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POLICY TITLE: Village of Howard Safety Manual for All Procedures

POLICY STATEMENT:

**VILLAGE OF HOWARD
SAFETY MANUAL
FOR
ALL PROCEDURES**

JANUARY, 1997

V I L L A G E O F
H O W A R D
P U B L I C W O R K S D E P A R T M E N T



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POLICY STATEMENT

Our Village must make every reasonable effort to keep accidents and incidents at an absolute minimum. This can only be accomplished by the establishment of sound hazard control procedures, and by a Village management dedicated to the prevention of accidents. The philosophy that prevention of accidents and efficiency in operations are inseparable will guide plans and actions. It is our intention that this Statement of Policy be our basis for assuring an efficient, safe, and healthful work place for our employees.

We fully realize that the prevention of accidents is a Management responsibility and a Supervisory function of any plan or program is only as effective as the individuals charged with the responsibility for its implementation. We also realize that the success of any plan or program requires the cooperation and support of ALL employees. We earnestly desire and expect this support, as the primary reason for our occupational safety program.

Village management has not only the moral and legal responsibility for the protection and welfare of our employees, but also an economic one. Employees too, have the same obligations to themselves and to their families.

Nothing is more important to the Village's continuing success than a safe, efficient, and healthful work environment. Human considerations require this, and legal and economic conditions demand it.

INTRODUCTION

The Village of Howard is sincerely concerned with the safety and well-being of its employees and the public it serves. It acknowledges an obligation as an employer to provide the safest possible working conditions for employees and a safe environment for the public that uses our services.

This manual is intended to be a general guide to employee safety with the Village of Howard. Our approach to accident prevention cannot be simple or basic, it is complicated by the wide diversity of operations within our Village government. Our safety program will include:

- Training of employees in good safety practices and procedures.
- Thorough and prompt investigation of accidents to identify the cause and establish procedures aimed at eliminating recurrences.
- Conducting routine safety inspections aimed at maintenance of a safe work environment and controlling hazards.
- Provision of necessary mechanical and physical safeguards.
- Provision of necessary personal protective equipment and instructions for its use and care.
- Development of reasonable safety rules with related enforcement and disciplinary standards.

Village Management recognizes that responsibility for safety must be shared. The Village of Howard accepts the responsibility for leadership of the safety program, for its effectiveness and improvement, and for providing the safeguards required to ensure safe conditions.

Supervisors are responsible for developing the proper attitudes toward safety in themselves and in those they supervise, and for ensuring that all operations are performed with regard for the safety and health of all personnel involved. They are also responsible for the reasonable and uniform enforcement of all safety rules including the maintenance of a safe working environment.

Employees are responsible for cooperation with all aspects of the safety program--including compliance with all rules and regulations--and for continuously practicing safety while performing their duties. No employee shall perform any act which endangers self or other persons. It is each employee's responsibility to inform his supervisor immediately of any hazardous situation beyond his ability or authority to correct.

All employees are required to carefully read and study this manual. Upon completion, each employee shall remove the certificate from the back of the manual and certify on it that he/she has read and understands all sections of this manual. As new sections are added to the manual, a similar

certificate will be included. The signed certificates shall be submitted to department supervisors and forwarded to the Personnel Office for filing in the employee's personnel file.

Safety suggestions are always welcome. You know better than most how best to do your job. If you know how to make it safer for yourself and others, let your supervisor know.

Remember, no job is so important and no service is so urgent that it cannot be done safely.

PROCEDURE FOR FILING A WORKER'S COMPENSATION CLAIM

The following procedure for filing a Worker's Compensation Claim will be followed by all Village employee.

1. Report all injuries, no matter how minor, to your supervisor.
2. It is the employee's responsibility to complete a Preliminary Accident Report as soon as possible.
3. It is the supervisor's responsibility to file the Preliminary Accident Report with the Safety Director within 24 hours of the accident. A copy of the Accident Investigation Report completed by the Supervisor should be filed with the Safety Director as soon as possible.
4. If an employee experiences loss of time from work, it is the supervisor's responsibility to notify the Safety Director of the last day of work, and the expected return date. All Doctor's slips are to be filed with the Safety Director.

PROCEDURE FOR REPORTING VILLAGE VEHICLE TRAFFIC ACCIDENTS

Accidents involving Village owned vehicles must be reported to the:

1. Police Department.
2. Department Supervisor.
3. Safety Director.
4. Administrator's Office.
5. Department of Transportation must be notified if anyone is injured or if there is \$500 or more damage per vehicle or property damage.

It is necessary to report all accidents. Without a report we jeopardize our chance of recovery for damages or a defense of any claims which may develop as a result of the accident.

FIRST AID & CPR

While emphasis is placed on the prevention of accidents and injuries that often result, accidents do occur. Prompt, knowledgeable treatment of wounds or other physical results of accidents, will in many cases, prevent minor injuries from becoming major ones and sometimes save lives.

The following first aid rules are established:

1. Each full time Village employee shall receive First Aid and CPR training.
2. First aid kits shall be maintained in each Village building. A first aid room will be maintained at the Public Works Facility.
3. Safety Committee Building Inspectors are to check first aid supplies every three months. The supplies shall be those specified by the Safety Committee or under the direction of the H-S Rescue Squad or Brown County Health Department. Safety Committee Building Inspectors should order supplies. Any first aid materials used should be stated on the accident reports.
4. Be sure that open wounds are thoroughly cleansed with soap and water to prevent infection. Follow the Universal Body Substance Precautions which include cleanup, protective clothing and exposure report when handling bodily fluids.
5. There may be cases in which an injured employee, while needing professional attention, could be transported to the hospital by Village car. There may be cases, however, in which it is important that the injured employee be transferred by ambulance as a stretcher case with a qualified attendant available. But if there is any doubt in the mind of the supervisor or lead man in charge, it should be resolved by calling for ambulance service. As an example, the following conditions would definitely indicate ambulance service:
 - a. Employee is unconscious or apparently in shock.
 - b. Any apparent fractures.
 - c. Excessive bleeding.
 - d. Severe abdominal cramps and/or vomiting.
 - e. Other symptoms or internal injury.
6. All animal bites, because of the possibility of rabies, should receive prompt medical attention by a physician. If someone is bit, an attempt should be made to confine the animal. All bites should be reported to the Health Officer.
7. All injuries, no matter how minor, are to be reported to the Safety Director. Injury report forms shall be made available by the Supervisor.

