may decide to conduct a separate investigation of any incident.

The HR Analyst will post a signed copy of the OSHA log summary for the previous year on the safety bulletin board each February 1 until April 30. The log will be kept on file for at least 5 years. Any employee can view an OSHA log upon request at any time during the year.

## **REPORTING ACCIDENTS & SAFETY HAZARDS *continued***

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- ◆ **Return to Work/Time Loss Certification.** The injured employee must take this form to his/her physician. The form must be completed by the physician and returned to the employee's supervisor within two (2) business days of receiving it from the physician.
- ◆ **Modified Work Form.** If your doctor says the employee is unable to report for work the following day under regular status, the "Modified Work Form" (*Appendix C*) must be completed. The injured employee must take this form also to his/her physician. The form must be completed by the physician and returned to the employee's supervisor.

### **Reporting Hazards**

- ◆ Take immediate action to correct any unsafe condition, piece of equipment, or work practice.
- ◆ If you or a co-worker cannot correct the unsafe condition, report it to your supervisor.

### **Report to your Supervisor**

- ◆ Unsafe work practices.
- ◆ Unsafe working conditions.
- ◆ Accidents of all kinds including vehicle accidents.
- ◆ Near misses.



## **ACCIDENT INVESTIGATION PROCEDURES**

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All accidents and near misses should be investigated. The seriousness of the accident will determine the extent of the investigation. The purpose of the investigation is to produce factual information that leads to corrective action in order to prevent further accidents from occurring.

### **Who conducts the investigation?**

- ◆ Immediate Supervisor
- ◆ 1 Safety Committee Member
- ◆ 1 Management Representative

### **Investigation Procedures**

The investigation should take place as soon as possible after the incident. Following is a list of procedures that encompass a thorough investigation report:

- ◆ Report the accident
- ◆ Arrival at the scene
- ◆ Gather information
  - Preserve Evidence
  - Interview Witnesses
  - Take Photos
  - Draw Sketches
- ◆ Find root causes
- ◆ Determine corrective actions
- ◆ Provide recommendations
- ◆ Write a report – the immediate supervisor will be responsible for writing the report.

All accident investigations should result in some kind of change or control. Recommendations for change/control should include:

- ◆ Engineering control/changes: encompassing those actions that include physical changes to the work environment.
- ◆ Administrative control/changes: include procedural, operating or training procedures.

The Safety Committee will review accident investigation reports to ensure corrections have been made.

## **SAFETY COMMITTEE**

### **(WAC 296-800-130)**

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Implementing an effective Safety and Accident Prevention Program can guard against prevention of unpredictable occurrences. For a viable safety program to function well, it requires everyone, both employer and employee working together. A means utilized to involve all personnel in the safety efforts is the organization and active function of the Safety Committee. The Safety Committee becomes the communication link between management and employees.

#### **Purpose**

The purpose of the Safety Committee is to assist and supplement management's efforts to provide a safe and healthy workplace for its employees. The Safety Committee provides the structure for employees to become involved and participate in providing a safe workplace and affect the environment where they work.

#### **Duties and Responsibilities**

- ◆ Evaluates accident investigations conducted since the last meeting to determine if the cause of the unsafe act or unsafe condition involved was properly identified and corrected.
- ◆ Conducts self-inspections of the facility: members of the Safety Committee inspect work areas to discover unsafe practices or conditions.
- ◆ Reviews safety and health inspection reports to assist in correction of identified unsafe condition or practices.
- ◆ Evaluates the Safety and Accident Prevention Program with a discussion of recommendations for improvement.
- ◆ Recommends necessary trainings based on feedback and needs assessment from departments.

#### **How the Safety Committee Is Organized**

- ◆ Committee members are elected by fellow employees and usually serve a minimum of 2 (two) years.
- ◆ The number of management personnel on the committee does not exceed the number of hourly employees.
- ◆ Committee members represent each work area of the facility. The committee may be as small as 3 - 5 people or as large as 6-10 people.
- ◆ A Committee Chair is elected by the members of the Committee every two years. The Committee Chair facilitates meetings and gives direction to the Committee. Meeting facilitation may also be delegated to members on a rotation basis.
- ◆ Members schedule meetings at least once a month.
- ◆ An agenda is prepared and followed.
- ◆ Minutes are taken.
- ◆ Meetings start and end on time.

**(NOTE: Meetings may last beyond the one-hour limit by majority vote of the committee).**

## **SAFETY COMMITTEE *continued***

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### **Membership**

Chair – Elected every two years by the committee and shall:

- ◆ Start and end meetings on time.
- ◆ Summarize discussions and call for votes.
- ◆ Make certain that minutes are kept.

Secretary – Elected every two years by the Committee and shall:

- ◆ Prepare agendas and distribute to Committee members 2 weeks prior to the meeting.
- ◆ Prepare minutes of the meeting and distribute to Committee members and post on Safety Bulletin Boards.
- ◆ Assist the Chair as requested.

### **Terms**

The term of all employee elected members shall be a maximum of two years. Should a vacancy occur, a new member shall be elected prior to the next scheduled meeting.

### **Individual Members of the Committee**

Each member has the responsibility to:

- ◆ Attend meetings.
- ◆ Participate/Discuss.
- ◆ Report for fellow employees on various hazards or unsafe work practices.
- ◆ Report to employees the safety efforts of the organization.
- ◆ Education/Instruction

### **Agenda Items**

- ◆ Approve previous minutes.
- ◆ Unfinished business.
- ◆ Review of recent incidents/accidents/near miss injury.
- ◆ Report on special assignments.
- ◆ Reports of inspections.
- ◆ New business.
- ◆ Set next agenda and meeting date & time.
- ◆ Special features, such as presentation.

### **Minutes**

- ◆ Documents attendance.
- ◆ Summarizes all subjects discussed.
- ◆ Filed for at least one year.
- ◆ Posted on the safety bulletin board.

### **Appendix D: Minutes/Agenda Form**

## **FIRST AID / CPR (WAC 296-800-150)**

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The City of DuPont has First Aid qualified workers at all offices. First Aid is done on a “Good Samaritan” basis.

### **If you or a co-worker are involved in an accident, you must:**

1. Ensure no further damage to yourself and/or the injured person.
2. Get first aid or medical assistance (if necessary, dial 911)
3. Transport the injured individual to the nearest medical aid (if necessary)
4. Report the incident immediately to your Supervisor.
5. Fill out the necessary accident reports.



### **Who is qualified to provide First Aid?**

- ◆ If you are trained and currently certified in First Aid/CPR, you are qualified to provide First Aid/CPR to an injured person.

### **If involved in a situation involving blood:**

- ◆ Avoid skin contact with blood/OPIM (other potential infectious materials) by letting the victim help as much as possible. Use gloves provided in first aid kits.



- ◆ Remove clothing with blood on it after rendering help.
- ◆ Wash thoroughly with soap and water to remove blood.
- ◆ Report such first aid incident exposures to blood/OPIM to supervisor.

## **FIRST AID** *continued*

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### **First Aid Kits/Stations**

Employees should be familiar with the location of First Aid Kits/Stations within the facility. The Safety Committee will designate one person responsible for replenishing supplies.

Make sure that first-aid supplies are:

- ◆ Easily accessible to all your employees.
- ◆ Stored in containers that protect them from damage, deterioration, or contamination.
- ◆ Containers must be clearly marked, not locked, and may be sealed.
- ◆ Able to be moved to the location of an injured or acutely ill employee.

## EMERGENCY PREPAREDNESS (WAC 296-24-567)

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### What Will We Do In An Emergency?

#### In case of fire

An evacuation map for the building is posted near the primary entrance. It shows the location of exits, fire extinguishers, first aid kits, and where to assemble outside. A copy of the map is attached. A fire evacuation drill will be conducted once a year.

All fire extinguishers will be serviced on a yearly basis. This includes examining for pitting, cracks, and corrosion.

#### If you discover a fire

- ◆ Tell another person immediately. Call or have them call 911 and a supervisor.
- ◆ If the fire is small (such as a wastebasket fire) and there is minimal smoke, you may try to put it out with a fire extinguisher
- ◆ If the fire grows or there is thick smoke, do not continue to fight the fire.
- ◆ Tell other employees in the area to evacuate.
- ◆ Go to the designated assembly point outside the building.



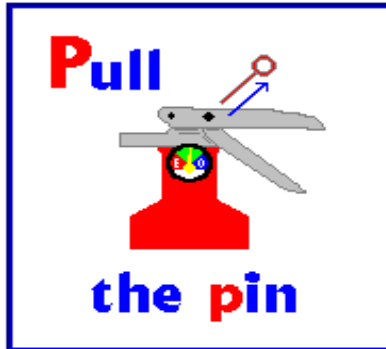
#### If you are a Supervisor notified of a fire in your area

- ◆ Tell your employees to evacuate to the designated assembly location. Check that all employees have been evacuated from your area.
- ◆ Verify that 911 has been called.
- ◆ Determine if the fire has been extinguished. If the fire has grown or there is thick smoke, evacuate any employees trying to fight the fire.
- ◆ Tell supervisors in other areas to evacuate the building.
- ◆ Go to the designated assembly point and check that all your employees are accounted for. If an employee is missing, *do not* re-enter the building! Notify the responding fire personnel that an employee is missing and may be in the building.

**Training and Education:** Annually, the City is required to provide fire extinguishers training and education. It will be provided for the familiarization and general use principals of extinguisher operation and their capabilities.

## EMERGENCY PREPAREDNESS *continued*

It's easy to remember how to use a fire extinguisher if you can remember the acronym **PASS**, which stands for **P**ull, **A**im, **S**queeze, and **S**weep.



**Pull the pin.**

This will allow you to discharge the extinguisher.



**Aim at the base of the fire.**

If you aim at the flames (which is frequently the temptation), the extinguishing agent will fly right through and do no good. You want to hit the fuel.



**Squeeze the top handle or lever.**

This depresses a button that releases the pressurized extinguishing agent in the extinguisher.



**Sweep from side to side**

until the fire is completely out. Start using the extinguisher from a safe distance away, then move forward. Once the fire is out, keep an eye on the area in case it re-ignites.

## **EMERGENCY PREPARDNESS *continued***

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### **In case of earthquake**

The west coast of the United States is subject to earthquakes. There will be no advance warning. The shock will be your only warning. An earthquake drill will be conducted each year to be determined by Safety Committee with suggestions from Fire Department. In the event of an earthquake:

#### **If you are inside a building:**

- ◆ Drop under a desk or table, cover your head and hold on. Stay away from windows, heavy cabinets, bookcases or glass dividers.
- ◆ When the shaking stops, employees are to check for damage in their immediate work area and available evacuation routes, then begin an evacuation of their area to the designated assembly location.
- ◆ Evacuation should proceed as quickly as possible since there may be aftershocks.
- ◆ Offer assistance to people who need help (elderly, mobility impaired, etc.)
- ◆ Supervisors must account for each employee in their work group as quickly as possible.
- ◆ First Aid certified employees should check for injuries and help evacuate injured employees. Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.
- ◆ If a gas odor is in the building, tell a supervisor to turn off the gas at the main. Open windows.
- ◆ Supervisors and First Aid employees must not re-enter the building once evacuation is complete.
- ◆ Do not approach or touch downed power lines or objects touched by downed power lines.
- ◆ Do not use the phone except for emergency use.
- ◆ Turn on a radio and listen for public safety instructions.

#### **If you are outside:**

- ◆ Stand away from buildings, trees, telephone and electric lines.

#### **If you are on the road:**

- ◆ Drive away from underpasses/overpasses. Stop in a safe area. Stay in the vehicle.



## **SAFETY BULLETIN BOARD**

### **(WAC 296-800-190)**

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A bulletin board containing posters and notices that must be posted by law, statues and information will be maintained for employees' attention at the City Hall. These include:

- ◆ All safety-related information required by local, state and federal agencies
- ◆ Safety and health protection on the job
- ◆ Workers Compensation
- ◆ Wage and hour
- ◆ Unemployment Compensation
- ◆ Equal Employee Opportunity Rights - ADA (Americans with Disability Act)
- ◆ Prohibition of discrimination in employment
- ◆ Family Medical Leave Act
- ◆ OSHA Log of Injury and Illness
- ◆ Emergency Phone Numbers

## **SECTION 2**

## PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT (WAC 296-800-160)

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Personal Protective Equipment (PPE) is an item or items used to protect the eyes, face, head, body, arms, hands, legs, and feet such as goggles, helmets, head covers, gloves, rubber slickers, disposable coveralls, safety shoes, protective shields, and barriers.

In order to comply with all occupational safety and health standards, rules, and regulations required by the Department of Occupational Safety and Health Act (DOSH) and Washington Industrial Safety and Health Act (WISHA), a Hazard Assessment was conducted of all job tasks according to 296-800-16005.

PPE alone should not be relied on to provide protection for our employees. PPE should be used after all other reasonable means of reducing hazards have been carried out. The City of DuPont has identified hazards in the workplace and has taken the following steps to minimize/eliminate those hazards.

- ◆ Considered other ways to get hazardous jobs done.
- ◆ Reduced hazardous materials or processes.
- ◆ Applied engineering controls to reduce or eliminate hazards.

The purpose of conducting a Hazard Assessment was to identify the sources of hazards or potential hazards that are present or associated with each particular workstation in the City's work environment.

The **Hazard Assessment** was conducted in the following manner:

1. A walk through survey of all workstations was conducted at the City of DuPont. Sources of hazards to workers and co-workers were identified and documented on the **Appendix E Worksheet of Core Rules 296-800-16005**.
2. Data was organized following the walk-through survey in order to analyze hazards in the environment and enable proper selection of protective equipment.
3. After gathering and organizing the data, an estimate of the potential for injuries was made. Each basic hazard was reviewed and a determination made as to the type, level of risk, and seriousness of potential injury from each hazard found.

## **PERSONAL PROTECTIVE EQUIPMENT**

### **HAZARD ASSESSMENT *continued***

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Personal protective equipment (PPE) protects employees and helps in controlling the danger from the risks of injury against workplace hazards. When the eyes, face, hands, extremities, or other parts of the body are exposed to workplace hazards that cannot be controlled by other means then PPE must be worn. PPE is the last line of defense and is not a substitute for engineering or administrative controls, or good work practices, but should be used in conjunction with those controls. Remember, using PPE does not eliminate the hazard. If the PPE fails or is used improperly, exposure to the hazard may occur.

#### **Responsibilities**

◆ **Supervisor/ Lead Worker:**

- ✓ Ensure that the required personal protective equipment is made available to, maintained properly, and worn by the employee.

◆ **Employees:**

- ✓ Responsible for wearing and/or using all safety equipment provided for its intended purpose.
- ✓ Following all safety policies and instructions.

#### **Equipment and Usage:**

- ◆ **Hard Hats and/or Head Protection:** Shall be worn when performing construction, repair, or inspection work, or on:

1. Construction sites where cranes, backhoes, scaffolding are present and whenever overhead hazards exist.
2. Trenches and hazardous confined spaces.
3. Wherever the Department Head, Supervisor, Lead Worker, or Safety Coordinator determines that a hazard exists.
4. Hair netting and/or other such protection shall be worn by an employee who has hair long enough to present a hazard while working around machinery.

## PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT *continued*

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♦ **Reflective clothing:** Approved reflective and protective clothing will be required when:

1. Employees are working within public right-of-way or are exposed to vehicular traffic.
2. Employees working night time operations.
3. Whenever the Department Head, Supervisor, Lead Worker, or Safety Coordinator or their designee determines that visibility danger is present.

**Note:** All flaggers shall have a flagging card issued by the proper authority. All flaggers will wear a hard hat, reflectorized outer garment and carry an approved sounding device such as a whistle or air horn. During emergency situations Police personnel are exempt when involved in traffic control. (It is recommended that a reflectorized vest or coat should be used.)

♦ **Eye and Face Protection:** Eye and face protectors shall be provided and worn where machines or operations present the hazards of:

1. Flying Objects
2. Glare
3. Liquids
4. Injurious Radiation
5. Or a combination of these hazards.

♦ **Respiratory Protection:** Respirators shall be provided when such equipment is necessary to protect the health of the employee. The employee shall use the provided respiratory protection in accordance with the instructions and training received as outlined in the City's Respiratory Protection Program.

♦ **Full Body Harness and Lifelines:** Where workers are employed above the floor, water surface, or the ground and it is impractical to provide temporary floors, staging, ladders, or scaffolds, safety belts, lifelines or life nets shall be provided and used by employees.

1. No employee shall enter a sewer, sewer flue, storm sewer duct, waterline, tunnel or other similar places without first notifying his supervisor. He shall wear a full body harness with a lifeline attached, when conditions require it.
2. The line shall be held by a fellow worker stationed at the opening which he enters. In such cases, signals shall be agreed upon and responded to immediately.



## **PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT *continued***

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2. Employees working over or on water, where a danger of drowning exists, shall wear a U.S. Coast Guard approved lifesaving device.



♦ **Shirts or Protective Clothing:** Shirts or approved clothing shall be worn by all employees. No employee at any time shall work without some type of protective clothing above the waist.

1. Safety Chaps: Shall be worn by operator anytime a chain saw is in use.

♦ **Safety Shoes and Boots:** When provided by the City, safety shoes or boots shall be worn. (see hazard assessment)



♦ **Hearing Protection:** Shall be worn when the noise level reaches: 85 dBA



### **Responsibility:**

It shall be the responsibility of the Department Head, Supervisor, or Lead Worker to ensure that the required personal protective equipment is made available to and maintained properly by the employee, and that all safety precautions are in use on all job sites according to the procedures set forth in this policy. Employees shall also be responsible for wearing and/or using all safety equipment provided for its intended purpose, and for following all safety policies and instructions.

## **HAZARD COMMUNICATION PROGRAM**

### **(WAC 296-800-170)**

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Each City employee will be informed about the chemicals in which he/she may be exposed to, the hazards associated with those chemicals, and the precautions that are necessary to avoid the hazards while in the performance of their job. The City of DuPont is committed to the prevention of exposures that result in injury and/or illness and to comply with all applicable state health and safety rules. To make sure that all affected employees know about information concerning the dangers of all hazardous chemicals used by City employees, the following hazardous information program has been established.

All members of the Public Works Department will participate in the Hazard Communication program. This written program will be available at the HR Office and PW Office for review by any interested employee.

#### **Container Labeling**

PW Safety Coordinator or his designee is responsible for container labeling procedures, reviewing, and updating. They must verify that all containers received for use will:

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

#### **How to Read and Interpret Labels: Labels have or show---**

- ◆ **Identity of the Chemical** -- a code number, chemical or trade name.
- ◆ **Signal Word** -- telling you the degree of hazard: **“Caution!”** or **“Warning!”** or **“Danger!”**
- ◆ **Hazard Statement** -- telling you the major hazards you face: **“Extremely Flammable”** or **“Harmful If Inhaled.”**
- ◆ **Precautions** -- what to do to avoid injury or illness: **“Avoid Breathing”** or **“Wash Thoroughly After Handling.”**
- ◆ **Instructions In Case Of Exposure** -- first-aid information telling you what to do if you're exposed to a chemical.
- ◆ **Antidotes** -- measures that can be used by a medical person to counteract the effects of chemical exposure.
- ◆ **Fire, Spill, Leak Instructions** -- how to put out or control fires, clean up leaks or spills.
- ◆ **Notes To Physician** -- information for physicians in case someone is exposed to a chemical.
- ◆ **Handling and Storage Instructions** -- special procedures for handling and storing chemical containers.

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

PW Safety Coordinator or his designee is responsible for establishing and monitoring the City's MSDS program. This person will make sure procedures are developed to obtain the necessary MSDS's and will review incoming MSDS's for new or significant health and safety information. This person will see that any new information is passed on to affected employees.