BODILY FLUIDS & INFECTIOUS WASTE

Anyone can be infected with HIV (the AIDS virus), even with no symptoms. It takes six weeks to six months (or possibly longer) after exposure for a person to develop HIV antibodies. Therefore, workers must use precautions with blood and body fluids to protect themselves from exposure to HIV. These precautions also protect against other infectious organisms, including Hepatitis B, TB, Meningitis, etc.

Universal Body Substance Precautions

1. Handle the blood and body fluids of all patients as potentially infectious (blood, urine, stool, tissue, vomitus, etc.).
2. Wash hands before and after all contact including after wearing gloves.
3. **Wear gloves** for potential contact with blood and body fluids.
4. **Wear clothes** that cover your skin when contact with blood or body fluids is anticipated.
5. Treat all material soiled with blood and/or body secretions as infectious.
6. Dispose of all materials properly.
7. In the event of exposure to blood (eyes, mouth, open area on skin, puncture wounds, etc.) report to your supervisor and then file an exposure report.
8. Disinfect blood and body fluid contact to environmental surfaces; gloves must be worn.

Small Spills

- 1) Kwik-Wipes (1:10 bleach packs)

Large Spills

- 1) Make up fresh solution of 1:10 bleach (1 cup bleach to 9 cups water).
- 2) With gloves on, absorb blood/body fluids with paper towels. Dispose of properly.
- 3) Keep bleach on area for twenty minutes.
- 4) With gloves on, soak up bleach solution with paper towels. Dispose of properly.
- 5) Clean area as usual.

PROPER LIFTING PROCEDURE

Knowing how to lift is important to all of us because there is hardly any kind of work that we do that does not require some lifting. So whether you are an office worker or one who works at a strenuous physical job, the proper lifting procedure is very important.

- Step 1. Get Ready...

- a. Size up the load. If it is too heavy or bulky, play it smart--get help.
- b. Check the load and remove protruding nails, splinters, sharp edges, oil, grease, or moisture.
- c. If the surface is rough, wear gloves.
- d. Know where the load is going and where you are going to put it down.
- e. Be sure the path you take is clear of obstacles.

Step 2. Pick It Up...

- a. Get a firm footing and good balance; have your feet about shoulder width apart.
- b. If the load is below waist level, bend your knees to get into position. Keep your back as straight as possible.
- c. Grip the load firmly.
- d. Lift the object to carrying position, keeping it close to the body. Let the leg and arm muscles do the work.

Step 3. Carry it Carefully...

- a. Be sure you can see where you are going.
- b. When changing directions, be careful not to twist your body--turn your body with changes of the position of your feet.
- c. Use extra caution in tight places so as not to smash your fingers or hands.

Step 4. Put It Down...

- a. If the receiving surface is about waist high, use the edge to take part of the load. Then push it forward.
- b. If you lower the load to the floor, bend your knees, keep your back as straight as possible, and the load close to your body.

GENERAL SAFETY RULES

1. Report all personal injuries, no matter how minor, to your immediate supervisor as soon as possible. This must be done whether the injury resulted in lost time from work or whether it required medical attention or not. This is not only done to meet Federal OSHA recording requirements but also for your protection. Accidents not reported within a specific period of time may not be compensable under worker's compensation benefits.
2. Each Village employee is responsible for performing their job with every possible regard for their own safety and for the rights and safety of others and for compliance with all federal, state, and city standards that apply to the performance of their job. The Village does not expect you to take any unnecessary chances to work under hazardous conditions. Learn the right way to do your job. That will be the safe way. If you are not sure you thoroughly understand the job, ask your supervisor for further instruction.
3. Drinking of alcoholic beverages or using illegal drugs of any kind during working hours is prohibited. Any employee reporting for work under the influence of alcohol or drugs shall be subject to disciplinary action.
4. Certain types of medication taken for physical illness can adversely affect your judgment, alertness, vision, or sense of balance. If you are taking medication which may affect you in any of these areas, you should report this to your supervisor who will take appropriate action.
5. Smoking is prohibited in all Village buildings according to Wisconsin State Statute 101.123 (2) (10). Smoking is prohibited in the vicinity of flammables and where "no smoking" signs are posted. When in doubt, do not smoke.
6. Avoid horseplay and practical jokes on the job. It not only disrupts the work flow but could cause someone serious injury.
7. Work at a speed consistent with safety. Foolish hurry such as running in passage ways or on stairs is dangerous.
8. Use the hand rails on stairs or on elevated places.
9. Jumping from an elevation such as a table, bench, or platform is liable to result in serious injury. Don't do it!
10. Always inspect tools and equipment before use. Report defects to supervisors and other potential users. Do not use tools and equipment that are defective to an unsafe degree.
11. Remove splinters from work benches, tables, bins, shelves, or chairs before someone is injured.
12. Remove, cut off, or hammer down protruding nails, staples, or steel straps.

13. Work clear of suspended loads; if a load is moved above where you are working, stand aside until it has passed by.
14. Obey warning tags and signs. They are posted to point out hazards.
15. Operate only the machinery or equipment you have been authorized and trained to operate safely.
16. Remove jewelry such as rings, identification bracelets, etc., in work involving climbing, materials handling, or operating mechanical equipment except when wearing gloves.
17. Never reach over moving parts of machinery or equipment.
18. Never operate machinery or equipment with guards removed.
19. Report to work in appropriate clothing suitable for the type of work you perform. This includes footwear. Avoid wearing loose clothing or personal equipment near machinery or equipment with moving parts.
20. Wear protective equipment as required, its use will be enforced.
21. Use common sense. Health and sanitation rules must be observed for the welfare and consideration of other employees.

FIRE PREVENTION

One of the most fearsome and damaging disasters that can occur in work activities is fire. In the variety of activities performed in municipal operations, there are shops and job sites in which potential fire hazards exist. Fires can be prevented by orderly planning, sensible arrangement of fire-producing activities in relations to combustible materials, good housekeeping, and observance of practical controls of smoking habits when flammable substances are present.

The following safety procedures are established:

1. Fire equipment shall be prominently displayed and kept clear for easy access at all times.
2. Know the location of fire extinguishers in your work area. After use of an extinguisher, report such use immediately to your supervisor so a replacement may be obtained or the extinguisher recharged.
3. Do not use water type extinguishers on an electrical fire because of the danger of electrocution. They are intended for use on Class "A" fires only (flammables such as wood, paper, rags, etc.).
4. Oily rags and other flammable wastes shall be kept in covered, metal containers. Such debris shall be removed from buildings as soon as possible.

5. Cleaning solvents that have flammable properties shall be kept in approved safety containers having spring-lift caps. Each container shall be labeled as to its contents.
6. Gasoline utilized in small quantities in shops for fueling engines being repaired, tested, adjusted, etc., shall be handled and dispensed in approved safety containers, having a spring-lift cap. Container must be labeled as to its contents.
7. The fueling of any type of motorized equipment while the engine is running is prohibited. When transferring flammable liquids, make sure the filler nozzle touches the equipment or can be filled in order to guard against the build-up of static electrical charge.
8. Never overfill a tank but rather underfill it to allow room for expansion of the liquid.
9. No artificial light except UL approved electric flashlights will be used near escaping gasoline or other flammable vapors or when entering an enclosure suspected of containing gas.
10. Dark places, basements, or cellars must not be entered without proper light. The use of matches is strictly forbidden.
11. The use of fuel oil or kerosene for starting fires is allowed only in outside areas. Caution must be observed. Fuel oil or kerosene will not be used for starting fires in stoves. Under no circumstances will gasoline be used for starting fires.
12. "NO SMOKING" shall be enforced in all areas where hazardous substances are stored or used.
13. Exits shall not be locked (chained or otherwise) from the inside.
14. All licensed vehicles are to carry a "dry chemical" fire extinguisher.
15. Village shall be responsible for scheduling independent safety suppliers for inspection of fire extinguishing equipment on a regular schedule.

HOUSEKEEPING RULES

Many painful, and sometimes disabling injuries are caused when employees are struck by falling objects, or striking against or tripping over objects they did not see. Many injuries and much property damage stems from fires caused by poor housekeeping practices and improper storage of flammable materials. The best protection against these hazards is good housekeeping.

When materials are stored properly with adequate space to move through the storage area, or with adequate clearance to work within the storage area, accidents are prevented. With some planning before laying out a job, tripping hazards can be avoided and many other sprains, fractures, and bruises that result from falls can be prevented.

Aside from the accident prevention benefits, good housekeeping means efficient performance. When materials, tools, and equipment all have a place for orderly storage, and are returned to the proper place after use, they are easier to find and easier to inspect for damage and wear.

The following safety procedures are established:

1. Keep work areas and storage facilities clean, neat, and orderly.
2. All aisles, stairways, passageways, exits and access ways to buildings shall be kept free from obstruction at all times. All grease and water spills shall be removed from traffic areas at once.
3. Do not place supplies on top of lockers, hampers, boxes, or other moveable containers at a height where they are not visible from the floor.
4. When piling materials for storage, make sure the base is firm and level. Cross tier each layer. Keep piles level and not stacked too high. Keep aisles clear and with adequate space to work in them.
5. When storing materials suspended from racks or hooks, secure them from falling and route walkways a safe distance from the surface beneath.
6. When storing materials overhead on balconies, provide adequate toe boards to prevent objects from rolling over the edge.
7. Do not let debris/garbage accumulate in lockers and work places.
8. Tools, equipment, machinery and work areas are to be maintained in a clean and safe manner. Electrical tools should be locked out until repaired. Disable the cord. Defects and unsafe conditions shall be reported to your supervisor.
9. Return tools and equipment to their proper place when not in use.
10. Lay out extension cords, air hoses, water hoses, ladders, pipes, tools, etc., in such a way as to minimize tripping hazards or obstructions to traffic.
11. Clean up spills immediately to avoid slipping hazards. In the event the removal cannot be done immediately, the area must be appropriately guarded, signed or roped off. Snow shall be removed from all access sidewalks and exterior stairs to buildings as soon as practicable. In the event the snow cannot readily be removed from traffic areas it shall be sanded or the area roped off.
12. Nail points, ends of loops or tie wires, etc., must not be left exposed when packing and unpacking boxes, crates, barrels, etc. Nails are to be removed as soon as lumber is disassembled.
13. Sharp or pointed articles should be stored as to prevent persons from coming in contact with

the sharp edges or points.

14. All packing materials should be properly disposed of to prevent fire.
15. Adequate lighting in obscure areas shall be secured for the protection of both employees and public.
16. Employees should not handle food, tobacco, etc., with gasoline on their hands. Gasoline should not be handled by employees whose hands are cut or scratched.
17. All switches or drives on machinery shall be shut down and locked out before cleaning, greasing, oiling, or making adjustments or repairs.
18. Control or fuse boxes should be kept closed at all times and clear of coats, rags, bottles.
19. Extension cords should not be run across aisles or through oil or water. Cords should be inspected for kinks, worn insulation, and exposed strands of wire before use.
20. When fuses blow continually it is an indication of an overload or short. This condition should be reported to your supervisor.
21. Keep electrical equipment properly oiled, free of grease and dirt.
22. To prevent static sparks, keep drive belts dressed. Also check belts for proper tension to prevent overloading motors.
23. Fire inspections and prevention measures shall be made as required.

AUTOMOTIVE SHOPS & GARAGES - GENERAL RULES

1. Attachments or devices should not be installed or modifications made on any Village vehicle without the written approval of the department supervisor.
2. When vehicle maintenance is being performed in a garage, the exhaust should be ventilated to the outside of the building.
3. When working under a vehicle which is not elevated, proper blocking should be used to prevent accidental movement of the vehicle.
4. If jacks are to be employed while working on a vehicle, extreme care should be exercised to properly place the jacks. Proper blocking of the vehicle should be used to prevent accidental vehicle movement.
5. A differential should not be run for testing purposes unless both rear wheels are elevated and the vehicle is properly blocked to prevent accidental movement.