## **HAZARD COMMUNICATION PROGRAM** *continued*

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The procedures to obtain MSDS's and review incoming MSDS's for new or significant health and safety information are as follows:

1. Name of chemical.
2. Name, address, and phone number for hazard and emergency information.
3. The date the MSDS was prepared.
4. Chemical and common names of hazardous ingredients in the chemical (unless it is a trade secret).
5. Limitations on exposure levels of the chemicals.
6. Physical and chemical characteristics.
7. Flammability, Reactivity, Stability of the chemical.
8. How the chemical enters your body. (routes of entry)
9. Health hazards - physical effects (skin, lungs, eyes, and nervous system)
10. Carcinogenic possibilities.
11. Emergency First Aid Procedures.
12. Safe handling procedures.
13. PPE required in using the chemical.

MSDS books are located at the City Hall/PW/Public Safety Building

MSDS's will be available to all employees during each work shift. If an MSDS is not available, or a new chemical in use does not have an MSDS, immediately contact the PW Safety Coordinator or his designee.

PW Safety Coordinator or his designee is responsible for the Hazard Communication Training Program. All present and new employees of the City of DuPont Public Works will attend one or more training courses and will receive information on the following:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>◆ An overview of the requirements contained in the Hazard Communication Standard.</li> <li>◆ Hazardous chemicals present at his or her work places.</li> <li>◆ Physical and health risks of the hazardous chemical.</li> <li>◆ The symptoms of overexposure.</li> <li>◆ How to determine the presence or release of hazardous chemicals in his or her work area.</li> </ul> | <ul style="list-style-type: none"> <li>◆ How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices, and personal protective equipment.</li> <li>◆ Steps the City has taken to reduce or prevent exposure to hazardous chemicals.</li> <li>◆ Procedures to follow if employees are overexposed to hazardous chemicals.</li> <li>◆ How to read labels and review MSDS's in order to obtain hazard information.</li> <li>◆ Location of the MSDS file and written Hazard Communication Program.</li> </ul> |
|--|---|

Before introducing a new chemical hazard in any department, each employee in that department will be given information and training as outlined above for the new chemical.



## **HAZARD COMMUNICATION PROGRAM *continued***

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### **Informing Contractors and Multi-Employer Work Places**

It is the responsibility of Department Heads to provide employers of any other employees, or sub-contractors at the work site, with the following information:

- ◆ Copy of the Hazardous Communication Program.
- ◆ Copies of MSDS's (or make them available at a central location) for any hazardous chemicals that the other employers' employees may be exposed to while working.
- ◆ Inform other employers of any precautionary measures that need to be taken to protect employees during normal operating conditions or in foreseeable emergencies.
- ◆ Provide other employers with an explanation of the labeling system that is used at the work site.

It is also the responsibility of PW Safety Coordinator or his designee to identify and obtain MSDS's for the chemicals the contractor is bringing into the work place.

### **List of Hazardous Chemicals**

The following is a list of all known hazardous chemicals used by our employees. Further information on each chemical may be obtained by reviewing the MSDS's located at the City Hall /PW Facility /Public Safety Building.

**A list of all known Hazardous Chemicals used by the City of DuPont employees on any particular job is available in the front of the Material Safety Data Sheets Books (MSDS).**

## HEARING CONSERVATION PROGRAM (WAC 296-817)

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This procedure will ensure that employees who are exposed to noise levels 85 decibels or greater are provided with protective equipment, engineering controls, and educational information to prevent a hearing disability due to prolonged exposure to high noise levels.

### Permissible Exposure Limits

Table 12-1 shows the permissible noise exposure limits as set by OSHA and the State of Washington (WISHA)



Table 12-1

Duration per day (hours)	Sound level (dBA)
<b>8</b>	<b>85</b>
<b>4</b>	<b>90</b>
<b>2</b>	<b>95</b>
<b>1</b>	<b>100</b>
<b>0.5</b>	<b>105</b>
<b>0.25</b>	<b>110</b>
<b>1 second</b>	<b>115</b>

The permissible exposure limits refer to sound pressure levels that represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse effect on their ability to hear and understand normal speech.

When an employee's duration per day has reached exposures listed in Table 12-1, (50% of 90 dBA), that employee will be part of the Hearing Conservation Program.

No employee should be exposed to impulse or impact noise in excess of 140 dBA peak sound pressure level.

Continued exposure to loud noises may result in permanent impairment to hearing which may impact upon the work efficiency of an employee or result in a physical disability recognized under State and Federal laws. This disability can be prevented in most cases. Permanent hearing loss is frequently not recognized by the individual because it affects hearing of sounds higher in frequency than necessary in speech communication.

## HEARING CONSERVATION PROGRAM *continued*

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### **Requirements**

All employees that are part of the Hearing Conservation Program will receive:

1. An annual audiogram
2. Annual training

### **The Human Resources Analyst will:**

1. Monitor work sites for noise hazards in compliance with WISHA/OSHA requirements.
2. Provide a method of annual training for all employees in the Hearing Conservation Program.
3. Assist Supervisors in developing solutions to noise hazard problems.

### **Supervisors will:**

1. Inform the Human Resources Analyst in writing of any noise hazards that may require monitoring.
2. Ensure all provisions of this procedure are adhered to.

### **Monitoring**



When reasonable information indicate that an employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dBA, the Supervisor shall send a written request for monitoring to the City Safety Coordinator.

The City Safety Coordinator will monitor the requested area and/or personnel involved. After monitoring, if the noise exposure equals or exceeds that referenced in Table 12-1, the supervisor of the affected employee will be notified of the results, and the supervisor will notify the employee of the results. The employee and/or job identified will be included in the Hearing Conservation Program. The supervisor will then schedule audiometric tests for the involved employees.

Prior to filling any job vacancy by new hire or transfer, in a classification covered by the hearing conservation program, the person will be given an audiometric test. The purpose of this test is to establish a baseline level of hearing and to determine if the person has any medical problem that would be aggravated by the use of hearing protectors.

Any affected employee or their representative may be provided with an opportunity to observe any measurements of employee noise exposure.

Whenever employee noise exposures equal or exceed an 8-hour time-weighted average of 90 dBA, feasible administrative or engineering controls shall be implemented by the supervisor, with assistance from the City Safety Coordinator.

## **HEARING CONSERVATION PROGRAM** *continued*

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Examples of acceptable engineering controls are:

- ◆ Replace noisy equipment
- ◆ Keep up on maintenance
- ◆ Mufflers and silencers
- ◆ Enclose equipment or workers
- ◆ Distance (double distance; half the exposure)
- ◆ Schedule noisy work to avoid exposures
- ◆ Reduce employee time in noisy areas.

Whenever engineering methods cannot reduce noise to safe levels or employees cannot be excluded from noisy areas, all employees exposed to loud noise will be required to wear personal protective devices designed to attenuate the ambient noise in the ear. These devices are two types:

1. Ear plugs
2. Aural protectors (ear muffs).

**NOTE:** Supervisors must ensure that employees wear this protective equipment whenever these employees are exposed to potentially hazardous noise levels.

### **Audiometric Testing**

All employees whose exposures equal or exceed and an 8-hour time-weighted average of 85 decibels will have an annual audiometric test.

**NOTE:** Supervisors may elect to have audiograms completed for employees not addressed by this procedure.

A Vendor approved by the AWC Retro Program will perform audiometric tests in accordance with this policy. All audiometric test results will be given to and maintained by the City Safety Coordinator and shall be kept on a separate and confidential medical file.

All employees or work groups identified to be in the Hearing Conservation Program will be tested within 90 days of being identified, and annually thereafter, for as long as the employee is qualified. All persons transferring to or hiring into jobs covered by this program will be given an audiometric test prior to filling the vacancy.



### **Evaluation**

1. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if a standard threshold shift has occurred. This comparison may be made by a certified audiometric technician.
2. If the annual audiogram indicates that an employee has suffered a standard threshold shift, they will be retested within 30 days and the results of the retest will be considered as the annual audiogram.

## **HEARING CONSERVATION PROGRAM *continued***

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3. An audiologist, otolaryngologist, or other qualified physician shall review audiograms which indicate a standard threshold shift to determine whether there is a need for further evaluation.

### **Follow-up:**

If a comparison of the annual audiogram to the baseline audiogram indicates a significant threshold shift, the City Safety Coordinator will ensure that the following steps are taken:

1. Inform the employee and his /her supervisor and/or manager in writing within 21 days of the determination.
2. Refer the employee for a clinical audiological evaluation, or an otological examination, as appropriate, if additional testing is necessary or if the City Safety Coordinator suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.



3. Inform the employee of the need for an otological examination.

4. Upon notification by the City Safety Coordinator, the supervisor and/or manager of the affected employee will ensure that the following steps are taken:

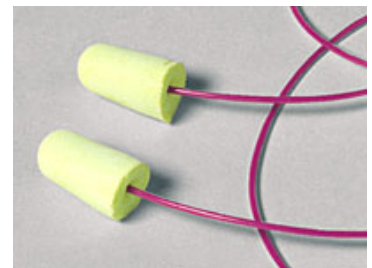
- ◆ The employee is fitted with hearing protectors, trained in their use and care, and be required to use them.
  - ◆ An employee already using hearing protectors shall be refitted and retrained in the use of hearing protectors offering greater attenuation if necessary.
5. If an employee continues to have a significant threshold shift, as determined from previous audiometric tests, the manager and/or department head and AWC Retro will be notified.

### **Hearing Protectors**

Supervisors shall make hearing protectors available to all employees exposed to a time-weighted average of 85 dBA or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.

Supervisors shall ensure that hearing protectors are worn by:

- ◆ Any employee who is exposed to an 8-hour time-weighted average of 85 dBA or greater; or
- ◆ Any employee who is exposed to noise above 115 dBA; or
- ◆ Any employee who is exposed to any impulse or impact noise measure at or above 140 dBA peak using an impulse sound level meter set to either the linear or C-scale; or
- ◆ Any employee working near or with equipment with sound levels greater than 90 dBA



## HEARING CONSERVATION PROGRAM *continued*

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The City will provide hearing protectors from at least two different types for the employee to choose from:

1. Molded / Self-molded
2. Ear muffs

### **Training**

Employees exposed to noise at or above a time-weighted average of 85 dBA will be trained at a regular basis in the following items:

1. The effects of noise on hearing.
2. The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care.
3. The purpose of audiometric testing and an explanation of the test procedures.
4. Attendance records of Hearing Conservation training will be retained by the City Safety Coordinator.

### **Information Regarding Hearing Protectors**



#### **Ear Plugs**

- ◆ Foam - with and without string.
- ◆ Custom-modeled plastic (can be ordered as needed)
- ◆ All of the ear plugs must have a Noise Reduction Rating (NRR) of at least 25.

#### **Ear Muffs**

- ◆ Fits over and attaches to the helmet
- ◆ Fits directly over the head.
- ◆ Ear muffs have different NRR's depending on their make and model.



## HEARING CONSERVATION PROGRAM *continued*

### Noise Reduction Ratings (NRRs)

Noise reduction ratings (NRRs) are obtained under ideal (laboratory) conditions. Slippage, improper fit, etc. may allow noise to “leak” past the hearing protector. For normal usage you should subtract 7 dBA and divide the result by two to determine the noise reduction level.



♦  $(NRR - 7) \div 2$  ex.  $(21 - 7) \div 2 = 7$

Sound level resulting from use of HPD	Protection Outcome
85 +	Insufficient
80 – 85	Acceptable
75 – 80	Optimum
70 – 75	Acceptable

**Example:** Noise dosimetry reveals that an employee’s daily exposure to noise is 88 dBA. We want to reduce exposure at the ear to at least 80 dBA. Therefore, the hearing protector must be able to yield 8 dBA of effective noise reduction. Using the formula above, the NRR must be at least 23 dBA.  
 $(23 - 7) \div 2 = 8$

### Care Instructions

- ♦ Foam ear plugs can be disposed of after use.
- ♦ Custom-modeled ear plugs and ear muffs should be checked by employees before each use for signs of damage and routinely cleaned.
- ♦ If the damage to the hearing protection is such that it can no longer provide proper protection, then it should be repaired or replaced.

## **HEARING CONSERVATION PROGRAM *continued***

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### **Sample Noise Levels for Various Types of Equipment and Processes**

These noise levels are for individual pieces of equipment or processes in a specific environment. It is important to note that noise levels produced by equipment or work processes may vary depending on equipment type and manufacturer, condition of equipment, method and environment of use.

This chart is not meant to be a substitute for a noise monitoring program, but can be used to provide some general guidance.

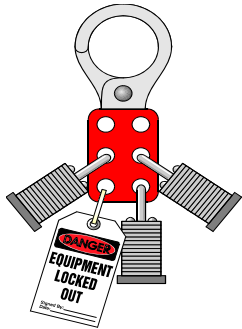
<u>Tool/Equipment</u>	<u>Decibel Level (dB)</u>
Oxygen Torch	121
Pneumatic Hammers	120
Bulldozer	117
Backhoe Tamper	115
Abrasive Saw	115
Jackhammer	114
Rock Concert	114
Whistle	113
Pump	113
Air Hose Alone	112
Chainsaw	110
Highways	110
Riveting	110
Clay Gun	106
Breaker on Asphalt	106
Caulking Gun	106
Hand Held Tamper	104
Circular Saw	102
Sheet Metal Shop	100
General Workshop	100
Grinder, Electric	99
Backhoe	98
Breaker on asphalt (30 feet away)	98
Power Mower	96
High Pressure Washer (idle)	95
Jigsaw	94
High Pressure washer (in use)	93
Gas Blower (yard)	93
Drill	93
Breaker on Asphalt (90 feet away)	88
Palm Sander	87
Forklift Idle	76
Compressor	72
Drill Press	68



## LOCKOUT / TAGOUT PROGRAM (WAC 296-803)

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The Control of Hazardous Energy (Lockout/Tagout) helps protect and safeguard employees while they perform servicing and maintenance on machines and equipment in which the unexpected energization or startup of the machine, or equipment, or the release of stored energy could occur and cause injury or possible death.



This procedure defines the minimum requirements for isolating hazardous energy sources to be in compliance with WISHA Standard WAC 296-803 (The Control Of Hazardous Energy Lockout/Tagout).  
This procedure applies to the control of energy during:

1. Servicing and/or maintenance of machines and equipment.
2. Work performed on piping systems.
3. Servicing of motor vehicles or heavy mobile equipment.

### Definitions

**Personnel Affected by this Safety Procedure:** Any employee, whose job requires them to work on any source of:

- |              |                                    |
|--------------|------------------------------------|
| ◆ Electrical | ◆ Chemical                         |
| ◆ Mechanical | ◆ Thermal                          |
| ◆ Hydraulic  | ◆ Other Energy, Including Gravity. |
| ◆ Pneumatic  |                                    |

### **Controlled energy where this procedure does not apply:**

- ◆ Electrical equipment that has a receptacle that is detached from the electrical source, or an electrical device that has a start/stop switch within arm's length of the person and within line of sight.

**Energy Isolating Device:** is a mechanical device that physically prevents the transmission or release of energy. The isolation device can be, but not limited to:

- |  |                                   |
|--|-----------------------------------|
| ◆ A block valve                                | ◆ A blind flange, break, and plug |
| ◆ A double block valve with bleeder in between | ◆ Electrical disconnects          |
| ◆ A blind blank                                | ◆ Mechanical gags                 |



**Lockout** is the placement of a locking device on an energy isolating device ensuring that the energy isolating device cannot be operated until the lockout device is removed.

**Tagout** is the placement of a tagout device on an energy isolating device to ensure that the energy isolating device may not be operated until the tagout device is removed (Tagout devices including their means of attachment shall

## **LOCKOUT/ TAGOUT PROGRAM** *continued*

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be substantial enough to prevent inadvertent or accidental removal)

**Tags** provide visual warnings that the equipment has been shut down.

Tags will also list the equipment that is out of service and how long the equipment will be shut down. Employees will use protective materials and hardware such as locks, tags, or other hardware for isolating, securing, or blocking of machines or equipment from energy sources. All locks and tagging devices:



- ◆ Are used only for the purpose of controlling energy.
- ◆ Durable and capable of withstanding the environment they are exposed to.
- ◆ Standardized in color, shape, and sizes.
- ◆ Identifies employee applying the devices.
- ◆ Substantial enough to prevent removal without the use of bolt cutters.

**Note:** When a machine or equipment cannot be locked out and a tag is used, an additional safety measure must be incorporated to achieve a safety level equivalent to that of a locking device. The tag also must hang at the same location that a lockout device would have been attached.

### **Requirements for Securing Electrical Equipment**

#### **Sequence Of Lockout**

1. A maintenance work order form is issued for service or maintenance work to be done on a piece of equipment, machine, motor etc.
2. Supervisor of the area that work is to be done will issue a permit.
3. All authorized and affected employees will adhere to the following written Lockout and Tagout procedures:
  - a) **Rectifiers** - Follow check sheet to remove 13.2 high voltages from rectifier units
  - b) **Other equipment, motors, machines**, etc. that have electrical, hydraulic, pneumatic, chemical or thermal energy:

## **LOCKOUT/ TAGOUT PROGRAM** *continued*

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1. Notify supervisor to verify proper procedure.
2. Get required signatures.
3. Notify all affected employees in area of lock out.
4. Install lock and tag.
5. Verify isolation of energy before beginning work.
6. Perform service or maintenance work.
7. Notify supervisor work is completed.
8. Supervisor must visually inspect for safety of start up.
9. Notify all affected employees and clear area for start up.
10. Remove lockout and tagout devices.
11. Supervisor signs off on permit.
12. Start up equipment, machine etc.
13. Permit is filed in area department and copy sent to safety department.



### **Procedures For Using A Single Lock System**

Contact the operator and area supervisor to tell them the machine or whatever piece of equipment is going to be locked out.

#### **Lock-out the machine:**

1. **Electric:** Stop motor, open disconnect switch and attach lock. Make sure the switch is in the **OFF** or **OPEN** position. Attach tag stating one of the following:

- ♦ **DO NOT START**
- ♦ **DO NOT OPEN**
- ♦ **DO NOT CLOSE**
- ♦ **DO NOT ENERGIZE**
- ♦ **DO NOT OPERATE**

2. **Air:** Disconnect the air line or cut off the air downstream of the valve or switch. Lockout if possible. Otherwise, tag the air supply valve in **OFF** or **CLOSED** position. The line being disconnected must be tagged with one of the following:

- ♦ **DO NOT START**
- ♦ **DO NOT OPEN**
- ♦ **DO NOT CLOSE**
- ♦ **DO NOT ENERGIZE**
- ♦ **DO NOT OPERATE**

The valve or switch must be in the **OFF/CLOSED** position and strapped with a nylon or equivalent non-reversible strap that will hold the valve switch off.

**NOTE:** A chain is the preferable device used in locking out valve handles.

## **LOCKOUT/ TAGOUT PROGRAM *continued***

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3. **Hydraulic:** Shut down the pump, bleed lines to release or eliminate any stored energy sources or movement, and use blocking so equipment cannot move.

**CAUTION**— Wait until hydraulic pressure is bled down to **ZERO** before working. (Rotating parts may still be in motion)

**\* Test and make sure all energy sources are disconnected – Then begin work.**

**Note:** All non-grounded conductors must be disconnected and tagged when electric lines must be disconnected to remove power to equipment. (Remove the neutral and all other hot conductors unless the neutral is grounded to the grounding bus.)



For **SHIFT CHANGES** or when an employee must leave, the new employee coming on shift must apply their lock before the off going employee lock is removed, so equipment stays positively locked out at all times. **EXCEPTION:** A supervisor's lock must be put on if the night shift employee has not come on duty when the day shift leaves work.