6. An approved type goggle or face shield should be stored in a dust proof box located near each bench type grinder. The goggles or face shield should be worn when grinding.
7. Extensions on hand tools should be used with extreme care.
8. Safety glasses are to be worn when drilling. When drilling on high tempered or hard metal, employees should always wear a face shield or goggles.
9. Drop lights or extension cords should be in good condition and equipped with non-metallic lamp guards. Care shall be exercised to avoid bulb breakage to eliminate a spark hazard. Electrical outlets in drop light cords shall not be used for electric tools and equipment. Proper cords shall be used for all electric tool and equipment operation.
10. Whenever possible, employees should avoid pouring gasoline into carburetors while starting an engine. If it is necessary to prime a carburetor with gasoline, a U.L. approved can is to be used. Prime the carburetor before starting the engine.
11. Starting fluids should not be sprayed on or in a warm or hot engine.
12. Employees should not use compressed air to blow dust from clothing or person.
13. Face shields and protective clothing should be worn when steam cleaning or high pressure cleaning in confined areas.
14. Gasoline tanks should not be filled while the motor is running; when the lights or radio are turned on; while someone is smoking; or when near an open flame. Only vapor proof flashlights shall be used in and around fueling stations.

PROTECTIVE CLOTHING AND EQUIPMENT

Every possible effort will be made by management to select protective clothing and equipment that is acceptable for comfort, appearance, and utility and still afford the desired protection. Since it is sometimes less comfortable to wear than ordinary dress, employees are tempted to lay it aside when the boss isn't around. That employee becomes a gambler who is betting on his life, eyesight, or other physical well being, that "it won't happen to me". Losing that bet becomes more uncomfortable for a lifetime than wearing the equipment for the duration of the job. Safety, in this instance, is a knowledge of the hazards, knowledge of the protection available, and a frame of mind that makes use of available protection a safe work habit.

General Clothing

1. For your safety and comfort, invest in work clothes that are sturdy, that fit well, and are washable. Proper clothing shall be worn during operation of machinery.
2. The wearing of loose, flowing, or ragged clothing on or near moving machinery or equipment is prohibited.

3. Rolled up sleeves are dangerous because they have flapping ends and because the added thickness of the cloth can pull your arm into a machine before the cloth tears.
4. Pant legs should be cut to ankle length and cuffs sewn up. Rolled up cuffs collect dirt and are likely to come down and cause you to fall.
5. Steel-toe safety boots are required to be worn on all jobs.
6. The safe worker does not wear rings, medals, identification bracelets, and other jewelry. Jewelry increases the danger of electric shock and can cause fingers to be badly injured.
7. Work clothes should be washed frequently as a safe guard against skin infections and irritations.
8. For outdoor work in winter weather, it is best to wear loose, warm, fairly lightweight clothing. Wear layers of clothing--so you can peel it off for inside work and put it back on when you have to go outdoors.
9. Oil soaked clothes are a serious fire hazard. Keep your clothes free from oil.
10. When working on curbside or streets you are required to wear reflective safety vests.

Head Protection

The many construction and maintenance activities performed by municipal employees involve working above or below ground levels, movement of material overhead, or working near construction machinery. In such operations, the hazards of being struck by falling objects, machinery, or loads being moved by machinery, constantly exist. Hard hats are provided to prevent head injuries by falling objects, and bumps against objects when working in confined spaces. The proper protection is provided when the head harness is adjusted so that there is approximately 1 1/2" clearance, plus or minus 1/8", between the skull and the inside of the hat when it is worn. When the harness becomes worn to the extent that it no longer can be adjusted to maintain that clearance, hard hats should be turned in for repair or replacement. The construction and shape of hard hats shall not be altered in any manner by the employees. Hard hats shall not be painted because it alters the dielectric properties of the hat.

Metal hard hats are not permissible.

Hard hats of the type approved by all department heads shall be worn by all Village employees in the following activities:

1. While on the job site for any public service construction or maintenance project.
2. While on the job site for any park construction project or tree trimming activity.
3. While on the job site for construction, maintenance, and cleaning of sewers.
4. When inspecting work projects involving any of the above conditions.
5. When working with or near construction equipment such as digging, hoisting, or towing equipment.
6. All personnel engaged in climbing tasks or working from aerial lifts shall wear head protection equipment that meets approved standards for dielectric properties due to the possibility of contacting overhead transmission facilities.
7. Supervisors may designate additional areas where hard hat usage is required as the need arises.

Eye Protection

When employees are assigned to work which could possibly be hazardous to the eyes, safety glasses must be worn.

In all cases, your supervisor will notify you of the safety glass regulations applying to your department. However, because of the many different types of jobs to be done much is left to the

good judgement of the individual. Because of this, in many cases you, yourself, are responsible for recognizing a situation that is dangerous to the eyes and doing the proper thing about it.

Take every precaution to protect your eyes. Wear proper eye protection for every job where there may be danger of impact, flying objects, harmful dust, strong chemicals, or harmful light rays.

Wash chemicals from the eyes with large quantities of clean running water for about 15 minutes, blinking the eyes repeatedly. Then get medical treatment if needed.

If dust or small particles get in your eyes, do not rub them. Report to your supervisor if needed.

Allow only the doctor to remove anything from your eyes.

Safety goggles or safety glasses with temple shields shall be worn when:

1. Grinding, cutting, milling, or drilling with powered tools.
2. Using impact wrenches and compressed air tools.
3. Chipping, scraping, or scaling paint, rust, carbon or other materials.
4. Using punches, chisels, or other impact tools.
5. Cutting rivets.
6. Cutting or breaking glass.
7. Chipping or breaking concrete.
8. Pipe cutting, threading.
9. Using paint remover.
10. Using power activated tools.
11. Soldering.
12. Cleaning dust or dirt from vehicles, machinery, etc.
13. Sand blasting or air cleaning operations.
14. Using metal cutting lathes, shapers, drill press, power hack saw and other metal working tools.

15. Using power woodworking machinery, both fixed and portable.
16. Tree trimming, brush chipping, or stump removal.
17. Washing vehicle parts with soaps or solvents.
18. Working under vehicles.
19. Using push-type rotary lawn mowers and string trimmers.

Hearing Protection

In the variety of activities conducted by municipal work crews, there are some machines or equipment that may produce sound levels in the frequencies which cause hearing loss. When employees are subjected to excessive sound levels, attempts should be made to use engineering controls. If the sound level cannot be reduced within tolerable range, then personal protective equipment shall be provided and shall be worn by employees so exposed.

Ear protection may consist of ear muffs, ear plugs, or some of the newer disposable materials. The type most acceptable to employees shall be provided whenever possible, so long as it achieves sufficient reduction of noise exposure. Cotton or waste should not be used as ear plugs.

Foot Protection

Many tasks involve manual lifting or handling of heavy tools and materials. Foot injuries frequently occur when heavy objects are dropped, resulting in bruises, dislocations, fractures, or crushes. Shoes, rubber boots, etc., reinforced with steel toes or soles will prevent foot injuries from impacts of falling objects, stepping on sharp objects, or exposures to blades of power tools. These items of foot wear are available in a variety of attractive styles as comfortable as any pair of properly fitted shoes can be.

Respiratory Protection

There are many tasks in municipal employment involving exposure to fumes, gases, mists, chemical dusts, etc., that are harmful to the human respiratory system, or exposure to environments containing insufficient oxygen to support human life.

These hazards can be avoided by use of the appropriate filter action breathing masks, self-contained breathing apparatus, etc. Safe performance is achieved through adequate knowledge of noxious or toxic effects of substances being handled, the circumstance under which harmful atmosphere may exist in the work environment, adequate testing to determine the nature of the environment before entering it, the type of equipment that will provide adequate protection, and training in the proper way to use the protective equipment.

The following safety procedures are established:

1. Supervisors shall learn, and then thoroughly instruct all employees whose work assignments may involve exposure to atmospheres containing noxious or toxic substances or oxygen deficiency, about the properties of such atmospheres, the potential hazards, the circumstances under which these hazards may exist, the proper method of testing for hazardous atmospheres, the proper type of protective breathing apparatus to use, and how to use it.
2. Suitable breathing apparatus shall be conspicuously placed near work environments involving the possibility of exposure to harmful atmospheres. The apparatus shall be kept sterile and used only for the protective function intended.
3. Each time the respiratory equipment is used, a report will be made to the supervisor of the reason for its use and the amount of time it was in use.
4. Approved respirators shall be worn in the following instances:
 - a. When welding on brass, bronze, or galvanized iron in confined areas where ventilation is limited.
 - b. When entering manholes, sewers, vaults, boilers, or other confined space where tests indicate presence of noxious atmosphere after attempts to purge and ventilate them.
 - c. When determined by the supervisor to be advisable due to the know or suspected presence of hazardous substances or lack of oxygen in the environment concerned.
5. The following is a list of regulations and requirements for the use and maintenance of the fresh air masks:
 - a. The masks shall be used whenever and wherever chlorine, ammonia, or other

hazardous gas leaks are suspected or detected. Gases can be absorbed through the skin. A Haz Mat suit should be worn.

- b. Before entering a potentially hazardous area, notify at least one other employee to stand by in case of emergency.
 - c. Before entering a potentially hazardous area be sure the mask is functioning properly and the face seal is secure.
 - d. Notify the Howard Fire Department to immediately furnish additional respiratory equipment and personnel. The Brown County HAZ MAT TEAM will be notified by Fire Department personnel.
 - e. The masks shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, or cap that projects under the face base, or temple pieces on glasses. It is essential that all employees be prepared to obtain a good face seal with the mask on short notice should the occasion require it. (Check the mask frequently to insure no interference from beards or sideburns.)
 - f. The warning bell on the respirator signals a five minute air supply remaining. This is an approximate time, as type of activity and respiration of each individual differ. Prepare to leave the contaminated atmosphere as soon as the warning bell sounds.
 - g. The masks shall be cleansed and disinfected after each use. Disinfection is accomplished by wiping the mask inside and outside with a cloth moistened with denatured alcohol. The denatured alcohol is then removed by wiping the surfaces with a cloth moistened with a mild detergent and water. Be sure the eye pieces are cleaned also.
6. The mask shall be checked against defects and low air supply periodically. Air supply shall be recorded on the appropriate chart in the carrying case. Low air supply, or defects shall be reported immediately.
 7. Face masks connected with respirators must not be bent in such a manner that air will pass around the mask instead of thru the filter.

MOTOR VEHICLES, MOBILE EQUIPMENT AND TOOLS

Village Vehicles constitute a traveling advertisement because they are easily identified by citizens. Therefore, safe, courteous, and considerate driving habits build good public relations.

1. No employee shall operate Village vehicles or equipment until he is properly instructed on

the safe operation of such vehicles, equipment or tools. All employees shall read the operator's manual prior to first time operation of any vehicle, equipment or tools.

2. All employees who drive Village of Howard vehicles must have a valid Wisconsin Driver's License or a Commercial Driver's License as required for the equipment operated.
3. Drivers are required to obey all State and Village traffic regulations. Costs for traffic citations are the responsibility of the driver.
4. Each employee shall be responsible for a safety check each day for any vehicle he/she is assigned to drive. Report any unsafe conditions to your supervisor.
5. Personal articles should not be stored or left in Village vehicles.
6. All vehicle defects should be reported to your supervisor. Vehicles with serious defects should not be driven if the defect makes operation hazardous.
7. Seat belts must be worn in vehicles so equipped.
8. Only materials and equipment necessary to carry on Village work will be transported in or on Village vehicles.

9. Articles, tools, equipment, etc. placed in or on cars or truck cabs shall be stored in such a manner so as not to interfere with vision or with proper Vehicle operation in any way. All items shall be secured in such a manner that they will not be dislodged or fall out or forward during transit or sudden stops.
10. Nothing shall be stored on the rear window ledge of any Village vehicle. If there is a sudden stop, articles there are hazardous to the occupants.
11. When boarding or exiting from vehicles, watch footing to avoid slipping or falling. Never board or exit when the vehicle is moving. Open doors to discharge passengers only when vehicle has come to a complete stop.
12. All slow moving equipment operated in public right-of-way should be equipped with a triangular shaped reflecting sign in accordance with Wisconsin Motor Vehicle Code.
13. The State Law regarding riding in or on vehicles is as follows: No person other than an employee engaged in the necessary discharge of his duty shall ride upon any portion of a vehicle not designed or intended for the use of passengers.
14. Keep a safe distance behind other vehicles so as to avoid tailgating. Do not allow others to tailgate. Slow down, pull over to the side, let the tailgater pass.
15. Before entering or leaving a building or crossing a blind crosswalk, all vehicles shall be brought to a full stop and the horn sounded.
16. Signal your intentions at least 100 feet in advance of any changes in direction, lane changes, or other maneuvers. Avoid sudden braking.
17. Stay within posted speed limits. Slow down when conditions warrant.
18. Never take drugs or strong medication before operating a vehicle. Remember that drugs, illness, or extreme fatigue may affect your ability to judge distances, speed, and driving conditions.
19. Backing vehicles:
 - a. When backing up and vision is obstructed, dismount and walk around your vehicle. Observe the clearances on top and sides, and inspect the area into which you are backing.
 - b. Use backup alarms. (If not working notify your Supervisor immediately.) Back up slowly, and sound horn unless you have someone to act as a guide. Be certain to agree on signals used.