Contact area supervisor when work is done and lock is ready to come off.

The lock may be removed when:

1. The person who placed the lock has cleared area of tools, materials, etc. and has completed all areas of **LOCKOUT CHECKLIST**.
2. The person tests the equipment for operation.

### **Group/Multiple Locks**

When more than one piece of equipment must be locked out in a system, the supervisor will place locks on the individual pieces of equipment from the group or gang lock-box.



The Supervisor will complete:

1. Energy Control Checklist.
2. Place the key in the lock-box and secure the lock-box with a supervisor's lock.

The individual(s) working on equipment within the system will:

1. Place their locks on the group or gang lock-box.
2. Sign lockout portion on the reverse side of the Energy Control checklist.

## **LOCKOUT/ TAGOUT PROGRAM *continued***

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### **When multiple employees are involved in work on a piece of equipment:**

#### The Supervisor will:

1. Use a group/gang lock-box lock with a supervisor's lock.
2. Have all individuals working on the equipment place their locks on the lock-box.
3. Complete the Energy Control Checklist.

#### Individuals will:

1. Sign the lockout portion on the reverse side of the Energy Control Checklist.

### **When an individual completes their work on the equipment, they will:**

1. Notify the area supervisor that he/she is finished.
2. Remove his/her lock.
3. Sign the lock-out clearance portion on the reverse side of the Energy Control Checklist.

Prior to restarting, the Departmental Supervisor will follow procedures below.

### **Restoring Machinery To Normal Operation By Supervisor**

When service or maintenance is complete and the machinery is ready for operation, check to ensure that:

- ◆ All personnel are cleared of the area.
- ◆ Tools and equipment have been removed.
- ◆ Safeguards are reinstalled.
- ◆ Locks and tags removed from switches, valves, etc. by the individuals who installed them.
- ◆ Lock-out clearances are signed on back of forms.
- ◆ Start equipment to restore energy.

### **Procedures to Follow If Lock Needs To Be Cut (Individual and Group)**

When the authorized employee who applied the lock-out device is not available to remove it, that device may be removed by their supervisor after:

1. The employer verifies that the authorized employee is not at the facility.
2. All reasonable efforts to contact authorized employee to inform him/her that their lockout device has been removed.
3. Ensuring that the authorized employee has this knowledge before he/she resumes work at the facility.
4. Verifying that all required steps of the LOTO (LockOut TagOut) procedures have been completed and a walk-through inspection of equipment condition has been performed.

## **LOCK-OUT/ TAG-OUT PROGRAM *continued***

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### **ENERGY CONTROL CHECKLIST**

**CHECK OFF EACH STEP IN SEQUENCE WHEN WORKING ON ANY EQUIPMENT**

- ☐ Departmental Supervisor's signature\_\_\_\_\_
- ☐ Equipment Operator's signature\_\_\_\_\_
- ☐ Location of locks and tags:\_\_\_\_\_
- ☐ Shut down machine.
- ☐ Notify all affected personnel.
- ☐ Identify and locate all sources of power to equipment.
- ☐ Disconnect main sources of power.
- ☐ Disconnect each independent power source of multiple power systems, i.e.: air over hydraulic, electric over hydraulic, etc.
- ☐ Discharge all residual energy remaining behind the power source.
- ☐ Attach a padlock, chain, cable, etc., thus securing all power sources in the de-energized position.
- ☐ Block or confine any equipment that can move on its own, with or without the power source.
- ☐ Test equipment before working on it

**IF THE LOCKOUT/TAGOUT PROCEDURE MUST BE INTERRUPTED TO TEST A REPAIR OR ADJUSTMENT, THE FOLLOWING PROCEDURE MUST BE FOLLOWED.**

- ☐ Contact Departmental Supervisor.
- ☐ Notify all affected personnel.

#### **BEFORE RE-ENERGIZING**

- ☐ Clear all personnel.
- ☐ Remove blocking, etc. and any tools, parts, or materials.
- ☐ Replace barricades, guards, etc. that had been removed.
- ☐ The authorized person (supervisor) is the last person to remove his lock or tag. They are also responsible for re-energizing the equipment.
- ☐ Turn this checklist into your Departmental Supervisor.

Authorized Employee/Time/Date\_\_\_\_\_

Equipment Operator/Time/Date\_\_\_\_\_

Departmental Supervisor/Time/Date\_\_\_\_\_

## **LOCK-OUT/ TAG-OUT PROGRAM** *continued*

### Sample Multiple Lockout / Log In Sheet

NAME	EQUIPMENT	CLEARANCE	DATE

#### **Training Requirements**

- ◆ All employees engaged in or affected by the Energy Control Program will receive training on site specific programs. They are also to receive annual refresher training on the program. Records of training are to be maintained in the Safety Training Department File. Records must include the employee's name, employee number, test scores, and date of training.
- ◆ New employees are to receive training at the time of initial orientation.
- ◆ The training shall include the following:
  1. Purpose of the Lockout/Tagout Procedure.
  2. Recognition of applicable hazardous energy sources.
  3. Type and magnitude of energy found in the work place.
  4. Methods and means necessary to isolate and control.
  5. Responsibilities under the Lockout/Tagout procedure.
  6. Right to individually verify isolation.
  7. Procedure to remove lock/tag and sign out an authorized person when they are unavailable.
  8. Proper verification techniques to verify equipment has been de-energized.
  9. Site-specific training will be given at each work site.
  10. Tags must be legible and understandable to all employees.
  11. Tags must be durable (use only those provided).
  12. Tags must be securely attached (how to attach securely).
- ◆ Retraining for the Energy Control Program will be given as required to all affected personnel each time a procedure is changed, or a new procedure is added.



## **CONFINED SPACE ENTRY PROGRAM (WAC 296-809)**

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The Confined Space Entry Program was developed to establish protective measures and to ensure your safety and health when you enter, work in, and exit from confined spaces.

Death and injury in confined spaces are often the result when employees disregard proper safety procedures, take short cuts, refuse to accept the fact that a space which has been safe for years in the past could develop into a deadly hazardous space, or Supervisory personnel fail to heed safety standards.

Confined space accidents are completely preventable. When employees are properly trained, provided adequate supervision, equipment, and other devices, confined space entry is a safe and routine working procedure.

**"Confined Space"** means any space having limited means of egress which is subject to the accumulation of toxic or flammable contaminants, or an oxygen deficient atmosphere. Confined spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults and vessels, cells, digesters, tank cars, and plumbing access areas.

A confined space is further defined as any area that:

1. Has a limited opening for entry or exit.
2. May contain or produce toxic air contaminants.
3. May contain a high concentration of inert gases.
4. Is not intended for continuous occupancy.
5. May have an oxygen deficient atmosphere.

### **Authority/Responsibilities**

#### **Department Director**

1. Review and update City of DuPont Confined Space Entry Program to conform to current WISHA standards.
2. Ensure compliance with standards set forth in the program by periodic inspection of entry sites and canceling permits where unsafe conditions are present.
3. Assist Supervisors with:
  - ◆ Providing training as set forth in the program.
  - ◆ Identification of confined spaces.
  - ◆ Identifying spaces that require a permit for entry.
  - ◆ Labeling Permit-Required Confined Spaces.
  - ◆ Performing a single annual review covering all entries performed during a 12-month period to ensure employees participating in entry operations are protected from permit space hazards.





## **CONFINED SPACE ENTRY PROGRAM *continued***

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### **Supervisor:**

1. Identify confined spaces within facilities or areas under their control.
2. Identify hazards within a confined space.
3. Ensure procedures are implemented.
4. Ensure the guidelines set for this procedure are followed.
5. Confirm that all employees involved in the work are trained in the safe entry procedures and confident that they are abetted.
6. Make certain that all necessary safety equipment is on hand, calibrated, and working properly.
7. Complete a Confined Space Entry permit, perform all necessary air testing, and discuss possible hazards and safety precautions.

### **Authorized Entrants:**

1. Understand the knowledge of hazards that may be faced during entry, including the mode, signs or symptoms, and consequences of the exposure.
2. Bringing to their Supervisor's attention any unsafe or hazardous conditions or practices that may cause injury to either themselves or any other employee.
3. Report to their Supervisor any malfunction of gas detectors, ventilation equipment, tripods, harnesses, safety lines, self-contained breathing apparatus (SCBA), and other air supplies, or any other related equipment used for confined space entry.
4. Have current certification in First Aid/CPR.
5. Fully understand and strictly observe the safety standards, regulations, and procedures applicable to such work.
6. Alert the attendant (standby person) whenever:
  - ◆ The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
  - ◆ The entrant detects a prohibited condition.
7. Exiting the permit space as quickly as possible whenever:
  - ◆ An order to evacuate has been given by the attendant or the entry Supervisor.
  - ◆ The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
  - ◆ The entrant detects a prohibited condition.
  - ◆ An evacuation alarm is activated.



## **CONFINED SPACE ENTRY PROGRAM** *continued*

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### **Attendants**



1. Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of exposure.
2. Awareness of possible behavioral effects of hazard exposure to authorized entrants.
3. Continuously maintaining an accurate count of authorized entrants in the permit space and ensuring that the means used to identify authorized entrants accurately identifies who is in the permit space.
4. Remain outside the permit space during entry operations until relieved by another attendant.
5. Attempt non-entry rescue if proper equipment is in place and the rescue attempt will not present further hazards to the entrant or attendant.
6. Communicate with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space when conditions warrant.
7. Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space and ordering the authorized entrants to evacuate the permit space immediately under any of the following conditions:
  - ◆ If the attendant detects a prohibited condition.
  - ◆ If the attendant detects the behavioral effects of hazard exposure in an authorized entrant.
  - ◆ If the attendant detects a situation outside the space that could endanger the authorized entrants.
  - ◆ If the attendant cannot effectively and safely perform all the duties required by this program.
8. Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
9. Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
  - ◆ Warn the unauthorized persons that they must stay away from the permit space.
  - ◆ Advise the unauthorized persons that they must exit immediately if they have entered the permit space.
  - ◆ Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
10. Perform no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

## **CONFINED SPACE ENTRY PROGRAM *continued***

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### **Training**

Employees who perform tasks covered by the Confined Space Entry Program will receive a written copy of these procedures and be trained annually in on-site procedure and the use of permits and equipment.

The Department Supervisor is directly responsible for confined space safety training. Each employee required to enter designated confined spaces shall have received training on the following:

1. The potential hazards that could be confronted.
2. Safety precautions, emergency procedures, and hazard exposure treatment.
3. Required personal protective equipment, clothing, and devices.
4. Inspection, use, selection, and fitting of safety harness and life lines.
5. Fitting, use and limitations of self-contained breathing apparatus.
6. Traffic control and job site protection.
7. CPR and First Aid.
8. Proper testing and monitoring of confined spaces.
9. Decontamination of hazardous spaces.
10. Proper ventilation procedures.

### **Identification**

Recognition is an important aspect of making a safe entry into a confined space. Not all confined spaces will be considered permit-required confined spaces and being able to identify the difference between the two is important. To clarify what constitutes a Confined Space, the following definition will be used.

♦ A **Confined Space** is any space that has the following characteristics:

1. It is large enough or so configured that an employee can bodily enter and perform assigned work.
2. It has limited or restricted means for entry or exit. Confined-space openings are limited primarily by size and location. Openings may be small in size and may be difficult to move through easily. However, in some cases openings may be very large; for example, open-topped spaces such as pits or excavations. Entrance and exit may be required from top, bottom, or side. In some cases, having to access the work area by a fixed ladder may constitute limited or restricted entry or exit. Size or location will generally make rescue efforts difficult.

## **CONFINED SPACE ENTRY PROGRAM *continued***

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3. It is not designed for continuous employee occupancy. Most confined spaces are not designed for employees to enter and work on a routine basis. They may be designed to store a product, enclose materials and processes, or transport products or substances. Because they are not designed for continuous occupancy, frequently they will not have good ventilation or lighting. Therefore, occasional employee entry for inspection, maintenance, repair, cleanup, or similar tasks, can be difficult and dangerous. The danger associated with entry may come from chemical or physical hazards within the space.
- ♦ A **Non-Permit Confined Space** is a confined space that does not contain, nor has the potential to contain, any hazard capable of causing death or serious physical harm. Examples of non-permit required confined spaces might include the interiors of HVAC units, certain air plenums and pipe chases, attics, walk-in freezers or refrigerators, and some building crawl spaces.
- ♦ A **Permit-Required Confined Space** is a confined space that is potentially hazardous. A permit-required confined space has one or more of the following characteristics:
  1. Contains or has a potential to contain a hazardous atmosphere.
  2. Contains a material that has the potential for engulfing an entrant.
  3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly-converging walls or by a floor that slopes downward and tapers to a smaller cross-section.
  4. Contains any other recognized serious safety or health hazard. Examples of serious safety or health hazards might include:
    - ✓ Fall hazards
    - ✓ Unguarded machinery
    - ✓ Extreme heat or cold
    - ✓ Steam pipes or chemical lines
    - ✓ Hazardous noise levels
    - ✓ Electrical hazards
    - ✓ Presence of asbestos
    - ✓ Potentially hazardous levels of dust

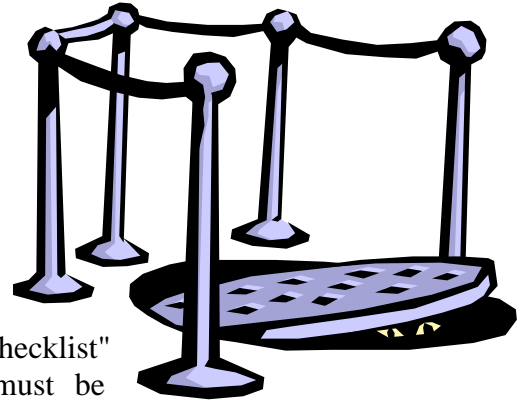
Because of the lack of ventilation in most confined spaces, they will have the potential for a hazardous atmosphere. Therefore, they must be designated "permit-required" and the procedures for making entry into a permit-required space must be followed.

## **CONFINED SPACE ENTRY PROGRAM *continued***

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### **Pre-Entry Procedures**

1. Post or barricade the area to prevent unauthorized entry.
2. Ensure control of all sources of ignition where a potential fire hazard exists.
3. Prior to leaving the City shop or main location, all specified safety and health related equipment for confined space entry shall be compared to the "Safety Equipment Checklist" located at the end of this section. All equipment must be examined, tested, and calibrated to ensure the correct operational condition and transported to the work site. No job shall be attempted unless all required personnel and equipment are on-site and ready for use.
4. If vehicles are involved, park vehicle, set the parking brake, block the wheels, turn on flashers and strobes; set up cones and provide for flagging, if necessary.
5. Mechanical hazards: Employees will not enter confined areas containing parts which may move or which contain motors, fans, or other power-driven moving parts of potential hazards until they are sure such parts cannot move to injure them. Tagging of controls without other means of control will be satisfactory only if the control is barricaded and/or is under constant observation during occupancy of the space. Isolation of a confined space is a process in which the space is removed from service by:
  - ◆ Locking out electrical sources.
  - ◆ Blanking and bleeding pneumatic and hydraulic lines.
  - ◆ Disconnecting belt and chain drives or mechanical linkages on shaft-driven equipment where possible.
  - ◆ Securing mechanical moving parts within confined spaces with latches, chains, chocks, blocks, or other devices.
6. Electric hazards: Employees will disconnect, lock-out, and tag electrical circuits in the confined area which may present a hazard. They will protect all temporary lights against damage. They will use heavy duty cords and keep these cords clear of working spaces and walkways. Finally, they will use only low voltage, battery operated, or ground fault protected equipment on water sides of boilers or electrical conductive liquids.



## **CONFINED SPACE ENTRY PROGRAM *continued***

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7. Electric lighting or circuits used where potentially hazardous concentrations of flammable vapors, gases, or dusts are present, or may develop, will conform to the National Electric Code. Also, employees will ground portable electric tools or use isolation transformers, ground fault interrupters, or double insulated tools.

### **Confined Space Entry Procedure**

1. Obtain the equipment required for entry if not on-site. Use the checklist if necessary.
2. Complete a Confined Space Entry permit. All the line items must be completed prior to entry. The Supervisor or qualified person shall certify by signature that the requirements have been reviewed and confirmed.
3. Set up rescue equipment at the confined space entry point.



4. Equip all confined space workers with:
  - ◆ Harness and safety line.
  - ◆ Combination gas/oxygen detector.
  - ◆ Proper respirator for the job..
  - ◆ Non-sparking tools.

**Exception:** Where all confined space workers are located within ten (10) feet of each other and on the same level, only one combination gas/oxygen detector is required. It shall be carried by the worker farthest into the confined space.

5. Equip attendant with SCBA respirator, or air line respirator, with an escape provision ready for instant use.
6. Hold crew meeting and discuss:
  - ◆ Safety procedures.
  - ◆ Communication signals.
  - ◆ Evaluation results.
  - ◆ Rescue procedures.
7. Attach the safety line to the confined space worker's harness; attach the other end to the rescue tripod where applicable.
8. No matches or lighters are to be used or carried into confined spaces. Explosion-proof drop lights or extension cords will be used in areas which could contain an explosive.

## **CONFINED SPACE ENTRY PROGRAM *continued***

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9. Continue to ventilate as long as workers are in the confined space.
10. Attendant must remain in constant voice communication with confined space worker(s) while he/she is in the confined space.
11. Upon loss of voice communication with the confined space worker(s), or upon receipt of an emergency signal (such as three (3) sharp tugs of the safety line), the attendant shall immediately implement the rescue plan.



### **12. Departure from Confined Space:**

◆ **Emergency** - The confined space worker shall immediately evacuate the confined space if the ventilation system fails or an audio or visual alarm warning is emitted from the gas/oxygen detector.

◆ **Routine Exits** - Upon notification that the confined space worker is ready to exit the confined space, the attendant shall take in the slack on the safety line. The attendant shall remain in voice contact with the confined space worker until all tools, material, and workers are completely removed.

### **13. Rescue Plan:**

- ◆ **Pre-Plan**
  - ✓ All personnel on the job site shall be trained in rescue procedures.
  - ✓ All equipment shall be inspected, tested and/or calibrated in advance prior to entry into the confined space.
  - ✓ Rescue equipment shall be in place and ready for use, including a tripod and winch approved for fall restraint and ladders when appropriate.



## CONFINED SPACE ENTRY PROGRAM *continued*

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### 14. Rescue Procedures:

◆ Initiate rescue operation upon:

- ✓ Declaration of an emergency by a confined space worker in the confined space.
- ✓ Loss of voice communication with worker in a confined space.
- ✓ The attendant calls for assistance, breaking into any existing communication, declares emergency station "worker down" in confined space.
- ✓ **CALL 911** for assistance.



- ◆ The attendant will immediately put on SCBA or airline respirator mask and prepare to enter space. **THE ATTENDANT MUST NEVER ENTER A CONFINED SPACE UNTIL THEY ARE RELIEVED OF THEIR DUTIES BY ANOTHER PERSON.**
- ◆ The attendant then enters the confined space and assists affected worker(s) to the entrance.
- ◆ The standby helper then plays out the air line and retrieves the air line and safety line to prevent fouling as the confined space worker is moved to the entrance.
- ◆ The standby helper then assists the attendant in removing the confined space worker(s) from the confined space with the safety line and hoist, if they are unable to do it themselves.
- ◆ The standby helper performs First-Aid/CPR, as required, while the attendant removes the respirator equipment. First-Aid/CPR shall be maintained until the confined space worker(s) is revived or until the attendant/helper is relieved by medical personnel.



### 15. Post Rescue:

- ◆ Secure the hazard by closing the confined space. Provide barricading and posting as applicable.
- ◆ Make full report to the Supervisor and the City Safety Officer.