- c. If possible, back from the driver's side of the vehicle; that is, turning toward the vehicle's left side.

20. Parking Vehicles:

- a. Except when working conditions require otherwise, parked vehicles must have motor stopped, key removed, and emergency brakes set. Vehicles with manual transmissions should be left in gear. Vehicles with automatic transmissions should be left in "park".
- b. If on a downgrade, turn front wheels toward the curb. If on an upgrade, turn away from the curb. Set brakes, and leave transmission in "park" for automatic transmissions and in gear for manual transmissions before leaving the driver's seat.
- c. Vehicles should not be parked or driven on the wrong side of the street facing traffic except in an emergency.
- d. When vehicles must be stopped on streets or highways, adequate warning signals must be used. If the position of the vehicle and traffic warrant, use a flagman if one is available.
- e. Turn signals shall not be used in lieu of 4-way hazardous flashers.
- f. Before leaving a curb, signal your intention and look to see that no cars are approaching from either direction.

TOWING

1. Garage service trucks shall display a flashing red/amber lamp mounted on the top of the truck when servicing a disabled vehicle on any public roadway.
2. Trailers, tool boxes, and trailer mounted machinery should be hitched to a towing truck with safety chains and safety brake chain in place.
3. When towing trailers - safety chains, light cords, and brake cords shall be used.

WORKING IN PUBLIC RIGHT OF WAY

Municipal employees are often required to work in or alongside right of ways normally used for vehicle or pedestrian traffic. It is desirable, that whenever possible, some continued flow of traffic be maintained with the least possible interference with normal traffic patterns. There are two safety considerations involved: (1) Protecting employees from being struck by vehicular traffic. (2) Helping the using public to safely avoid hazardous obstructions, excavations, etc., that interrupt the

flow of both vehicle and pedestrian traffic.

When road surfaces are being repaired, manholes opened, or excavations dug, it is necessary that adequate warning of the hazard be posted, that a minimum amount of the right of way be blocked off consistent with safety requirements, and that traffic be efficiently re-routed.

Maintenance activities may include such minor interferences as tree trimming, curb site planting, street sweeper operation, trash pickups, light fixture cleaning, traffic signal repair, etc. They may interfere with normal traffic in the form of standing or slow-moving vehicles and equipment, or occasional movements into the normal right of way. The feature of simultaneous flashing of all turn signal lights should be used, augmented by oscillating or rotating lights, or flashing arrow signs mounted on the vehicle. For minor construction or maintenance operations requiring 15 minutes or less, the work vehicle itself with high visibility color or reflective markings mounted on the vehicle and warning lights described above, will usually be adequate.

When maintenance or construction activities exceed 15 minutes duration, adequate signs and barricades shall be set up.

The following safety procedures are established:

1. No Village street shall be completely closed without prior approval of the Director of Public Works and adequate notice to the Police Department.
2. When Village work crews must perform emergency repair work in a posted traffic lane during peak traffic periods, the Director of Public Works shall be notified as to location, time work started, and estimated time of completion.
3. If an open cut is left in a posted traffic lane when work is stopped or suspended for any reason, a steel plate cover, of sufficient strength to sustain normal traffic loads should be placed over the cut and anchored. If a cut cannot be covered and must be left overnight, signs and barricades shall be left in place, adequate lighting shall be provided, and the Director of Public Works shall be consulted.
4. Mobile equipment used for maintenance and repair work in Village streets shall be equipped with flashing or rotating beacon.
5. When a portion of a street has been closed for maintenance and repair work and construction equipment must be intermittently operated in lanes left open to traffic, a flagman shall be provided to control traffic.
6. Any obstruction of a public right of way by Village work crews for maintenance and repair work exceeding 15 minutes duration shall be signed and barricaded according to basic traffic warning principles in the Manual on Uniform Traffic Control Devices.

Traffic Warning

1. Protection of hazards such as large holes, soft patches, windrows, etc.
 - a. Place signs (plus flashers at night) in advance of hazard. Cones must have two reflector stripes for night use.
 - b. Mark windrow ends with flag during the day and flashers at night.
 - c. Protect holes and patches with wooden horses or snow fence barricades at the hazard and add flashers at night.
 - d. No gravel windrow shall be left in the middle of the road at night.
 - e. Where flags are used to mark a hazard, they shall be replaced by signs as soon as possible.
2. The man in charge of work requiring the lighting of a barricade shall make sure barricades and flasher lights are properly placed.
3. Removal of temporary signs:
 - a. Signs placed solely for the protection of workmen (Men Working, etc.) shall be removed at the end of the day's work.
 - b. Signs placed to warn of temporary hazards (Bump, One-Way Traffic, etc.) shall be removed as soon as the hazard has been eliminated.
4. Protection of men working on roadway:
 - a. Proper signs shall be placed in advance of any repair operations.
 - b. Work shall be done on one-half of the roadway at a time when practical.
 - c. Flagmen shall be used where the amount or speed of traffic warrants.
5. Hand Signaling Devices:

A number of hand signaling devices, such STOP/SLOW paddles, lights and red flags are used in controlling traffic through work zones. The sign paddle bearing the clear messages STOP or SLOW provide motorists with more positive guidance than flags and should be the primary hand-signaling device. Flag use should be limited to emergency situations and at spot locations which can best be controlled by a single flagger.

6. Flaggers:

Since flaggers are responsible for human safety and make the greatest number of public contacts of all construction personnel, it is important that qualified personnel be selected. A flagger should possess the following minimum qualifications:

1. Average intelligence.
2. Good physical condition, including sight and hearing.
3. Mental alertness.
4. Courteous but firm manner.
5. Neat appearance.
6. Sense of responsibility for safety of public and crew.