## **CONFINED SPACE ENTRY PROGRAM *continued***

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### **General Guidelines**

1. Employees must never use pure oxygen to ventilate a confined space.
2. Employees will not enter atmospheres which contain, or could contain, flammable gases or vapors if the contamination of gases or vapors in any part of the area is more than 10% of the lower explosive limit, except in the event of an emergency, and then only when equipment approved for such an exposure is protecting these employees.
3. The atmospheric testing equipment for explosive gases must be set to alarm when the concentration is above 10% of the lower explosive limit (LEL).
4. All workers will exit and/or not enter any space with a reading of >10% of the lower explosive limits (LEL). The exception is in emergency rescue operations when using confined space entry equipment approved for this purpose.
5. Use of toxic and/or flammable materials in confined spaces:
  - ◆ Quantities of toxic or flammable materials brought into or used in confined spaces shall be limited to the smallest amount consistent with efficient use.
  - ◆ Containers shall be designed to minimize the evaporation and spillage. Safety cans or small squeeze bottles are preferable when applicable.
  - ◆ Continuous ventilation shall be provided.
  - ◆ Spraying of toxic or flammable substances such as paint is not recommended.



6. Employees may enter atmospheres that have no contamination without respiratory protection. Always ventilate to remove contaminate atmospheres where contamination is above the threshold limit values, but below values immediately hazardous to life or health.

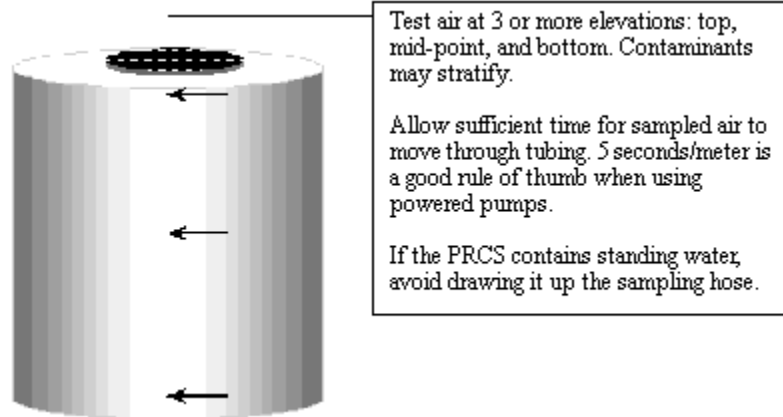
7. If ventilation cannot remove contaminants, the immediate supervisor may authorize entry with respiratory protective equipment on a case by case basis. Use ambient air for ventilation purposes. Again, never use pure oxygen for ventilation.

### **Testing the Atmosphere of a Confined Space**

- ◆ It is necessary to test all areas (top, middle and bottom) of the confined space with properly calibrated testing instruments to determine what gases are present and whether enough oxygen is present. If testing levels reveal oxygen-deficiency or the presence of toxic gases or vapors, employees must purge the spaces by forced ventilation and re-test it before any workers enter. If ventilation is not possible, and entry is necessary, workers must have appropriate respirator protection. If doors and covers contain vents, employees must make the re-test with doors and covers in place in order to test conditions of the confined space before it has been disturbed. If the cover or door is un-vented, employees will open it only enough to admit the test hose or their equipment.

## CONFINED SPACE ENTRY PROGRAM *continued*

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- ◆ When moving the cover, use only non-sparking tools.
- ◆ The qualified person will evaluate the area immediately prior to entry and during the occupation at intervals dependent on the possibility of changing condition.
- ◆ Re-test every confined space that has been closed for any period of time to determine air quality and the presence of mechanical hazards.
- ◆ If positive test results are found, ventilate with an explosion-proof fan. Extend the hose all the way to the bottom of the confined space. Ventilate for at least ten air changes.
- ◆ To maximize the ventilation, open any other access direct to the confined space, add more fans, if possible. Direct the air flow to eliminate any pockets of hazardous gases. Workers in the surrounding area shall be protected from hazardous exhaust gases by distance or by respirators.

### Ventilation

#### Air Changes

- ✓ A minimum of five complete exchanges of air are needed where oxygen deficiency may exist, and a minimum of ten complete exchanges of air are needed where a toxic and/or flammable material is involved. In no case shall ventilation time be less than fifteen minutes immediately prior to entry.



Temporary ventilation tube is routed through a butter-worth hole minimizing interference with access and egress

## **CONFINED SPACE ENTRY PROGRAM *continued***

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### **Hot Work/Welding In Confined Spaces**



◆ Hot work permits must be issued by the Supervisor before employees may enter any area where hot work occurs. Local exhaust and/or respiratory protection shall be required where hot work involves the generation of toxic gases, fumes, or vapors.

◆ Employees generally should not allow compressed gas cylinders in confined spaces. If they do, they will protect the compressed gas lines from rupture or damage. Also, employees will monitor compressed gas cylinders or electric generators at all times and immediately turn off sources of energy when an emergency arises or when work is interrupted or completed.

### **Record Keeping**

1. The immediate Supervisor will fill out a Confined Space Entry permit for all confined space entry applications. They will post one copy at the site and will keep the original on file in the department.
2. The department will keep a file of all permits. In it will be the originals of the permits that have been issued.
3. The department will maintain all permits for a period of one year.

### **Instrument/Detector Maintenance:**

- ◆ Instruments used to evaluate life-threatening conditions shall be maintained in working condition.
- ◆ A person shall be assigned to maintain the instruments located in each department that has a need for such equipment. This person must be thoroughly familiar with the instruction manual and maintenance procedures.
- ◆ A calibration and maintenance log shall be kept with each instrument at the department or location.

## **RESPIRATORY PROTECTION PROGRAM** **(WAC 296-842)**

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Your health depends on breathing clean air, but in an industrial environment breathing hazards may be present. These hazards are often invisible and can cause health problems when you are exposed to them without personal protection. Our respiratory program is designed to help protect your health and have you go home each day as healthy as when you arrived.

Respiratory protection equipment shall be used to protect the respiratory tract of City personnel who are required to work in an atmosphere that is irritating and or potentially harmful. This procedure provides information to assist in proper usage, selection, fitting, and training for such equipment.



### **Authority/Responsibilities**

**Department Directors** will be the designated Respirator Program Administer. This program meets WISHA regulations and includes the following:

1. Administration of the overall program.
2. Provision for appropriate respirators.
3. Implementation of training and instruction programs.
4. Provision for technical assistance in the selection of respirators.
5. Provision for surveillance of ordinary conditions and periodic evaluation of the respirator program.
6. Maintenance of employee respirator training records and medical evaluations.

### **Supervisors**

1. Ensuring that employees wear their respirators as required.
2. Make certain that only properly trained employees assume jobs that require use of respirators.

### **Employees**

1. Using the respirator supplied to them in accordance with instructions and training.
2. Cleaning, disinfecting, inspecting, and storing (in accordance with the written policy) respirators checked out to them.
3. Reporting a respirator malfunction to their Supervisor.
4. Guarding against damage to the respirator.
5. Inspecting the respirator before and after use.
6. Performing a negative and positive fit test before each use.

## RESPIRATORY PROTECTION PROGRAM *continued*

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### General Requirements

1. Hazard elimination by engineering methods such as improved ventilation, or administrative controls like, elimination of source, or removal of people is considered the first priority. Where such controls are unsuccessful or not feasible respiratory protection equipment will be used.
2. All respiratory equipment purchased and used by the City of DuPont will carry the NIOSH (National Institute for Occupational Safety and Health) approval.
3. The substance or substances creating the hazard must be identified in order to determine acceptable methods or equipment to be used for protection. The following criteria must be evaluated:
  - ◆ Nature of hazard and significant properties of the substances.
  - ◆ Severity and effects of exposure at various concentrations.
  - ◆ Possible engineering controls or limiting of exposure duration.
  - ◆ Replacement of substance with less toxic compounds.
  - ◆ Necessary emergency measures to protect individuals should controls or protection be inadequate or fail.
4. All personnel that work with or may contact the harmful substances, must be notified of:
  - ◆ Existence of substance and appropriate counter measures.
  - ◆ Possible harmful effects.
  - ◆ Protective equipment to be used; its limitations, proper fitting (techniques), and other pertinent information to its use.
  - ◆ Any other information pertinent to protecting them from possible harm.



**NOTE:** All persons with potential exposure must have the situation, conditions, etc., fully explained to them.

5. Entry into any atmosphere with less than 19.5% (WISHA) oxygen or undetermined contaminated concentrations shall be done only under the direction of the Department Director or Supervisor and will be done with self contained breathing apparatus. Such entry shall comply with the provisions of "CONFINED SPACE ENTRY" and "WORK PERMIT SYSTEM" requirements.
6. The Department Director or Supervisor is available to assist in the supervision of assuring proper precautions and safeguards are taken with respect to ventilation requirements, protective equipment selections, employee training requirements, and other technical safeguards.

## **RESPIRATORY PROTECTION PROGRAM *continued***

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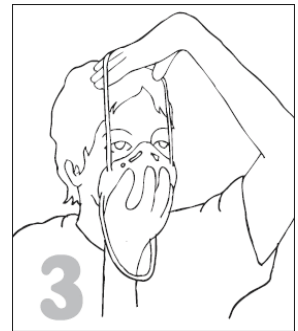
Careful respirator selection, fit-testing, proper care of your respirator, employee training, medical assessment of employee health, and recordkeeping are covered in the next sections.

### **Fit Testing**

All employees who wear tight-fitting respirators will be fit-tested before using their respirator, or given a new one. Fit-testing will be repeated annually. Fit-testing will also be done when a different respirator face piece is chosen, when there is a physical change in an employee's face that would affect fit, or when our employees, or medical provider notify us that the fit is unacceptable. No beards are allowed on wearers of tight-fitting respirators. Respirators are chosen for fit-testing following procedures in the WISHA Respirator Rule.

### **Fitting the Respirator**

1. Fit the respirator on the bridge of your nose, making sure you are able to breathe through your nose.
2. Swing the bottom of the respirator into contact with your chin.
3. Position the headbands with the top headband on the top back of your head and the bottom headband around your neck just below your ears.
4. Adjust the headbands by moving the slides either way.




### **Testing**

**User Seal Check**

An action conducted by the respirator user to determine if the respirator is properly seated to the face.



Positive Pressure Check



Negative Pressure Check

Using the Positive and Negative Pressure Methods:

1. Place your hand over the exhalation valve. Create a slight positive pressure inside the face cushion by exhaling.
2. For a negative pressure check, place hands (piece of paper, etc.) over both inhalation ports. If leaking occurs around the face cushion, readjust face-piece and yoke, and then re-test.

**NOTE:** *Persons not required to use respirators are:*

- ◆ Those not physically able. (as per a doctors evaluation)
- ◆ Have a hole in their ear drum.
- ◆ Those who can't see without glasses.

## **RESPIRATORY PROTECTION PROGRAM *continued***

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Respiratory devices equipped with a face piece that operates on negative pressure shall not be worn if facial hair comes between the sealing periphery of the face piece and the face or if facial hair interferes with valve function. Personnel that cannot ensure an adequate face respirator seal should not be allowed in atmospheres requiring respiratory protection.

Users of a respirator equipped with a full face piece, helmet, hood, or suit shall not be allowed to wear contact lenses. If a spectacle, goggle, face shield, or welding helmet must be worn with a face piece, it shall be worn so not to affect the seal of the face piece to the face.

Persons with physical disabilities such as lung disease, heart disease, or other problems which could make use of a respirator harmful or unsafe, should not be assigned jobs requiring their use. Fit-testing is mandatory prior to the use of all respiratory equipment.

### **Maintenance and Care of Respirators**

Maintenance and care of respirators include the following basic services:

- ◆ Inspection for defects (including a leak check)
- ◆ Cleaning and disinfecting
- ◆ Repair
- ◆ Storage

### **Inspection:**

- ◆ All respirators shall be inspected routinely before and after use. A respirator that is not routinely used, but is kept ready for emergency use, shall be inspected after each use and at least monthly to ensure that it is in satisfactory working condition. It is important that care be taken with respirators to eliminate all physical abuse and a designated location shall be provided for the respirators after their use for cleaning and inspection.
- ◆ Self-contained breathing apparatus shall be inspected monthly. Cylinders shall be fully charged according to the manufacturer's instructions. It shall be determined that the regulator and warning devices function properly.
- ◆ A record shall be kept of inspection dates and findings for respirators maintained for emergency use.



## **RESPIRATORY PROTECTION PROGRAM *continued***

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### **Cleaning and Disinfecting:**



### **Suggested Respirator Cleaning And Sanitation Procedures**

- ◆ Routinely used respirators shall be collected, cleaned, and disinfected as frequently as necessary to insure that proper protection is provided for the wearer.
- ◆ Each worker should be briefed on the cleaning procedure and be assured that he will always receive a clean and disinfected respirator. Such assurances are of greatest significance when respirators are not individually assigned to workers.
- ◆ Respirators maintained for emergency use shall be cleaned and disinfected after each use.
- ◆ The following procedure is to be followed in cleaning and disinfecting respirators:
  1. Remove any filter, cartridges, or canisters.
  2. Wash face piece and breathing tube in cleaner/disinfectant or detergent solution. Use a hand brush to facilitate removal of dirt.
  3. Rinse completely in clean, warm water.
  4. Air-dry in a clean area.
  5. Clean other respirator parts as recommended by manufacturer.
  6. Inspect valves, head straps, and other parts; replace with new parts if defective.
  7. Insert new filters, cartridges, or canisters; make sure seal is tight.
  8. Place in plastic bag or container for storage.
- ◆ Cleaner/disinfectant solutions are available that effectively clean the respirator and contain a bactericidal agent.
- ◆ Disposable respirators shall be discarded after each day's use. If to be used intermittently during the day, they must be placed in a sealed plastic bag and labeled with the user's name.



## **RESPIRATORY PROTECTION PROGRAM *continued***

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### **Training**

For safe use of any respirator, it is essential that the user be properly instructed in its selection, use, and maintenance. Both supervisors and technicians shall be instructed by a competent person, i.e., safety personnel, manufacturers, etc.

Minimum training shall include the following:

- ◆ Instruction in the nature of the hazard, whether acute, chronic, or both, and an appraisal of what may happen if the respirator is not used or fails.
- ◆ Explanation of why more positive control is not immediately feasible. This shall include recognition that every reasonable effort is being made to reduce or eliminate the need for respirators.
- ◆ A discussion of why this is the proper type of respirator for a particular purpose.
- ◆ A discussion of the respirator's capabilities and limitations.
- ◆ Instruction and training in actual use of the respirator (especially a respirator for emergency use) with close and frequent supervision to assure that it continues to be properly used.
- ◆ Classroom and field training to recognize and cope with emergency situations.
- ◆ Other special training as needed for special use.

Training shall provide the employee an opportunity to handle the respirator, have it fitted properly, test face piece to face seal, wear it in normal air for a familiarity period, and wear it in a test atmosphere where applicable.

### **Medical Evaluations**

Every employee of City of DuPont who must wear a respirator will be provided with a medical evaluation before they are allowed to use the respirator. Our first step is to give the medical questionnaire (following this section) to those employees. Employees are required to fill out the questionnaire when they go to the medical provider authorized by the City for evaluation. Completed questionnaires are confidential and will be sent directly to medical provider without review by management.



## **RESPIRATORY PROTECTION PROGRAM** *continued*

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Additional medical evaluations will be done in the following situations:

- ◆ Our medical provider recommends it.
- ◆ Our respirator program administrator decides it is needed.
- ◆ An employee shows signs of breathing difficulty.
- ◆ Changes in work conditions that increase employee physical stress (such as high temperatures or greater physical exertion).

### **Recordkeeping**

The following records will be kept:

- ◆ A copy of this completed respirator program.
- ◆ Employees' latest fit-testing results.
- ◆ Employee training records.
- ◆ Written recommendations from our medical provider.

## FALL PROTECTION PROGRAM

### WAC 296-155-245

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When City employees are exposed to a hazard of falling while working and performing duties on elevated surfaces and ladders from a location 10 feet or more in height, the City of Dupont shall ensure that fall restraint, fall arrest systems, or positioning device systems are provided. Employees will not perform any duties which require the employee to get closer than 6 feet to an unprotected edge, platform, walkway, or utilize elevated equipment unless the employee is properly secured from falling.

Additionally, this program shall apply to all employees in order to minimize slips, trips, and falls on the same elevation. All employees shall control fall hazards in their work area by maintaining good housekeeping and shall report conditions that may lead to slips, trips, and falls to the appropriate maintenance unit.

Subcontractors/Contractors working on our projects are required to comply with all applicable WISHA workplace safety regulations and shall provide their own fall protection program and plan. Contractors' Safety Programs shall be available for review upon request by the City of DuPont representatives.



**Exceptions: Employees may work without fall protection for inspection or observation purposes only.**

### **Responsibilities**

- ◆ Department Directors and Supervisors
  - ✓ Responsible for ensuring that all requirements listed in the written program for fall protection are met.
  - ✓ Responsible for ensuring new and existing employees receive fall protection training as applicable to their job duties.
  - ✓ With the assistance of the Safety Coordinator, are responsible for identifying elevated work areas.
  - ✓ Responsible for conducting periodic visits to elevated work locations to inspect equipment and to observe employees' procedures while working at elevated levels.

## **FALL PROTECTION PROGRAM** *continued*

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◆ **Employees**

- ✓ Employees whose duties involve work activities at elevated locations are required to comply with the rules of operations and accepted safety practices outlined within this written program.

### **Program Components**



The following work situations are covered by the City's program for fall protection:

- ◆ **Ladders** - fixed, free standing, temporary, or roll away type
- ◆ **Elevating Personal Platforms** – scaffolds, aerial platforms, scissors lifts, forklift-mounted platforms, cherry pickers, etc.
- ◆ **Elevated Surfaces** – roofs (closer than 6 feet to the edge), catwalks, skylights, boilers, chillers, etc.
- ◆ **Vertical Opening** - ground level entry into excavations, trenches, holes, pits, vessels, and other confined spaces.

Fall protection is required whenever work is performed in an area 10 feet or above its surroundings and can generally be provided through the use of fall protection systems including:

- ◆ **Guardrails** - Standard guardrails consist of a top rail, located 42 inches above the floor, and a mid-rail. Screens and mesh may be used to replace the mid-rail, so long as they extend from the top rail to the floor.
- ◆ **Personal Fall Arresting Systems** - Components of a personal fall arresting system include a body harness, lanyard, lifeline, connector, and an anchorage point capable of supporting at least 5000 pounds.



## FALL PROTECTION PROGRAM *continued*

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- ♦ **Positioning Device Systems** - Positioning device systems consist of a body belt or harness rigged to allow work on a vertical surface, such as a wall, with both hands free.
- ♦ **Warning Line Systems** - Warning line systems are made up of lines or ropes installed around a work area on a roof. These act as a barrier to prevent those working on the roof from approaching its edges.
- ♦ **Covers** - Covers are fastened over holes in the working surface to prevent falls.

Where it can be clearly demonstrated that the use of these systems is infeasible or creates a greater hazard, alternative fall protection measures may be implemented.

### Guidelines for employees using specific equipment:

1. **Ladders:** Employees who work on ladders with a working height of 10 feet or more shall be knowledgeable of the following:
  - ♦ How to inspect ladders for visible defects
  - ♦ How to use ladders properly
2. **Fall Arrest:** Employees who use personal fall arresting systems to control fall hazards in their work area shall be knowledgeable of the following:
  - ♦ The application limits of the equipment.
  - ♦ The proper hook-up, anchoring and tie-off techniques including determination of elongation and deceleration distance.
  - ♦ Methods of use, inspection, and storage of equipment.

Personal Fall Arrest components including harnesses and lanyards shall be inspected prior to each use for mildew, wear, damage and other deterioration. Defective components shall be removed from service.



Fall arrest systems, including harnesses, shall be inspected at least twice each year or according to manufacturer's recommendations. The date of the most current semi-annual inspection shall be recorded on an inspection tag which shall be attached to the harness. In addition, records shall be kept and maintained showing date of purchase, dates when attachments were renewed, and dates when the entire harness assembly was inspected and by whom.

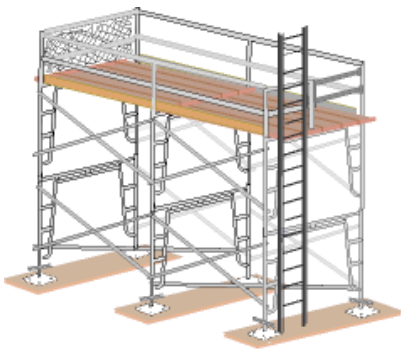
## **FALL PROTECTION PROGRAM *continued***

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3. **Aerial Lifts:** Employees who use aerial lifts shall be knowledgeable of the following:

- ◆ The manufacturer's operating instructions.
- ◆ Pre-start inspection of the lift Inspection of the work area for dangerous conditions such as uneven surfaces, overhead obstructions such as power lines, or other hazards.
- ◆ Load capacities of the equipment.
- ◆ How to safely move the equipment.
- ◆ How to prevent falls and use appropriate fall protection personal protective equipment.
- ◆ Minimum safe approach distances to energized power lines.

4. **Scaffolds:** Employees who work on scaffolds shall be knowledgeable of the following:



- ◆ The nature of any electrical hazards, fall hazards, and falling object hazards in the work area.
- ◆ The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used.
- ◆ The proper use of the scaffold, and the proper handling of materials on the scaffold.
- ◆ The maximum intended load and the load carrying capacities of the scaffolds.

5. **Walking/Working Surfaces:** All Employees should be aware of guidelines to minimize slips, trips, and falls on the same elevation of walking/working surfaces.

- ◆ To prevent slipping, tripping, and falling, all work environments, including passageways, storerooms, and service areas, must be kept clean, orderly, and in a sanitary condition.
- ◆ The floor of every work area will be maintained in a clean and, so far as possible, dry condition.
- ◆ Where wet processes are used, drainage will be maintained and false floors, platforms, mats, or other dry standing places are provided.

### **Reporting Requirements**

Constant awareness of and respect for fall protection procedures and compliance with all applicable safety rules is mandatory.



## **FALL PROTECTION PROGRAM *continued***

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- ◆ Supervisors may issue warnings and implement disciplinary actions up to and including termination for failure to follow the guidelines of this program.
- ◆ Employees shall report any safety concerns to their supervisor or Safety Coordinator.

### **Training Requirements and Competency Assessment**

Under no circumstances will any employee work in areas of high fall hazards, perform work requiring fall protection devices, or use fall protection devices until he/she has attended training in fall protection. This includes all new employees, regardless of previous experience.

The training program provided by the City of DuPont includes classroom instruction and operational training on specific fall hazards on-site.

Employees will require retraining under any of the following conditions:

- ◆ Changes in the workplace.
- ◆ Changes in the types of fall protection systems or equipment to be used.
- ◆ Inadequacies in an employee's knowledge of use of fall protection systems or equipment or observed behavior indicate that the employee has not retained the required training.



**FALL PROTECTION PROGRAM** *continued*

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**FALL PROTECTION WORK PLAN**  
**Site Specific Information****1. Site Location** \_\_\_\_\_**2. Fall Hazards in the Work Area**

- |   |  |
|---|--|
| <input type="checkbox"/> Elevator Shaft       | <input type="checkbox"/> Rolling Scaffold      |
| <input type="checkbox"/> Exterior Scaffolding | <input type="checkbox"/> Scaffold Over 10 Ft.  |
| <input type="checkbox"/> Boom Lift            | <input type="checkbox"/> Scaffold Under 10 Ft. |
| <input type="checkbox"/> Leading Edge         | <input type="checkbox"/> Scissors Lift         |
| <input type="checkbox"/> Outside Static Line  | <input type="checkbox"/> Stairwell             |
| <input type="checkbox"/> Perimeter Edge       | <input type="checkbox"/> Window Opening        |
| <input type="checkbox"/> Roof                 | <input type="checkbox"/> Other:                |

**3. Method of Fall Arrest or Restraint**

- |  |   |
|--|---|
| <input type="checkbox"/> Full Body Harness       | <input type="checkbox"/> Body Belt            |
| <input type="checkbox"/> Lifeline                | <input type="checkbox"/> Horizontal Lifeline  |
| <input type="checkbox"/> Shock Absorbing Lanyard | <input type="checkbox"/> Safety Nets          |
| <input type="checkbox"/> Guard Rails             | <input type="checkbox"/> Scaffolding Platform |
| <input type="checkbox"/> Deceleration Device     |   |



## **FALL PROTECTION PROGRAM *continued***

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### **4. Inspection of Fall Restraint Equipment**

A visual inspection of all safety equipment will be done before each use. Any defective equipment will be tagged and removed from use immediately. Assembly and disassembly of all equipment will be done according to manufacturers' recommended procedures.

- ◆ **Specific Information Before Each Use.** All employees will inspect webbing and stitching on harness for fraying, cuts or tears. Check all hardware for corrosion, or rust if it is bent out of shape. Also, inspect lanyard webbing and snap hooks. Discard equipment if damaged or used in a fall.

### **5. Site Specific Procedures (Handling, Storage and Use of Tools and Materials)**

Employees will put harness on prior to working at elevations of 10 feet or more. Attach lanyard to harness. Attach other end of lanyard to lifeline cable. Secure. Keep fall protection equipment available at all times in work truck.

### **6. Overhead Protection**

Hard hats are required on all job sites with the exception of those that have no exposure to overhead hazards.

### **7. Injured Worker Removal**

Injured worker must be left in place until emergency services take over, unless there is further risk to danger. Apply First Aid as needed. Call for ambulance transport and other notifications.

### **8. Training and Instruction Program**

Prior to permitting employees into areas where fall hazards exist, all employees shall be trained regarding fall protection work plan requirements.

## **BLOODBORNE PATHOGENS - Exposure Control Plan (WAC 296-823)**

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The City of DuPont is committed to providing a safe and healthful work environment for our entire staff. This is our plan to eliminate or minimize occupational exposure to bloodborne pathogens.

Employees, who have occupational exposure to blood, or other potentially infectious material (OPIM), must follow the procedures and work practices in this plan.

Employees can review this plan at any time during their work shifts. We will provide a copy to an employee within 15 days of a request.



This plan includes:

- ◆ Overview
- ◆ Identify employees who are at risk for exposure
- ◆ Controlling Employee Exposure to Bloodborne Pathogens
- ◆ Employee Training and Hazardous Communication
- ◆ Post Exposure Evaluation and Follow-up
- ◆ Recordkeeping

### **Exposure Determination**

One of the keys to implementing a successful Exposure Control Plan is to identify exposure situations employees may encounter. To facilitate this in our operations, we have prepared an exposure control plan for each work group per the following:

### **Police Department**

- ◆ Job classifications in which all employees have occupational exposure to bloodborne pathogens.
- ◆ Job classifications in which some employees have occupational exposure to bloodborne pathogens.
- ◆ Tasks and procedures in which occupational exposure to bloodborne pathogens occur.



## **BLOODBORNE PATHOGENS *continued***

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### **Public Works Department**

As Public Works employees, your work may involve contact with another person's body fluids. Since these body fluids may be infectious, you are considered to be at risk for occupational exposure to infectious disease. The environment you work in provides unpredictable risks of exposure. Therefore, you should assume that all persons whose blood and body fluids that you come into contact with to be infectious.



Employees shall give first-aid to those persons requiring aid regardless of the fact that the person may have an infectious/communicable disease. Employees will not refuse to aid persons solely on the information that the person may have an infectious/communicable disease.

The following employees perform tasks and duties which do or may expose them to blood and/or other body fluids:

### **High Risk:**

- |                           |                            |                 |
|---------------------------|----------------------------|-----------------|
| ◆ Public Works Supervisor | ◆ Maintenance Worker II    | ◆ Firefighters  |
| ◆ Maintenance Worker I    | ◆ Water Quality Specialist | ◆ Law Enforcers |

Public Works employees may also be exposed through contact with employees, shared equipment or surfaces which may have become contaminated: **(Low Risk)**

### **Low Risk:**

- |                                  |                           |                                 |
|----------------------------------|---------------------------|---------------------------------|
| ◆ City Administrator             | ◆ Police Chief            | ◆ Building Inspectors           |
| ◆ Assistant City Administrator   | ◆ City Clerk              | ◆ Building Official             |
| ◆ Community Development Director | ◆ Human Resources Analyst | ◆ Permit Technician             |
| ◆ Public Works Director          | ◆ Accountant              | ◆ Receptionist/General Clerical |
| ◆ Fire Chief                     | ◆ Finance Specialist      | ◆ Museum Manager                |
| ◆ Battalion Chief                | ◆ Police Records Clerk    | ◆ Visitor Readiness Coordinator |
|                                  | ◆ Planners                |                                 |

These employees could potentially be exposed to blood and/or body fluids through mucous splash and/or by the handling of job related equipment or materials used in the performance of their duties.

## **BLOODBORNE PATHOGENS *continued***

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### **HBV Vaccination**

HBV vaccinations shall be offered to all employees identified as high risk free of charge by the City of DuPont. The City of DuPont will allow the use of City time and pay all fees associated with that service. The vaccination will be provided after the employee has received the training outlined in these policies, but within 10 (ten) days of assignment to duties. This policy shall exempt employees who have previously received the complete vaccination series, whose antibody testing indicates they are immune, or those employees for whom the vaccine is contraindicated. Employee vaccinations shall be documented and maintained in the employee's medical record files in the City of DuPont HR Department as prescribed by WISHA, and shall be preserved in the City of DuPont HR Department for the duration of employment plus thirty (30) years.



Routine booster dose(s) of the HBV vaccine shall be provided in accordance with US Public Health Service recommendations at no cost to the employees.

If an employee refuses to obtain the required HBV vaccination, the employee will be required to document that refusal on the HBV Declination Statement form (*Form at end of chapter*) which will be maintained in the employee's medical record for the duration of employment plus thirty (30) years. If however, an employee subsequently decides to have an HBV vaccination; it will be made available under the same terms and conditions as stated above, upon employer's receipt of a written request to the Human Resource Manager or Safety Officer.

### **Follow-Up Procedures After Possible Exposure To HIV/HBV**

All employees are required to report any incident of exposure to blood and/or body fluids to their immediate supervisor. All exposure incidents shall be recorded on the OSHA300 form and investigated using the Exposure Incident Investigation form (*Form at end of chapter*) which will subsequently become a part of the employee's medical record. All exposures must document the route(s) of exposure and the circumstances under which the exposure occurred.

Possible exposure incidents include percutaneous needle sticks or cuts, mucous membrane exposure to blood or body fluids, or contact with blood or body fluids via chapped, abraded, or otherwise non-intact skin surfaces.

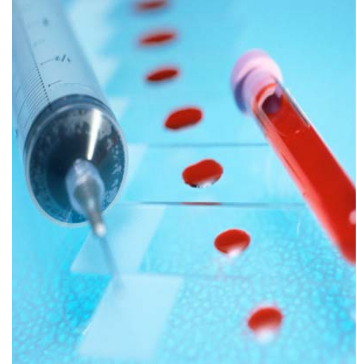
Using the Post Exposure Evaluation and Follow-up Checklist (*Form at end of chapter*) the following steps will be taken:

1. The source individual shall be notified of the exposure incident and be requested to consent to and obtain testing for HIV/HBV. A refusal of the source individual to consent for testing shall be documented.
2. The results of the source individual's test shall be made known to the exposed employee.

## **BLOODBORNE PATHOGENS** *continued*

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3. The exposed employee shall also be reminded of the laws and regulations concerning the disclosure of the identity and infectious status of the source individual.
4. If the source individual refuses to consent to HIV/HBV testing, or if the source individual tests positive, the exposed employee shall have a clinical evaluation which will include HIV and HBV antibody testing as soon as possible.
5. If the exposed employee tests zero-negative, the employee shall be retested 6 weeks post-exposure and on a periodic basis thereafter; 12 weeks and 6 months.
6. Follow-up procedures shall also be taken for employees exposed or potentially exposed to HBV, depending on employee immunization status, antibody response, and HBV serologic status of source individual.
7. If the exposed employee refuses to submit to clinical evaluation and HIV and HBV testing, such refusal will be documented and maintained in the employee's medical record.
8. If the employee consents to baseline blood collection, but does not consent to testing, the employee's blood sample shall be preserved for ninety (90) days. If within ninety (90) days of exposure, the employee elects to have the baseline sample tested; such testing will be conducted as soon as possible.
9. Exposed employees shall have access to post-exposure prophylaxis, as recommended by the US Public Health Service, when medically indicated, as well as counseling.
10. Exposed employees shall also be advised to report and seek medical evaluation of any acute febrile illness within twelve (12) weeks following exposure.
11. All tests shall be conducted by an accredited laboratory at no cost to the employee.



The following information will be provided to the physician performing the post-exposure evaluation:

- ◆ A copy of the WISHA regulation pertaining to bloodborne pathogens.
- ◆ A description of the employee's duties.
- ◆ Documentation of the route(s) of exposure and circumstances under which the exposure occurred.
- ◆ Results of the source individual's blood testing, if available.
- ◆ All relevant medical records of the employee, including vaccination status.

## **BLOODBORNE PATHOGENS *continued***

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The City of DuPont Human Resources Department will obtain a written report and opinion from the physician performing the post-exposure evaluation which shall be limited to:

- ◆ Whether an HBV vaccination is indicated, and if the employee has received such vaccination.
- ◆ That the employee has been informed of the results of the evaluation.
- ◆ That the employee has been told about any medical conditions resulting from exposure to blood or other infectious materials which warrant further evaluation or treatment.

In the event of employee exposure to blood or body fluids via percutaneous needle stick, cuts, or mucous membrane exposure, necessary medical treatment shall be administered as appropriate for the type of injury.

### **Sharps And Disposable Items**

**Public Works:** The following sharp instruments or disposable sharps are frequently encountered by employees in the Public Works Department:

- |                      |  |
|----------------------|--|
| ◆ Hypodermic needles | ◆ Blood stained broken glass           |
| ◆ Syringes           | ◆ Brooms used in street sweeping       |
| ◆ Knives             | ◆ Medical waste                        |
| ◆ Razor Blades       | ◆ Any and all sewage related materials |

Subsequent to recovery or use, potentially contaminated sharp instruments and/or disposable sharps shall be disposed of in the following manner:

1. All such sharp items shall be placed in a leak proof, rigid, puncture-resistant, break-resistant container which is conspicuously labeled.
2. The person recovering/receiving a sharps instrument or item shall be responsible for its proper disposal as soon as feasible. In no instance will any employee leave any such sharp instrument at any work station or in any vehicle beyond the end of the employee's shift without notifying his/her supervisor.
3. Needles shall **not** be recapped, purposely bent or broken, or removed from disposable syringes. (If recapping or removal is necessary, it must be accomplished by using a mechanical device or a one-handed "scoop" technique).
4. Scalpel blades shall be removed from the handle using clamped forceps and placed in the appropriate sharps container by the person using that item.
5. Knives and other sharps necessary for evidence will at all times remain in an approved, properly labeled sharps container.
6. Appropriate protective gloves will be worn at all times when handling any sharps or knives possibly contaminated by blood or OPIM.
7. At no time will any employee reach into a sharps container to retrieve any item. All such removal will be accomplished with tongs, pliers, or other mechanical tool.





## **BLOODBORNE PATHOGENS *continued***

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### **Reusable Equipment**

#### **Public Works Department**

The following reusable equipment is used in the Public Works Department and does come in direct contact with blood or other body fluids and could potentially expose employees to HIV/HBV:

- ◆ All hand and power tools used in maintenance of all jobs as assigned daily; in the maintenance of all equipment and vehicles; and during all construction projects.
- ✓ Reusable equipment shall be scrubbed to remove all debris from surfaces immediately following contamination by the person using said equipment.
- ✓ All said equipment will be sterilized using cold sterile solutions prepared to appropriate dilution as recommended for control of HBV.
- ✓ Contaminated item(s) will be handled as appropriate for disposal.

### **Hand Washing**

**All employees** having direct contact with blood or O.P.I.M. (Other Potentially Infectious Materials) shall wash hands using warm water and soap before, when anticipated, but **always** after contact with blood or O.P.I.M. If such facilities are unavailable, alcohol foams or antiseptic towelettes may be used.



Employees shall immediately remove and dispose of gloves in appropriate segregated waste receptacles.

Where exposure may occur in order to prevent contamination from spreading to other work areas:

- ◆ Employees shall immediately and thoroughly wash hands and other exposed skin surfaces after removal of gloves using warm water and soap. The City of DuPont encourages all employees to regularly wash their hands as a means of controlling the spread of infectious diseases.
- ◆ These procedures shall also be followed after removal of other personal protective equipment following accidental exposure to blood or body fluids.
- ◆ Reusable personal protective equipment shall be rinsed and sterilized per the recommendations set forth by the manufacturer.

## **BLOODBORNE PATHOGENS *continued***

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### **Personal Protective Equipment**

#### **Public Works Department**

The City of DuPont will provide and maintain, in a sanitary and reliable condition, necessary personal protective equipment which is relevant to the procedures and job functions of the various employees. Employees are required to use appropriate protective equipment for the task they are performing, except in those extraordinary circumstances when such use would, in the employee's professional judgment, prevent the service from being provided. In such cases the incident shall be investigated and documented in order to determine if changes can be instituted to prevent such occurrences.

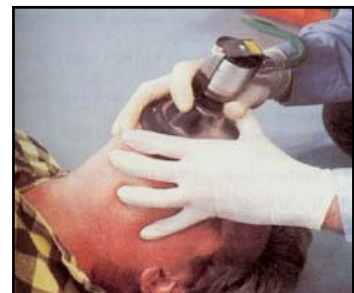
The use of **gloves** is indicated and must be worn:

1. For all emergency response care which involves potential exposure to blood or body fluids, particularly if the employee has cuts, abraded skin, chapped hands, dermatitis, or other non-intact skin.
2. During all decontamination procedures involving clean up of blood or body fluids.
3. When scrubbing equipment contaminated with blood or body fluids prior to sterilization.
  - ◆ Gloves shall be of appropriate quality and material and shall comply with the standards of safety for the procedure performed. A sufficient quantity and appropriate size for each employee will be supplied by the City.
  - ◆ Hypo-allergenic gloves, glove liners, powderless gloves or similar alternatives will be made available to those employees who are allergic to the gloves normally provided.
  - ◆ Gloves shall be single-use and shall be disposed of immediately following each contaminant contact or procedure.

**Masks and Eye Protectors** are to be available and are required to be used:

- ◆ When contamination of mucosal membranes (eye, nose, or mouth) with body fluids is likely to occur.

**Resuscitation equipment** is provided to minimize the need for mouth-to-mouth resuscitation and shall be easily accessible in the event resuscitation is necessary. Mouth suctioning of blood or other potentially infectious material is prohibited.





## **BLOOD BORNE PATHOGENS *continued***

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All contaminated personal protective equipment must be removed from vehicles or work stations, cleaned or disposed of in the appropriate area or container prior to leaving the work area.

New or cleaned personal protective equipment will also be installed to replace contaminated equipment. This will be the responsibility of the employee who used the equipment. Failure to replace/restock used materials will make the employee (s) subject to disciplinary action.