The use of orange clothing such as a vest, shirt, or jacket shall be required for flaggers. For nighttime conditions similar outside garments shall be reflectorized. The retroreflective material shall be either orange, white (including silver-colored reflecting coating or elements that reflect white light), yellow, fluorescent red-orange, or fluorescent yellow-orange. The design of the retroreflective portions including stripe width, extent, design and type of material shall be determined by the contracting agency or purchaser of the vest.

Flaggers are provided at worksites to stop traffic intermittently as necessitated by work progress or to maintain continuous traffic past a worksite at reduced speeds to help protect the work crew. For both of these functions the flagger must, at all times, be clearly visible to approaching traffic for a distance sufficient to permit proper response by the motorist to the flagging instructions, and to permit traffic to reduce speed before entering the worksite. In positioning flaggers consideration must be given to maintaining color contrast between the work area background and the flagger's protective garments.

7. Flagging Procedures:

The following methods of signaling with sign paddles should be used:

1. To STOP Traffic. The flagger shall face traffic and extend the STOP sign paddle in a stationary position with the arm extended horizontally away from the body. The free arm is raised with the palm toward approaching traffic.
2. When it is Safe for Traffic to Proceed. The Flagger shall face traffic with SLOW sign paddle held in a stationary position with the arm extended horizontally away from the body. The flagger motions traffic ahead with the free hand.
3. When it is Desired to Alert or Slow Traffic. The flagger shall face traffic with the SLOW sign paddle held in a stationary position with the arm extended horizontally away from the body.

The following methods of signaling with a flag should be used:

1. To Stop Traffic. The flagger shall face traffic and extend the flag horizontally across the traffic lane in a stationary position so that the full area of the flag is visible hanging below the staff. For greater emphasis, the free arm may be raised with the palm toward approaching traffic.

2. When it is Safe for Traffic to Proceed. The flagger shall extend the flag toward the ground and motions traffic ahead with the free hand.

3. Where it is Desired to Alert or Slow Traffic. Where it is desired to alert or slow traffic by means of flagging, the flagger shall face traffic and slowly wave the flag in a sweeping motion of the extended arm from the shoulder level to straight down without raising the arm above a horizontal position.

The use of the flag and sign paddle are illustrated in figure 6-15.

Lights approved by the appropriate highway authority or reflectorized sign paddles or reflectorized flags shall be used to flag traffic at night. Daytime flagging procedures shall be followed whenever such lights, paddles or flags are used at night.

Whenever practicable, the flagger should advise the motorist of the reason for the delay and the approximate period that traffic will be halted. Flaggers and operators of construction machinery or trucks should be made to understand that every reasonable effort must be made to allow the driving public right-of-way and prevent excessive delays.

8. Flagger Stations:

Flaggers stations shall be located far enough in advance of the worksite so that approaching traffic will have sufficient distance to reduce speed before entering the project. This distance is related to approach speed and physical conditions at the site; however 200 to 300 feet is desirable. In urban areas when speeds are low and streets closely spaced, the distance necessarily must be decreased.

The flagger should stand either on the shoulder adjacent to the traffic being controlled or in the barricaded lane. At a "spot" obstruction a position may have to be taken on the shoulder opposite the barricaded section to operate effectively. Under no circumstances should a flagger stand in the lane being used by moving traffic. The flagger should be clearly visible to approaching traffic at all times. For this reason the flagger should stand alone, never permitting a group of workers to congregate around the flagger station. The flagger should be stationed sufficiently in advance of the work force to warn them of approaching danger, such as out-of-control vehicles.

Flaggers stations should be adequately protected and preceded by proper advance warning signs. At night, flagger stations should be adequately illuminated.

At short construction and maintenance lane closures where adequate sight distances is available for the safe handling of traffic the use of one flagger may be sufficient.

9. One-Way Traffic Control:

Where traffic in both directions must, for a limited distance, use a single lane, provision should be made for alternate one-way movement to pass traffic through the constructed section. At a "spot" obstruction, such as an isolated pavement patch, the movement may be self-regulating. However where the one-lane section is of any length, there should be some means of coordinating movements at each end so that vehicles are not simultaneously moving in opposite directions in the section and so that delays are not excessive at either end. Control points at each end of the route should be chosen so as to permit easy passing of opposing lines of vehicles.

Alternate one-way traffic control may be effected by the following means:

1. Flagger control.
2. Flag-carrying or official car.
3. Pilot car.
4. Traffic signals.

10. Flagger Control:

Where the one-lane section is short enough so that each end is visible from the other end, traffic may be controlled by means of a flagger at each end of the section. One of the two should be designated as the chief flagger for purposes of coordinating movement. They should be able to communicate with each other verbally or by means of signals. These signals should not be such as to be mistaken for flagging signals.

Where the end of a one-lane section is not visible from the other end, the flaggers may maintain contact by means of radio or field telephones. So that a flagger may know when to allow traffic to proceed into the section, the last vehicle from the opposite direction can be identified by description or license.

11. Flagging traffic at night:

- a. Use a bright red flash light with cone.
- b. To stop traffic, wave the light back and forth until the vehicle has stopped.
- c. Give the signal to proceed with your free hand or by speaking to the driver.

TRACTOR OPERATIONS

1. Sickle bar blades must be kept in contained rack or holder to prevent injury to the tractor operator.
2. Check to insure that both hand and foot engine speed levers work.
3. Mirrors both convex and concave should be used for greater visibility.
4. No greater than 45 degree angle slopes are recommended for cutting by the operator. When operating at an angle in excess of 45 degrees, extreme caution should be exercised by the operator.
5. Proceed cautiously when operating so as to be aware of road and cutting hazards: holes, ruts, debris, signs, etc.
6. When operating a dozer, bulldozer or front end loader, the operator should check to make sure that the bucket or blade is not in a raised position when parked or not in use. When bucket or blade is up and maintenance is being performed on the vehicle, the blade or bucket must be blocked underneath or secured overhead.

WET CELL BATTERIES

1. Open flames and smoking should not be permitted when working with batteries.
2. When working with batteries including jumping, suitable goggles or face shield should be worn.
3. Before connecting or disconnecting terminals from a battery being charged, the employee should turn off the battery charger.
4. If contact with battery acid or corrosion is made, affected parts should be washed immediately with clear water or an acid neutralizing solution.
5. The battery should be properly protected when work is to be done in its vicinity.
6. Metal funnels and containers should not be used to handle battery fluids.
7. Care should be taken to prevent arcing when connecting or disconnecting battery terminals.