### **Housekeeping**

A cleaning schedule for equipment with or areas will be established and maintained. The following guidelines will be followed until such time as procedures or policies require an appropriate update.

1. All equipment and surfaces shall be cleaned as soon as practical after any contamination by blood or other potentially infectious material. Under no circumstances will this be left for other officers/employees to do. It is the responsibility of the officer/employee who contaminated the area.
2. Protective coverings used to cover equipment are to be removed, cleaned, or replaced as soon as feasible after being contaminated.
3. All bins, cans, or other receptacles which will be reused and which may be contaminated are to be emptied, cleaned, and decontaminated at the end of each work shift.
4. Broken glass which may be contaminated is not to be picked up by hand, but cleaned up or picked up by using a broom and dust pan, tongs, or forceps.
5. Reusable sharps are, after use, to be placed in the appropriate labeled container. Officers/Employees shall not reach into such containers with their hands, but must place and retrieve used, and presumably contaminated, sharps with tongs or forceps.



### **Regulated waste (disposable sharps)**

Contaminated sharps shall be discarded immediately after they are located or used, or as soon as feasible, in appropriate containers. This presumes that there is no compelling need to retain the item for evidentiary purposes. Appropriate containers, whether for disposal or evidence, are described as follows:

- ◆ Closable
- ◆ Puncture resistant
- ◆ Leak-proof on sides and bottoms
- ◆ Appropriately labeled
- ◆ Maintained upright
- ◆ Emptied or replaced daily or whenever 2/3 full, except evidence containers

## **BLOODBORNE PATHOGENS *continued***

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When moving containers containing contaminated sharps, care should be taken to assure the container is closed to prevent spillage or protrusion of contents.

In the event of leakage or protrusion, the container is to be placed in a secondary container which must also be closable, puncture resistant, and leak-proof.

### **Other Regulated Waste includes:**

- ◆ Liquid or semi-liquid blood or other infectious materials.
- ◆ Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed.
- ◆ Items caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling.
- ◆ Contaminated sharps.
- ◆ Pathological and microbiological wastes containing blood or other potentially infectious materials.



Such regulated waste must be placed in the appropriate, labeled containers. Containers must meet the following specifications:

- ◆ Closable
- ◆ Able to prevent leakage during handling, storage, or transport
- ◆ Appropriately labeled

Containers must be closed prior to removal to prevent leaks. If outside contamination of a container occurs, the container is to be placed in a secondary container which is also closable, able to prevent leakage, and appropriately labeled.

### **Disposal Of Regulated Waste**

At the end of each day, remove waste from vehicles and other work areas and place in an appropriate waste receptacle lined with a red, leak-proof plastic bag, and store in the appropriate location for pick-up and disposal by an outside contractor. Such independent contractors will be responsible for the training of their employees regarding the identification, segregation, and disposal of infectious waste.

### **Signs And Labeling**



Warning labels shall be affixed to all containers of regulated waste, laundry, sharps containers, disposable personal protection equipment, refrigerators, or freezers containing blood or other potentially infectious material, and containers used to store or transport blood or potentially infectious materials.

## **BLOODBORNE PATHOGENS *continued***

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Warning labels will include the preceding symbol and will be florescent orange or orange-red, or predominantly so, with lettering and symbol in a contrasting color. Warning labels will be affixed to containers by string, wire, or adhesive in order to prevent their unintentional removal.

Note: Red containers may be substituted for labels. Red bags will be used for contaminated laundry and non-sharp regulated waste.

### **Education And Training Of Employees**

All employees whose job functions involve the risk of exposure to blood or body fluids shall receive appropriate education and training prior to the commencement of their duties and annually thereafter. Such education and training shall, at a minimum, include:

- ◆ A copy of the regulation and an explanation of its contents.
- ◆ A general explanation of the epidemiology and symptoms of blood borne diseases.
- ◆ An explanation of the modes of transmission of bloodborne pathogens.
- ◆ An explanation of exposure control plan and means by which the employee can obtain a copy of the written plan.
- ◆ An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood or other potentially infectious materials.
- ◆ An explanation of the use and limitations of methods that will prevent or reduce exposure, including work practices and personal protective equipment.
- ◆ Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.
- ◆ An explanation of the basis for selecting personal protective equipment.
- ◆ Information on the Hepatitis B vaccine, including information on its efficacy, safety, method of administration, benefits of being vaccinated, and that the vaccine will be offered free of charge.
- ◆ Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
- ◆ An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- ◆ Information on the post-exposure evaluation and follow-up that the employer is required to provide.
- ◆ An explanation of the signs and labels and/or color-coding used by the employer.
- ◆ An opportunity for interactive questions and answers with the persons conducting the training sessions.

## **BLOODBORNE PATHOGENS *continued***

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Additional training will be provided when new tasks or procedures involving potential exposure are instituted.

Records of training sessions will be maintained for three (3) years. Such records will include:

1. The date of training.
2. A summary of the content of training.
3. The names and qualifications of person(s) conducting the training session.
4. The names and job titles of all persons attending the training session.



### **Medical Records**

A medical record for each employee whose duties include potential occupational exposure will be maintained by the City of DuPont. These records will include:

1. The name and social security number of the employee.
2. A copy of the employee's HBV vaccination status including the dates of vaccination and any medical records regarding the employee's ability to receive the vaccination.
3. A copy of all opinions, examinations, testing, and follow-up involving post-exposure incidents.
4. A copy of any information provided to any other healthcare professional regarding possible exposure.

Such records will be kept confidential and will not be disclosed to any person, except as required by law, without the express written consent of the employee. Such records will be maintained for thirty (30) years beyond the duration of the employment.

In the event the City of DuPont ceases to do business and there is no successor employer to transfer the records to, the City of DuPont will notify the Department of Labor and Industries at least three (3) months prior to the disposal, and will transfer them to the Department, if requested to do so.

### **Procedures In The Event Of Personal Exposure**

All employees are required to use the following procedures in the event of exposure to possibly infectious blood or body fluids:

- ◆ **Needle Stick/Cut:** Milk the exposure to express blood and clean the wound vigorously with soap and water for at least 10-15 seconds using friction.
- ◆ **Mucosal Splash:** For a mucosal splash to eyes, nose, or mouth, flush or rinse with saline or water. For a mucosal splash to the skin or contamination of open wound, wash with soap and water. Shower and change clothes if necessary.

## **BLOODBORNE PATHOGENS** *continued*

---

- ◆ **Blood Splash/Contact:** For blood splash to mucosal tissues follow mucosal splash guideline above. For blood splash or contact to chapped, abraded, cut or broken skin, wash with soap and water and again remove contaminated clothing as soon as possible.

For any other contact with blood or body fluids to skin surfaces, wash with soap and water immediately, or antiseptic wipes when wash facilities are not available. Remove contaminated clothing, shower and, if continued contamination is anticipated, put on appropriate personal protective equipment.

**Reporting:** Report all needle sticks, mucosal splashes, and contamination of open wounds with blood and/or body fluids to your immediate senior supervisor.

## ERGONOMICS

---

### What is Ergonomics?

Ergonomics is the scientific study of human work. It considers the physical, behavioral and mental capabilities and the limitations of the worker as they interact with tools, equipment, work methods, tasks, and work environment.

### Purpose

- ◆ Reduce the physical stress associated with a given job.
- ◆ Increase the comfort, health, and safety of the work environment.
- ◆ Increase productivity.
- ◆ Reduce human errors associated with a task.
- ◆ Improve quality of work life.

### Goal

- ◆ *Ergonomics* is a way to work smarter—not harder
- ◆ Fits the job to the worker - **Not** the worker to the job!

### Musculoskeletal Disorders caused by Cumulative Trauma

- ◆ Carpal Tunnel Syndrome
- ◆ Tendonitis-forearm to hand
- ◆ Epicondylitis-elbow
- ◆ Rotator Cuff Syndrome-shoulder

In order to prevent Cumulative Trauma Disorders (CTD's) to the musculoskeletal system, we must first understand their causal factors. Identifying the causes of CTD's is challenging because no one single causative factor will lead to a CTD by itself. It is the interaction of several risk factors over time that may lead to a CTD. These risk factors include:



1. Awkward Posture: Postures that are not our normal standing and sitting posture. Examples include: bending, twisting, turning, long-arm reaching, cradling the neck with the telephone.



2. Force: Gripping, grasping, and pinching activities such as picking up large file folders or stapling.



3. High Repetition: Movements over and over again with hand, arm, or shoulder. Frequency and duration are risk factors.

4. Contact/Mechanical Stress: Direct pressure on nerves – soft tissues of our body coming in contact with something that is hard, sharp or rough. (Ex. No padding with the keyboard and mouse.)

5. Static Load: Keeping muscles in one place for long periods of time. (Ex. Sitting or using the mouse for long periods of time without moving.)

## ERGONOMICS *continued*

6. Vibration: Using tools such as jackhammers.
7. Temperature Extremes: Heat and cold

### Symptoms to look for and report to your Supervisor:

- ◆ Pain, numbness and tingling in the thumb and first 3 fingers or last 2 fingers.
  - ◆ Shaking your hand to get the feeling back
- ◆ Weakness in the hand
  - ◆ Pain and discomfort in wrist
  - ◆ Pain going up to elbow or shoulder
  - ◆ Clumsy feeling in affected hand



### Workstation Design

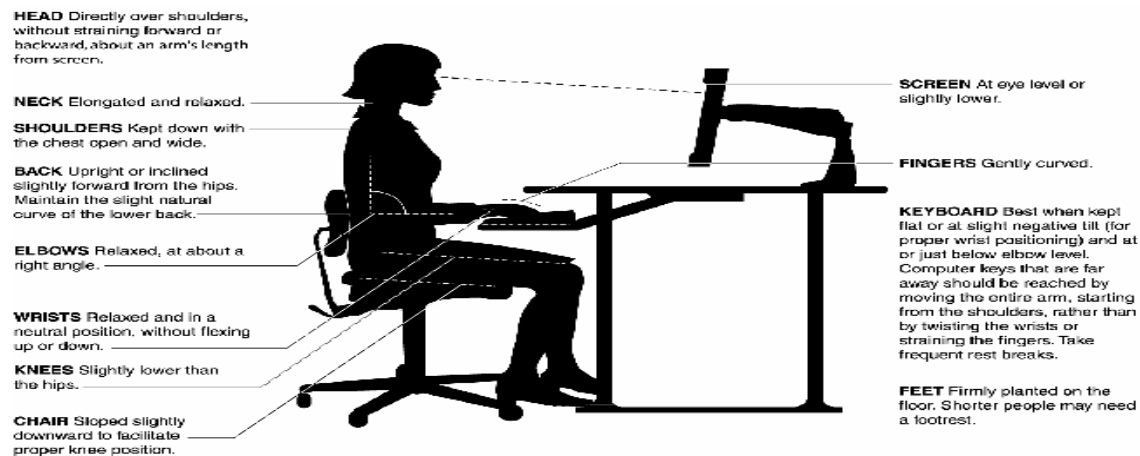
Use the following guidelines to assist in setting up your workstation to reduce CTD risk factors:

#### Keyboard

- ◆ Shoulders should be relaxed with arms hanging comfortably by sides.
- ◆ Bend at the elbows so that the arm is in a 90-degree angle and elbows are at waist.
- ◆ Forearms come straight out with palms hovering over thighs. Wrists are flat. Position keyboard and or tray under palms.
- ◆ Use padded articulating tray large enough to accommodate both keyboard and mouse.

Figure 1

#### Optimum Neutral Posture for Seated Computer Operators





## **ERGONOMICS *continued***

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### **Mouse**

- ◆ Should be located next to and at the same level as the keyboard.
- ◆ Use padded foam wrist supports for mouse and keyboard to elevate wrists to neutral and eliminate contact with hard surfaces.



### **Chair**



- ◆ Sit all the way back in the chair to allow weight distribution on buttocks, not thighs.
- ◆ Hips and knees should be level and positioned in a 90-degree angle.
- ◆ Feet flat on the floor or footrest.
- ◆ Backrest is upright with lumbar support at small of back, head aligned over shoulders.

### **Monitor**

- ◆ Monitor should sit “straight on” to employee – not at an angle.
- ◆ Top of monitor screen should be at eye level or just below (except if wearing bifocals, the monitor can be lower).
- ◆ Optimum viewing distance is 20 to 30 inches.
- ◆ Minimize glare by placing screen at right angles to light source, using anti-glare screen, or adjusting the screen angle.



### **Telephone**



- ◆ Telephone “neck holder” devices that encourage awkward neck and shoulder posture while on the phone should be removed and eliminated.
- ◆ Place telephone within easy reach to eliminate long arm reaching.

### **Document Holders**

- ◆ Recommended for copy-intensive work.
- ◆ The holder should be placed at the same level as the monitor screen.

### **Shelves**

- ◆ Frequently used items located in shelving above shoulder height should be moved down below shoulder height.
- ◆ Use a “two-handed” lift when lifting large 3-ring binders.

### **Stretch Breaks and Micro-Pauses**

- ◆ Incorporate preventative stretch and exercise breaks from constant keying every hour.
- ◆ Change from static positions every 30 minutes to help reduce neck and lower back strain.



## OUTDOOR HEAT EXPOSURE (WAC 296-62-095)

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Each year prior to the month of May, all employees working who are exposed to extreme heat at or above Table 1 of the regulation will be provided training on signs and symptoms of outdoor heat exposure and ways to prevent heat-related illnesses. When new employees are hired during the summer months, training will be provided prior to the new employee working in the outdoor environment. This training requirement is only in effect during the months of May through September each year.

**Table 1: OUTDOOR TEMPERATURE ACTION LEVELS**

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

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

Training on Outdoor Heat Exposure will include the following:

1. Environmental factors that contribute to the risk of heat-related illness.
2. General awareness of personal factors that may increase susceptibility to heat-related illness including, but not limited to, an individual's age, degree of acclimatization, medical conditions, drinking water consumption, alcohol and caffeine use, nicotine use, and use of medications that affect the body's responses to heat.
3. The importance of removing heat-retaining personal protective equipment such as non-breathable chemical resistant clothing during all breaks;
4. Importance of frequent consumption of small quantities of drinking water or other acceptable beverages;
5. Importance of acclimatization;
6. The different types of heat-related illness and common signs and symptoms of heat-related illness;
7. Importance of immediately reporting signs or symptoms of heat-related illness and procedures the employee must following including appropriate emergency response procedures.

## **SECTION 3**

## **MATERIAL HANDLING & LIFTING**

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### **MATERIAL HANDLING**

Material handling is defined as using any part of the body to lift, move, push, pull, retrieve, carry, or climb with any materials such as people, inventory, merchandise, tools, raw materials, or supplies found in the work environment. Overexertion can cause sprain/strain injuries to our musculoskeletal system causing pain and discomfort. Other factors to consider that can contribute in causing these injuries are:

- |   |  |
|---|--|
| 1. Poor physical fitness                            | 5. Lack of rest  |
| 2. Lack of flexibility                              | 6. Poor back support when sleeping                         |
| 3. Participation in certain recreational activities | 7. Poor posture when sitting and standing for long periods |
| 4. Emotional stress                                 |  |

You as an employee have the greater control of these factors and should be considered in your overall health concerns.

As your employer, the City of DuPont will focus on factors that can be controlled in the workplace and implement engineering, administrative or training controls to eliminate or reduce hazards on the job that can contribute to musculoskeletal injuries.

### **Priorities for Risk Control**

1. Eliminate need for manual materials handling by using mechanical aids such as:
 

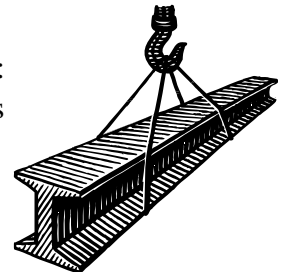
♦ Lift tables	♦ Drum and barrel dumpers
♦ Lift trucks	♦ Conveyors
♦ Hoists and cranes	
2. Change work area layout by:
 

♦ Changing height of work level.	♦ Decreasing vertical distance load travels.
♦ Changing worker level.	♦ Limiting stacking heights to shoulder height.
♦ Providing all material at work level.	♦ Keeping heavy objects at knuckle height.
♦ Minimizing horizontal distance between operator and load.	
3. Decrease job demands by decreasing object weight by:
 

♦ Assigning the job to 2 or more persons.	♦ Reducing container weight.
♦ Distributing the load into 2 or more containers.	♦ Reducing hand force.
4. Change type of manual materials handling activity by:
 

♦ Changing from lifting to lowering.	♦ Changing from pulling to pushing.
♦ Changing from carrying to pulling.	
5. Maximize time to perform job by:
 

♦ Reducing frequency of activities.	♦ Utilizing job rotation
♦ Incorporating work/rest schedules.	



## **MATERIAL HANDLING & LIFTING *continued***

### **LIFTING**

Lifting is one of the most dangerous activities for the spine. The neutral position **MUST** be used to reduce the risk of injury. Lifting in a neutral position allows the larger and more powerful leg muscles to do the lifting.

1. Avoid manual lifting whenever possible. Manual lifting is one of the most common causes of workplace injury. If you are doing manual lifting, you are at risk for injury. Use mechanical means when possible.
2. The closer the object, the easier it is to lift.
3. Avoid twisting as you lift to help keep your back strong and free from injury.
4. Use lifting handles whenever possible.
5. Good firm footing is a must.

#### **How to lift properly**

1. Squat down close to the object; maintain a natural curve of back.
2. Test the weight of the object by lifting or tilting a corner.
3. If the object is too heavy:
  - ◆ Divide into smaller loads.
  - ◆ Get someone to help.
  - ◆ Use a mechanical device.
4. Grasp object firmly.
5. Keeping the object close in, lift it while straightening the legs and tightening the stomach and buttock muscles.
6. Never twist or jerk the body.
7. Avoid lifting to the side.
8. Avoid overextending and reaching too far.



#### **How to carry an object**

1. Select a clear route of travel and maintain an awareness of surface conditions.
2. Keep a firm grip on the object and carry it close to the body.
3. Do not allow the load to obstruct your view.
4. Do not twist the body; change direction by moving the feet.

#### **How to set an object down:**

1. Face the spot where the object is to be placed.
2. Squat down; maintain a natural curve of back.
3. Lower object, first on to one corner or onto a support to avoid finger injuries.
4. Lower the object into final position keeping fingers out of the way.



## HOUSEKEEPING PROCEDURES (WAC 296-800-220)

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Close attention to good housekeeping and office safety encourages teamwork, prevents accidents and creates a wholesome and productive work environment.



Good housekeeping is one of the most important factors in maintaining a safe job. Numerous workers in the industry are injured each year because they trip, stumble or step on objects that are in their way. These accidents are often blamed on the worker's carelessness in not looking where they are going. Actually, these accidents are the direct result of poor housekeeping. When you see something lying around stop and take the time to put it in its proper place. Don't wait for someone else to do it, even though they may be the one who left it there.

- ◆ Report all injuries, regardless of severity to your supervisor within 24 hours.
- ◆ Walk cautiously up and down stairs; use the handrail whenever possible.
- ◆ Use caution when opening a door onto a stairwell and walking past doors in stairwells.
- ◆ Keep floors, landings, and stairs free of debris.
- ◆ Close drawers of desks and file cabinets when not in use.
- ◆ Boxes, chairs, etc., shall not be used in place of ladders.
- ◆ Keep the floor free of tripping hazards such as telephone cords, electric extension cords, and paper cartons.
- ◆ Store material on shelves in a manner to prevent falling; heavy objects should be placed on lower shelves.
- ◆ Report unsafe electrical cords, faulty electrical or other equipment, or any other hazardous condition promptly to your supervisor.



## SLIPS, TRIPS, and FALLS

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Slips, trips and falls are a leading cause of accidents in the workplace. Injuries can occur anywhere at any time. Surfaces such as asphalt, sidewalks, wooden, tiled, or carpet-covered floors, special surfaces on stairs and conveyances (moving sidewalks, escalators, and elevators) can present serious tripping, slipping, or falling hazards.

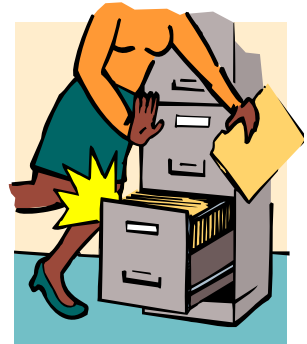
Walking surfaces can change substantially when people track in mud, snow, dirt, and moisture. Outside weather conditions can often produce wet and slick surfaces. Holes in asphalt or unexpected obstructions in sidewalks can be a potential cause for injury. Torn or curled-up carpet or floor coverings are other areas of concern. Liquid spills in bathrooms, coffee shops, lunch rooms, etc., can be unseen or undetected.

### Guidelines

- ◆ Be aware of floor surfaces. Look at path of travel for obstacles.
- ◆ Clean up spills, even if you didn't do it.
- ◆ Wear appropriate shoes in adverse weather conditions (no heels on ice or slick surfaces).
- ◆ Report any hazards.

Poor housekeeping is another cause for slips, trips, and falls. Open drawers, boxes in aisles, extension/computer cords, debris or objects, or cramped and crowded spaces are some examples of this.

- ◆ Keep drawers closed when not in use. Open one at a time.
- ◆ Pick up after yourself. Everything should be put away after it is used.
- ◆ Avoid using extension cords.
- ◆ Report hazards.



Inadequate illumination can contribute to slips, trips, and falls. Light values at floor level should be uniform with no glare or shadows. There should be no violent contrasts in light levels between floor areas.

- ◆ Report areas where lighting has gone out and bulbs need replacing to your supervisor or maintenance.

Other factors causing slips, trips and falls include:

- |                          |  |
|--------------------------|--|
| ◆ Person's age           | ◆ Fatigue                              |
| ◆ Illness                | ◆ Lack of familiarity with environment |
| ◆ Emotional disturbances | ◆ Poor vision                          |

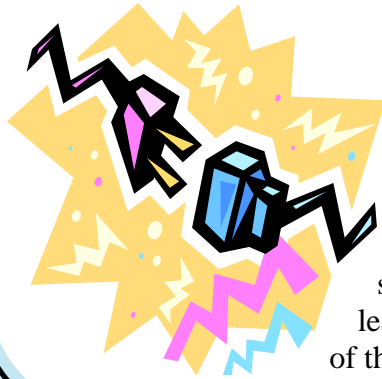
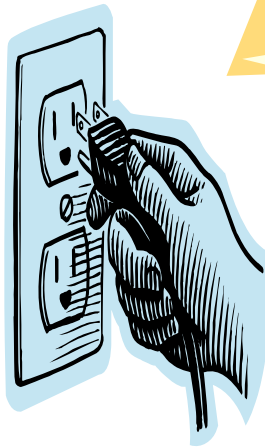
## ELECTRICAL HAZARDS (WAC 296-800-280)

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The easiest way to reduce the possibility of electrocution is to:

- ◆ Use Ground Fault Circuit Interrupter (GFCI)
- ◆ Make sure extension cords are not frayed.
- ◆ Make sure equipment is grounded.
- ◆ Receptacles are mounted and secured.
- ◆ Panel boxes are covered.
- ◆ Do not use extension cords to suspend lighting.
- ◆ Do not use extension cords as permanent wiring.

### What is a



### GFCI?

GFCI is a fast acting circuit breaker which senses small imbalances in the circuit caused by current leakage to ground and, in a fraction of a second, shuts off the electricity.

The GFCI continually matches the amount of current going to an electrical device against the amount of current returning from the device along the electrical path. Whenever the amount going differs from the amount returning by approximately 5 milliamps, the GFCI interrupts the electrical power within as little as 1/40 of a second.

Why does the GFCI cut the flow at 5 milliamps? It only takes 100 milliamps to kill a person.

## **LADDER SAFETY (WAC 296-876)**

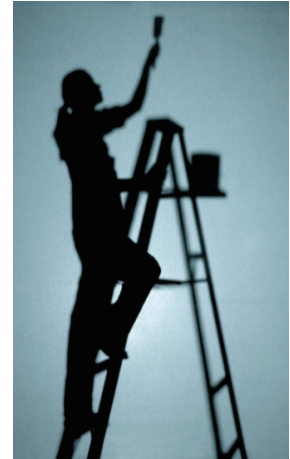
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Supervision is responsible to assure that all ladders used in their assigned area are regularly inspected and that defective ladders are replaced or repaired.

Purchasing department shall insure that all ladders purchased meet the specifications of the ANSI codes for metal or fiberglass ladders.

### **Placement**

1. All ladders must be fully secured before being climbed. Portable ladders shall be equipped with safety feet or with sharp spurs. When necessary, ladders will be securely lashed at the top and or bottom. When appropriate, safety hooks will be utilized to secure ladders at top.
2. Only ladders of proper length shall be used. Any alteration to a ladder is strictly prohibited.
3. Step ladders shall be fully opened and locked in place during use.
4. Ladder placement shall be so positioned that for every 4 feet of height, the base will be located 1 foot away from the vertical plain. This ratio is 4 to 1, or 25% of the total height.
5. Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.
6. When a ladder is being used in an open traffic area, or where there is a danger of it being knocked over, a workman shall be stationed at the foot of the ladder.
7. Ladders shall not be used in a horizontal position as a platform, runway, scaffold, or any other purpose except that for which they were designed.
8. Rubber safety feet are recommended for hard surfaces such as wood or concrete. Safety spurs will be used on soft surfaces.
9. No ladder shall be used to gain access to a roof unless the top of the ladder extends at least 3 feet above the point of support.
10. Fixed ladders erected in areas in which a stairway cannot be constructed must be of steel. When fixed ladders exceed 20 feet in height, a cage or basket guard (beginning not more than 8 feet above grade) shall be provided. The ladder must have a minimum front clearance of 6 1/2-inches, and a minimum side clearance of 15-inches measured from the centerline. Side rails on permanent ladders should extend 3 ft. 6in. above landings.



### **Climbing Ladders**

1. Examine ladders before each use. If broken, cracked, or defective in any way, the ladder shall be tagged for immediate repair or destruction and removed from work area.
2. Face ladder when climbing up or down.
3. Use rungs for climbing and descending, not side rails.
2. Keep body centered between side rails; move the ladder as needed. Don't reach.
4. Do not slide down, jump off, or run on a ladder.



## LADDER SAFETY *continued*

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5. Keep hands free while climbing ladders. Carry small objects in pockets or on belts; use hand lines for larger items.
6. Before climbing a ladder, make sure it is clean, free of grease, oil, mud, snow, or other slippery material. Keep your shoes clean.
7. When working from a stepladder over five feet high, a workman shall not stand on a step higher than the third step from the top of the stepladder.
8. Do not climb higher than the third rung from the top on straight or extension ladders or the second tread from the top of stepladders.
9. Do not climb a ladder already occupied by another person.
10. Hook safety chains onto elevated platforms that have more than one access. Chains may be unhooked on unoccupied platforms having only one access.
11. No type of work shall be performed on a ladder over 25 feet from the ground that requires the use of both hands to perform the work, unless a safety harness is worn and the safety lanyard is secured to the ladder.
12. Any work that requires eye protection, respirators, or handling of pressure equipment, shall not be performed from a ladder more than twenty-five feet above the surrounding surface.



These are NOT  
ladders!



This is a ladder!



## HAND TOOLS – CARE & USE

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### **Use the right tool for the right job. Common types of Hand Tools:**

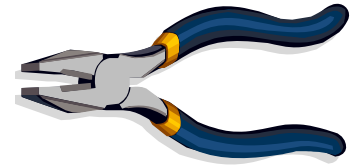
- ◆ Wrenches: open, pipe, socket
- ◆ Impact: drift pins, chisels, wedges
- ◆ Hammers
- ◆ Screw drivers



- ◆ Cutting: knives, axes, saws machetes
- ◆ Shovels
- ◆ Rakes
- ◆ Hoes

### **Inspection and Use Guidelines:**

- ◆ Maintain in serviceable condition.
- ◆ Check handles for cracks, splinters, and taped repairs.
- ◆ Wear proper PPE.
- ◆ Do not carry sharp-edged tools in pockets.
- ◆ Keep sharp-edge tools sharp.
- ◆ Cut away from body.



### **Wrenches:**

- ◆ Must not be used if sprung or worn to the point that slippage occurs.

### **Impact:**

- ◆ Keep free of mushroomed heads.

### **Axes:**

- ◆ Must be sharp.
- ◆ Check head for burrs or deep grooves.
- ◆ Head securely fastened to handle; when in doubt insert a wedge.
- ◆ Check handles for cracks, splinters, and taped repairs.

### **Saws:**

- ◆ Make sure saw body is straight.
- ◆ Inspect for sharpness and missing teeth.
- ◆ Check handles for cracks and that the blade is securely attached.



### **Knives:**

- ◆ Must be sharp.
- ◆ No burrs or nicks.
- ◆ Cut away from body.
- ◆ Never cut on items held between the knees or legs.

## POWER TOOLS (WAC 298-807)

---

### General:

- ◆ All rotating shafts, spindle, belts, fittings, and other projections must be guarded.
- ◆ Machinery intended for stationary use must be secured from tipping over.



### Common Types of Power Tools

- ◆ Electric power operated tools, drills, saws, grinders
  - ✓ Must be double insulated or grounded.
  - ✓ Do not hoist or lower using the electric cords.
  - ✓ Inspect cords and connections; if damaged, have them replaced.
  - ✓ All power saws shall have guarding to protect the operator from contact with moving saw teeth.
  - ✓ Use retractable guards when possible.

### Pneumatic Power Tools



- ◆ Secure tool hose by whip check.
- ◆ Connections to be clipped.
- ◆ Do not exceed the manufacturer's safe operating pressure.
- ◆ All hoses exceeding ½" I.D. shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.
- ◆ On nailers and staplers operating at over 100 psi, a safety device is required to prevent firing unless muzzle is in contact with work surface.
- ◆ When cleaning with compressed air, 30 psi is maximum pressure and then only with PPE and chip guarding.
- ◆ Inspect all hoses and fittings; if damaged, have them replaced.



### Abrasive Wheels

- ◆ Guards must be in place.
- ◆ Ring test prior to use.
- ◆ Use safety glasses and face shield.
- ◆ Must have safety guards that expose only the proper amount of wheel surface.

### Bench Grinders

- ◆ Tool rest with 1/8" of grinding wheel     ◆ Tongue guard with ¼" of grinding wheel

## MOTOR VEHICLE DRIVING

---

Driving is the primary mode of travel for 90% of all licensed persons 16 years and older. It is an activity that most people enjoy and one that must be correctly learned and properly practiced if injury is to be prevented.

Each year, nearly one driver in eight is involved in a reportable crash. Only 10 percent of drivers recognize this statistic. Thirty percent believe their chances of a collision are one in a thousand. As a result, most drivers let their guard down when they're behind the wheel and aren't aware of conditions that can lead to crashes.

As a City employee, commuting to work, carpooling, driving a City owned vehicle or other work-related driving task, we want you to arrive to work and home safely. Lack of awareness is a major factor in traffic crashes and many drivers do not relate "risk" to driving. Managing risk when you drive involves controlling visibility, time, and space, and being aware of the amount of traction available.

The following are guidelines that can help you assess conditions more accurately, predict the actions of other roadway users, and make decisions with a more realistic concept of the consequences.

### 1. Inspect The Vehicle:

- ◆ Walk around and inspect outside before entering.
- ◆ Check tires for proper inflation.
- ◆ Check oil/gas levels.
- ◆ Check mirrors for proper alignment.
- ◆ Make sure lights, signals, windshield wipers and instruments are working properly.

### 2. Develop Visual Habits:

- ◆ Concentrate on path of travel.
- ◆ Look well ahead.
- ◆ Scan the scene constantly.
- ◆ Look through rear window and turn head while backing up.
- ◆ Be aware of signs, signals and roadway markings.
- ◆ Look for pedestrians, bicycles, obstructions.

### 3. Time And Space Considerations:

- ◆ Maintain 2-3 second following distance behind other vehicles.
- ◆ Allow 2 seconds distance to the rear.
- ◆ Allow at least one car width of space to one side.
- ◆ Adjust speed for road, traffic, sight or weather conditions.

✓ The number one cause for Workplace fatalities in the United States is motor vehicle accidents.

✓ Driving is the single most dangerous activity people engage in on a daily basis.

✓ One American dies every 11 minutes in a motor vehicle accident.

## **MOTOR VEHICLE DRIVING *continued***

---

### **4. Communication With Other Drivers:**

- ◆ Use proper turn/hazard/brake signals.
- ◆ Position car to be seen.
- ◆ Turn lights on for safety.
- ◆ Use the horn to warn.
- ◆ Use appropriate body actions and gestures (eye-to-eye contact).



### **5. Adverse Driving Conditions And Emergencies:**



- ◆ Clear windshield, rear windows.
- ◆ Slow for adverse weather conditions.
- ◆ Pull off roadway and wait for rain or snow to ease, if needed.
- ◆ Use low beams and slow down for foggy conditions.
- ◆ Adjust speed for glare and reduced visibility for night driving.
- ◆ Pump brakes, shift to low gear, or use emergency brake if brakes fail.
- ◆ Avoid driving around bedtime or for long periods of time.
- ◆ Firmly hold the steering wheel and steer straight if a blowout occurs.

### **6. Obey Laws/Safety Precautions:**

- ◆ Wear seatbelts (all passengers over 5 years old).
- ◆ Obey child restraint laws.
- ◆ Lock doors.
- ◆ Don't drink or abuse drugs and drive.
- ◆ Don't drive while fatigued. Stop and rest.
- ◆ Don't drive while emotionally or mentally upset.
- ◆ Pull over for emergency vehicles.
- ◆ Obey construction site rules/signs.
- ◆ Adhere to speed limits.
- ◆ Do not use cell phones while driving.



## **VEHICLE ACCIDENT REPORTING PROCEDURES**

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1. Stop immediately to investigate.
2. Protect the scene of the accident to prevent further injury or damage.
3. Call 911
4. Render assistance to injured parties.
5. Report the accident to your supervisor immediately.
6. Fill out the Accident Report at the scene.
7. Return completed forms to your immediate supervisor within one business day following the accident.

### **Insert Vehicle Accident Report Form**

**(Copies of this form should be kept in every City Vehicle)**



## **VIOLENCE IN THE WORKPLACE**

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Violence in the workplace causes a significant number of workplace fatalities and injuries throughout the United States. Every week, about 20 workers are murdered in the United States. Workplace fatality data shows that assaults and other violent acts are among the leading causes of work-related deaths in a number of states. For women, violence is the leading cause of workplace fatalities in the United States.

The following types of violence illustrate different characteristics of workplace violence and ways violence may present itself. Each involves different risk factors and means of preventing or responding to the potential violent incident.

1. Violence by strangers
2. Violence by customers or clients
3. Violence by co-workers
4. Violence by personal relations

The City of DuPont is concerned and committed to employees' safety and health. The City refuses to tolerate violence in the workplace and will make every effort to prevent violent incidents from occurring by implementing a Workplace Violence Prevention Program (WVPP).

All managers, supervisors and employees are responsible for implementing and maintaining our WVPP Program. We require prompt and accurate reporting of all violent incidents, whether or not physical injury has occurred.

Our program will ensure all employees adhere to work practices that are designed to make the workplace more secure, and do not engage in verbal threats or physical actions which create a security hazard for others in the workplace. It includes:

- ◆ Informing all employees about the WVPP.
- ◆ Evaluating workplace security measures.
- ◆ Recognition of workplace security hazards and risk factors associated with the four types of violence.
- ◆ Providing training and/or counseling to employees who need to improve work practices to ensure workplace security.
- ◆ Disciplining employees for failure to comply with established practices.
- ◆ Providing training designed to address specific aspects of workplace security unique to our establishment.
- ◆ Posting or distributing workplace security information.
- ◆ Providing a system for employees to inform management about hazards or threats of violence.
- ◆ Establishing procedures for protecting employees who report threats from retaliation.
- ◆ Complying with all Federal and State record keeping requirements.
- ◆ Conducting periodic inspections to identify and evaluate workplace security hazards and threats of workplace violence assessing all four types of violence listed above.
- ◆ Annual reviewing and evaluating program safety and security measures.

## **SAFETY TRAINING**

---

Safety training will be provided for all employees as an essential part of implementing the Accident Prevention Program. This training is conducted for new employees before they begin working at our establishment and on-going for staff as needed and appropriate. Safety Trainings may include:

- ◆ Ergonomics
- ◆ Material Handling
- ◆ Outdoor Heat Exposure
- ◆ First Aid/CPR
- ◆ Hearing Conservation
- ◆ Personal Protective Equipment
- ◆ Hazardous Communication
- ◆ Electrical Hazards
- ◆ Bloodborne Pathogens
- ◆ Ladder
- ◆ Lock-out/Tag-out
- ◆ Confined Space
- ◆ Respiratory Protection
- ◆ Safe Lifting
- ◆ Emergency Preparedness
- ◆ Workplace Violence
- ◆ Fire Extinguishers
- ◆ Heavy Equipment
- ◆ Scaffolds
- ◆ Fall Protection



## **SECTION 4**

## APPENDICES

### Appendix

	Definitions
A-	Accident/Illness Report Form
B-	Accident Investigation Report form
C-	Modified Work Form
D-	Minutes/Agenda Form
E-	Job Hazard Analysis Assessment
F-	Exposure Incident Investigation Form
G-	Hepatitis B Declination Statement Form
H-	Hepatitis B Vaccination Record
I-	Employee Medical Record Checklist
J-	Needlestick/Sharps Exposure Log
K-	Post Exposure Evaluation & Follow-Up Checklist

## DEFINITIONS FOR THE PURPOSES OF THIS EXPOSURE CONTROL PLAN

<b>Antibody</b>	a substance produced in the blood of an individual which is capable of producing a specific immunity to a specific germ or virus.
<b>Amniotic Fluid</b>	the fluid surrounding the embryo in the mother's womb.
<b>Antigen</b>	any substance which stimulates the formation of an antibody
<b>Assistant Secretary</b>	the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.
<b>Biohazard Label</b>	a label affixed to containers of regulated waste, refrigerators/freezers and other containers used to store, transport or ship blood and other potentially infectious materials. The label must be fluorescent orange-red in color with the biohazard symbol and the word biohazard on the lower part of the label.
<b>Blood</b>	human blood, human blood components, and products made from human blood.
<b>Bloodborne Pathogens</b>	pathogenic (disease producing) microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV)
<b>Cerebrospinal Fluid</b>	a clear, colorless fluid surrounding the brain and spinal cord. It can be withdrawn by performing a spinal puncture.
<b>Clinical Laboratory</b>	a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.
<b>Contaminated</b>	the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.
<b>Contaminated Laundry</b>	laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.
<b>Contaminated Sharp</b>	any contaminated object that can penetrate the skin including, but not limited to needles, scalpels, broken glass, capillary tubes, and the exposed ends of dental wires.
<b>Decontamination</b>	the use of physical or chemical means to remove, inactivate, or destroy Bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

<b>Engineering Controls</b>	controls (i.e., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace.
<b>Exposure Control Plan</b>	a written program developed and implemented by the employer which sets forth procedures, engineering controls, personal protective equipment, work practices and other methods that are capable of protecting employees from exposures to bloodborne pathogens, and meets the requirements spelled out by the OSHA bloodborne Pathogens Standard.
<b>Exposure Determination</b>	how and when occupational exposure occurs and which job classifications and/or individuals are at risk of exposure without regard to the use of personal protective equipment.
<b>Exposure Incident</b>	a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
<b>Handwashing Facilities</b>	a facility providing an adequate supply of running potable water, soap and single use towels, medicated towelettes or hot air drying machines.
<b>HBV</b>	Hepatitis B Virus.
<b>HIV</b>	Human Immunodeficiency Virus.
<b>Licensed Health care Professional</b>	a person whose legally permitted scope and practice allows him or her to independently perform the activities required by paragraph (f) of the standard: hepatitis B vaccination and post exposure evaluation and follow-up. <b>(In Wisconsin only a licensed physician meets definition).</b>
<b>Medical Consultation</b>	a consultation which takes place between an employee and a licensed healthcare professional for the purpose of determining the employee's medical condition resulting from exposure to blood or other potentially infectious materials, as well as any further evaluation or treatment that is required.
<b>Mucus</b>	a thick liquid secreted by glands, such as those lining the nasal passages, the stomach and intestines, the vagina, etc.
<b>Mucous Membranes</b>	a surface membrane composed of cells which secrete various forms of mucus, as in the lining of the respiratory tract and the gastrointestinal tract, etc.
<b>Occupational Exposure</b>	a reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

<b>OSHA</b>	the Occupational Safety and Health Administration of the U.S. Department of Labor; the Federal agency with safety and health regulatory and enforcement authorities for most U.S. industry and business.
<b>Other Potentially Infectious Materials (OPIM)</b>	(1) the following human body fluids: semen, vaginal secretions, menstrual blood, vomit, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.
<b>Parenteral</b>	piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.
<b>Pathogen</b>	a bacteria or virus capable of causing infection or disease.
<b>Pericardial Fluid</b>	fluid from around the heart.
<b>Pericardium</b>	the sheath of tissue encasing the heart.
<b>Peritoneal Fluid</b>	the clear straw-colored serous fluid secreted by the cells of the peritoneum.
<b>Peritoneum</b>	the lining membrane of the abdominal (peritoneal) cavity. It is composed of a thin layer of cells.
<b>Personal Protective Equipment</b>	specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (i.e., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment. Personal protective equipment may include, but is not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection equipment, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membrane under nominal conditions of use and for the duration of time which the protective equipment is used.
<b>Pleural</b>	the membrane lining the chest cavity and covering the lungs. It is made up of a thin sheet of cells.
<b>Pleural Fluid</b>	fluid from the pleural cavity.

<b>Production Facility</b>	a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.
<b>Prophylaxis</b>	the measures carried out to prevent diseases.
<b>Regulated Waste</b>	liquid or semi-liquid blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.
<b>Research Laboratory</b>	a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.
<b>Serous Fluids</b>	liquids of the body, similar to blood serum, which are in part secreted by serous membranes.
<b>Source Individual</b>	any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.
<b>Sterilize</b>	the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.
<b>Synovial Fluid</b>	the clear amber fluid usually present in small quantities in a joint of the body (i.e., knee, elbow).
<b>Universal Precautions</b>	an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.
<b>Vascular</b>	pertaining to or composed of blood vessels
<b>Work Practice Controls</b>	controls that reduce the likelihood of exposure by altering the manner in which the task is performed.



**Appendix B**

**City of DuPont**  
**ACCIDENT INVESTIGATION REPORT**

EMPLOYEE NAME	DATE OF INJURY	TIME OF INJURY
DEPARTMENT	JOB TITLE	HOW LONG ON THIS JOB?
What happened? <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		Describe what took place or what caused you to make this investigation.
Why did it happen? <hr/> <hr/> <hr/> <hr/>		Get all the facts. Study the job and the situation. Ask WHY- WHAT-WHERE- WHO- HOW
What should be done? <hr/> <hr/> <hr/> <hr/>		Determine which people, equipment, and materials require additional attention
What have you done? What will you do? <hr/> <hr/> <hr/> <hr/>		Determine which people, equipment, and materials require additional attention
Was personal protective equipment needed?    Yes_____                      No_____		
Personal protective equipment available?    Yes_____                      No_____		
Corrective action to be taken for unsafe act (discipline, training, warning, etc)		
Is modified light duty available for this worker? If yes, describe:		
Investigated by:	Date	Reviewed by:                      Date



## Appendix C

# City of DuPont MODIFIED WORK FORM

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

Contact Phone: \_\_\_\_\_

**Section A (completed at site)**

Employee Name:	DOB:
Claim #:	Date of Injury/Illness:
Description of Injury:	
Treatment Given:	
I authorize the release of any relevant medical information/records related to my current medical condition to (your company) for the purpose of enabling them to develop a written rehabilitation plan to assist me in returning to work.	
Signature:	Date:

**Section B (completed by physician)**

<b>Walking/Standing:</b>	<input type="checkbox"/> Only short distances <input type="checkbox"/> No kneeling / squatting No more than <input type="checkbox"/> 2 hrs <input type="checkbox"/> 4 hrs <input type="checkbox"/> 6 hrs <input type="checkbox"/> 8 hrs <input type="checkbox"/> 10hrs					
<b>Lifting/Carrying:</b>	No more than <input type="checkbox"/> 2 hrs <input type="checkbox"/> 4 hrs <input type="checkbox"/> 6 hrs <input type="checkbox"/> 8 hrs <input type="checkbox"/> 10hrs No more than <input type="checkbox"/> 10 lbs <input type="checkbox"/> 20 lbs <input type="checkbox"/> 30 lbs <input type="checkbox"/> 40 lbs <input type="checkbox"/> 50 lbs					
<b>Pushing/Pulling:</b>	No more than <input type="checkbox"/> 2 hrs <input type="checkbox"/> 4 hrs <input type="checkbox"/> 6 hrs <input type="checkbox"/> 8 hrs <input type="checkbox"/> 10hrs No more than <input type="checkbox"/> 10 lbs <input type="checkbox"/> 20 lbs <input type="checkbox"/> 30 lbs <input type="checkbox"/> 40 lbs <input type="checkbox"/> 50 lbs					
<b>Manual Dexterity:</b>	<input type="checkbox"/> Left <input type="checkbox"/> Limited use of hand(s) <input type="checkbox"/> Right    No more than <input type="checkbox"/> 2 hrs	Not able to: <input type="checkbox"/> Write <input type="checkbox"/> Sort <input type="checkbox"/> 4 hrs <input type="checkbox"/> 6 hrs <input type="checkbox"/> 8 hrs <input type="checkbox"/> 10hrs				
<b>Repetitive Motion:</b>	<input type="checkbox"/> Left <input type="checkbox"/> Short periods <input type="checkbox"/> Right    No more than <input type="checkbox"/> 2 hrs	<input type="checkbox"/> Self paced <input type="checkbox"/> 4 hrs <input type="checkbox"/> 6 hrs <input type="checkbox"/> 8 hrs <input type="checkbox"/> 10hrs				
<b>Climbing Stairs/ladders:</b>	<input type="checkbox"/> No ladder climbing <input type="checkbox"/> No stair climbing <input type="checkbox"/> Short flights at own pace					
<b>Medication(s) causing sedation/drowsiness:</b>						
<b>Miscellaneous:</b>	<input type="checkbox"/> No working with arms above shoulder level    Not able to work in: <input type="checkbox"/> Dust <input type="checkbox"/> No operating mobile equipment <input type="checkbox"/> Ground level work only <input type="checkbox"/> Cold temperatures <input type="checkbox"/> Vision is a potential safety hazard <input type="checkbox"/> No bending or twisting <input type="checkbox"/> No working near high speed/moving machinery					
<b>Worker Status</b>						
<input type="checkbox"/> Fit for regular job		Estimated date of return to regular work:				
<input type="checkbox"/> Fit for modified work		Indicate level: <input type="checkbox"/> Sedentary <input type="checkbox"/> Light <input type="checkbox"/> Medium <input type="checkbox"/> Heavy				
Date of reassessment:						
<b>Comments:</b>						
Physician's Signature:						Date:

## Appendix D



### SAFETY MEETING MINUTES

Date: \_\_\_\_\_ Meeting Start Time: \_\_\_\_\_ Meeting End Time: \_\_\_\_\_

Attendance:

#### Agenda:

Review of minutes of last Safety Meeting: Approved? ☐ Yes ☐ No

Corrections:

1. Progress report on last meeting's "To Do" list.
2. Any hazards reported during this time period?
3. Describe any injury/ near miss investigations conducted since last meeting. Did you identify and correct the cause of the unsafe situation (s)?
4. Suggested updates to our Accident Prevention Program.
5. Other concerns:

To Do List:

Assigned to:

Due Date:

Minutes written by: \_\_\_\_\_ Meeting Facilitator: \_\_\_\_\_

Next Meeting Date: \_\_\_\_\_ Location: \_\_\_\_\_

***\* Keep this minutes of meeting for one year.***

## Appendix E (page 1 of 3)

### City of DuPont JOB HAZARD ANALYSIS ASSESSMENT

#### Instructions

- 1. Conduct a walk through survey of your business.** For each job/task step, note the presence of any of the following hazard types (see table below), their sources, and the body parts at risk. Fill out the left side of the hazard assessment form (for help, see samples on p.29-30 in the guide). Gather all the information you can.
  - Look at all steps of a job and ask the employee if there are any variations in the job that are infrequently done and that you might have missed during your observation.
  - For purposes of the assessment, assume that no PPE is being worn by the affected employees even though they may actually be wearing what they need to do the job safely.
  - Note all observed hazards. *This list does not cover all possible hazards that employees may face or for which personal protective equipment may be required.* Noisy environments or those which may require respirators must be evaluated with appropriate test equipment to quantify the exposure level when overexposure is suspected.

Hazard Type	General Description of Hazard Type
Impact	Person can strike an object or be struck by a moving or flying or falling object.
Penetration	Person can strike, be struck by, or fall upon an object or tool that would break the skin.
Crush or pinch	An object(s) or machine may crush or pinch a body or body part.
Harmful Dust	Presence of dust that may cause irritation, or breathing or vision difficulty. May also have ignition potential.
Chemical	Exposure from spills, splashing, or other contact with chemical substances or harmful dusts that could cause illness, irritation, burns, asphyxiation, breathing or vision difficulty, or other toxic health effects. May also have ignition potential.
Heat	Exposure to radiant heat sources, splashes or spills of hot material, or work in hot environments.
Light (optical) Radiation	Exposure to strong light sources, glare, or intense light exposure which is a byproduct of a process.
Electrical Contact	Exposure to contact with or proximity to live or potentially live electrical objects.
Ergonomic hazards	Repetitive movements, awkward postures, vibration, heavy lifting, etc.
Environmental hazards	Conditions in the work place that could cause discomfort or negative health effects.

- 2. Analyze the hazard.** For each job task with a hazard source identified, use the Job Hazard Analysis Matrix table and discuss the hazard with the affected employee and supervisor. Fill out the right side of the hazard assessment form:
  - Rate the SEVERITY of injury that would *reasonably* be expected to result from exposure to the hazard.
  - Rate the PROBABILITY of an accident actually happening.

## Appendix E (page 2 of 3)

Job Hazard Analysis Matrix						
Severity of Injury		Probability of an Accident Occurring				
Level	Description	A Frequent	B Several Times	C Occasional	D Possible	E Extremely Improbable
I	Fatal or Permanent Disability	1	1	1	2	3
II	Severe Illness or Injury	1	1	2	2	3
III	Minor Injury or Illness	2	2	2-3	3	3
IV	No Injury or Illness	3	3	3	3	3

Assign a **RISK CODE** based upon the intersection of the **SEVERITY** and **PROBABILITY** ratings on the matrix.

Risk Priority		
Code	Risk Level	Action Required
1	<b>High</b>	Work activities must be suspended immediately until hazard can be eliminated or controlled or reduced to a lower level.
2	<b>Medium</b>	Job hazards are unacceptable and must be controlled by engineering, administrative, or personal protective equipment methods as soon as possible.
3	<b>Low</b>	No real or significant hazard exists. Controls are not required but may increase the comfort level of employees.

**3. Take action on the assessment.** Depending on the assigned Risk Level/Code (or Risk priority), take the corresponding action according to the table above:

- If Risk priority is **LOW** (3) for a task step → requires no further action.  
*Note: If you assign a risk code of 3, be sure that there isn't a WISHA standard that requires specific protection be provided. For example: WAC 296-24-65003 requires personal protective equipment when using compressed air for cleaning.*
- If Risk priority is **MEDIUM** (2) → select and implement appropriate controls.
- If Risk priority is **HIGH** (1) → immediately stop the task step until appropriate controls can be implemented.

*A high risk priority means that there is a reasonable to high probability that an employee will be killed or permanently disabled doing this task step and/or a high probability that the employee will suffer severe illness or injury!*

**4. Select PPE:**

- Try to reduce employee exposure to the hazard by first implementing engineering, work practice, and/or administrative controls. If PPE is supplied, it must be appropriately matched to the hazard to provide effective protection, durability, and proper fit to the worker. Note the control method to be implemented in the far right column.

**5. Certify the hazard assessment:**

- Certify on the hazard assessment form that you have done the hazard assessment and implemented the needed controls.
- Incorporate any new PPE requirements that you have developed into your written accident prevention program.

**Appendix E** (page 3 of 3)**Job Hazard Analysis for Personal Protective Equipment (PPE) Assessment**

Job/Task: \_\_\_\_\_ Location: \_\_\_\_\_

<b>Job/Task Step</b>	<b>Hazard Type</b>	<b>Hazard Source</b>	<b>Body Parts At Risk</b>	<b>Severity</b>	<b>Probability</b>	<b>Risk Code</b>	<b>Control Method<sup>1</sup></b>

**(1) Note: Engineering, work practice, and/or administrative hazard controls such as guarding must be used, if feasible, before requiring employees to use personal protective equipment.**

**Certification of Assessment**\*Name of work place: **CITY OF DUPONT**\*Address: **1700 Civic Drive, DuPont, WA 98327**

\*Assessment Conducted By: \_\_\_\_\_ Title: \_\_\_\_\_ \*Date(s) of Assessment \_\_\_\_\_

Implementation of Controls Approved By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Appendix F**

**City of DuPont**  
**EXPOSURE INCIDENT INVESTIGATION FORM**

Date of Incident	Time of Incident
Location	Person(s) Involved

<b>Potentially Infectious Materials Involved</b>	
Type	Source
Circumstances (what was occurring at the time of the incident)	
How the incident was caused (accident, equipment malfunction, and so forth; list any tool, machine, or equipment involved)	
Personal protective equipment and engineering controls being used at the time of the incident	
Actions taken (decontamination, clean-up, reporting, and so forth)	
Training of employee	
Recommendations for avoiding repetition of the incident, including any recommended changes to the ECP (Exposure Control Plan)	

## Appendix G

### City of DuPont HEPATITIS B VACCINE DECLINATION FORM

Facility Name: **CITY OF DUPONT – 1700 Civic Drive DuPont, WA 98327**

I understand that due to my occupational exposure to blood or other potentially infectious materials (OPIM), I may be at risk of acquiring hepatitis B virus (HBV) infection.

You have given me the opportunity to be vaccinated with the hepatitis B vaccine, at no charge to myself.

However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials, and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

☐ I have already received the hepatitis B vaccination series.

\_\_\_\_\_  
Employee's Name (Print)

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

\_\_\_\_\_  
Date



## Appendix H

### City of DuPont HEPATITIS B VACCINATION RECORD

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration and the benefits of being vaccinated. I also understand that the vaccine and vaccination series will be offered free of charge.

-----

I, \_\_\_\_\_, have completed the following inoculations using:

\_\_\_\_\_ Recombivax-HB Vaccine                      or                      \_\_\_\_\_ Enerix-B Vaccine

<input type="checkbox"/> Inoculation 1	Date: _____	Given at: _____
<input type="checkbox"/> Inoculation 2	Date: _____	Given at: _____
<input type="checkbox"/> Inoculation 3	Date: _____	Given at: _____

**Appendix I**

**City of DuPont**  
**EMPLOYEE MEDICAL RECORD CHECKLIST**

NAME: \_\_\_\_\_

SOCIAL SECURITY NUMBER: \_\_\_\_\_

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

JOB CLASSIFICATION: \_\_\_\_\_

Attach a copy of the employee's hepatitis B vaccination record or declination form. Attach any additional medical records relative to hepatitis B.

-----  
 Brief Description of Exposure Incident: \_\_\_\_\_  
 \_\_\_\_\_

**Log and attach copy of: (Check all that apply)**

- ☐ The information provided to the health care professional
- ☐ The Exposure Incident Investigation Report
- ☐ The results of the source individual's blood testing, if consent for release has been obtained and results are available
- ☐ The health care professional's written opinion

-----  
 Brief Description of Exposure Incident: \_\_\_\_\_  
 \_\_\_\_\_

**Log and attach a copy of: (Check all that apply)**

- ☐ The information provided to the health care professional
- ☐ The Exposure Incident Investigation Report
- ☐ The results of the source individual's blood testing, if consent for release has been obtained and results are available
- ☐ The health care professional's written opinion

**Appendix J**

**City of DuPont**  
**NEEDLESTICKS/SHARPS EXPOSURE LOG**

**Instructions:**

1. Complete a log for each employee exposure incident involving a sharp
2. Make a photocopy for your own record; and
3. Ensure that the form is received by your department's Worker's Compensation Department.

Employee exposed:	Social Security Number:	Phone number/ E-mail:
Department:	Supervisor:	Phone number/ E-mail:

Date and Time of Stick or contact with Sharp:	Location of Incident:	Job classification of employee:
Nature of exposure:	Body part stuck:	Procedure being performed at time of exposure:
Describe how the incident occurred:  <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Patient agitated/ hostile   <input type="checkbox"/> During disposal         </div> <div> <input type="checkbox"/> Emptying on handling sharps container   <input type="checkbox"/> Other _____         </div> </div>		

Sharps information if known (Type, Brand, Model) e.g. 18g needle/ABC Medical/ "no stick" syringe:
a. Was the sharp/ needle contaminated? _____  b. If yes, what was the contaminant? _____  c. Did the device used have a retractable or self-sheathing needle? _____  d. If yes, was training provided on its proper use? _____
For the employee: What do you think could have been done to prevent this injury?
For the employer: What do you think could have been done to prevent this injury?

Employee's Signature:	Date:
-----------------------	-------

**Appendix K**

**City of Dupont**  
**POST-EXPOSURE EVALUATION AND FOLLOW-UP CHECKLIST**

The following steps must be taken, and information transmitted, in the case of an employee's exposure to Bloodborne Pathogens:

<u><b>ACTIVITY</b></u>	<u><b>COMPLETION DATE</b></u>
<input type="checkbox"/> Employee furnished with documentation regarding exposure to incident.	_____
<input type="checkbox"/> Source individual identified.	_____
_____	
Source Individual	
<input type="checkbox"/> Source individual's blood tested and results given to exposed employee.	_____
<input type="checkbox"/> Consent has not been able to be obtained.	
<input type="checkbox"/> Exposed employee's blood collected and tested.	_____
<input type="checkbox"/> Appointment arranged for employee with healthcare professional.	_____
_____	_____
Professional's Name	Phone No. or Company
<input type="checkbox"/> Documentation forwarded to healthcare professional.	_____
<input type="checkbox"/> Bloodborne Pathogens Standard.	
<input type="checkbox"/> Description of exposed employee's duties.	
<input type="checkbox"/> Description of exposure incident, including routes of exposure.	
<input type="checkbox"/> Result of source individual's blood testing.	
<input type="checkbox"/> Employee's medical records.	