EXITS

1. Access to exits will be marked by readily visible exit lights where the exit or the way to reach it is not immediately visible to the occupants.
2. Exit doors, passageways, and stairways must be maintained free of all obstructions to permit full use in case of fire or other emergency.

TOOLS

Because of the widespread use of hand tools and the frequency of many tool injuries, it is important that methods of controlling tool accidents be made a part of this manual. Many industrial eye injuries are caused by steel particles from the mushroomed edges of cold chisels, drills, or hammers.

Failure to observe one or more of the following safety practices has accounted for most of the hand tool accidents:

1. USE THE RIGHT TOOL FOR THE JOB:

Examples of unsafe practices: Using a file for a pry, a wrench for a hammer or a pair of pliers instead of a wrench. Use tools only for the purpose for which they are designed.

2. MAKE SURE YOUR TOOLS ARE IN GOOD CONDITION:

Examples of unsafe practices: Using chisels with mushroomed heads, dull saws, tools with burrs or cracks, or with broken or splintered handles.

3. ALWAYS BE SURE TOOLS ARE USED IN THE RIGHT WAY:

Examples of unsafe practices: Applying a screw driver to an object held in the hands, pulling a knife towards the body, striking two hardened steel tools together, using improper materials as levers--all these unsafe practices have caused accidents. All moving objects or machinery in motion must be stopped before tools are used on them.

4. KEEP TOOLS IN A SAFE PLACE:

Accidents have been caused by falling materials; by knives, screw drivers and other sharp tools carried in pockets and by chisels loosely laid in tool boxes. Do not leave tools on overhead work areas where they could fall and strike someone below. Do not carry an edged or pointed tool in pockets or belts unless the point or edge is protected. If they cannot be protected, carry them in a tool box, carrying belt, or pocket tool pouch.

5. Portable electric power tools should be provided with a suitable grounding device; either a connection from the frame of the tool to a spring clip for attachment to a ground, or a three-wire cord and polarized plug. When spring clip is safely used, the ground is attached before

the tool is plugged in.

6. Shovels, mauls, pitchforks, etc., should have strong smooth handles. Never leave them lying where anyone may trip over or step on them. Always return them to their proper storage areas.
7. Long handled tools should never be leaned up against a wall without a toe board.
8. Safety glasses should be worn when using chisels and punches. Check the immediate vicinity for bystanders who may be struck by flying chips.
9. Safety glasses should be worn when doing any operation which produces chips, splinters, or particles which could lodge in the eye or cause eye injury.

Workers should avoid carrying tools which might interfere with using both hands freely on a ladder or while climbing on a structure.

Workers carrying tools on their shoulders should pay close attention to clearances and other workers nearby. Carelessness in this way has caused far too many accidents. When two workers are carrying long materials on their shoulders, they should both place the materials on the same shoulder and should walk in step.

The following hand and portable power tools are listed and emphasized in this manual because of the frequency of accidents caused by the misuse of them:

1. Utility Knives: Cuts on the hand, arm and leg have resulted from the misuse of the utility knife. Workers should not draw the knives toward their bodies. When not in use, knives should have safety caps over the blades or be stored in a safe place.
2. Adjustable Wrenches: Whenever possible, an adjustable wrench should be placed on the nut with the open jaws facing the user. Placed in this way, the pulling force applied to the handle tends to force the wrench onto the nut. Wrenches should, if possible, be pulled--not pushed. According to manufactures, the moveable jaws on adjustable wrenches are roughly 1/3 as strong as the fixed jaws. It makes sense then to use the wrench in such a way that the strongest jaw bears the most pressure. The handle of every wrench is designed to be long enough for the maximum allowable pressure. So a piece of pipe slipped over the handle could easily break your wrench and cause an accident.
3. Pliers: Side-cutting pliers have caused injuries when short ends of wire are cut. Care must be used to avoid being struck by flying short ends.
4. Screw Drivers: The screw driver is probably the most commonly used and abused tool. The practice of using screw drivers as punches, wedges, pinch bars or pries should be discouraged. Using the proper screw driver for the job will lessen accidents by slipping.

5. Electric Disc Sanders: The disc sander can and has caused severe injury. Excessive pressure or working in awkward positions can cause the sander to bounce or slip against the operator and cut the worker badly. When using the tool, use extreme caution. The slightest touch of the edge of the disc will cut deeply.
6. Electric & Cordless Drills: Accidents with electric drills usually cause hand strains, finger injuries, bruises and eye injuries. These are caused by loose chuck binding, the drill simply "getting away" from the operator, a drill breaking or cut stock flying. Safety glasses are required to be used in all drilling operations. Working in cramped spaces with a drill has indirectly caused several accidents. Check out the work area closely before starting the job.

In all cases, when working with hand tools, report all tools or equipment which are in need or repair immediately. Use only those tools which were made for the job and use care always.

WOODWORKING MACHINERY

1. Machine guards are to be used at all times.
2. If you are running short or narrow stock, protect your fingers by using a block.
3. Before using a circular saw, check all materials for possible warping. If a concave edge is found, always place it away from the straight-edge guide of the table saw.
4. If the saw binds in a cut, the saw must be shut off before attempting to dislodge the lumber.
5. A rip saw shall not be used for cross-cutting; nor shall a cross-cut saw be used for ripping. A spreader and kickback fingers shall be required when using a rip saw. A spreader will be required when using a cross-cut saw.
6. Learn to stand out of the line of a possible "kick-back" and to avoid the danger of being struck by the small pieces that are frequently thrown from a circular saw.
7. Never reach over any machine to get finished materials from the opposite side, to remove dust or wood particles from the saw table, or to oil the machine while it is in operation.
8. In using a joiner, never allow either hand to pass over the knife. Use both hands--one on each side of the material--using particular care at the start and finish.

ELECTRICAL EQUIPMENT

1. Extension cords, sockets, plugs, receptacles, switches, circuit breakers, and fuses shall be maintained in good condition.

2. When possible, noninsulated metal parts on all portable electrical equipment shall be grounded in such a manner that handling, moving, or the progress of the work will not disconnect or loosen ground connections.
3. Portable electric power tools shall be provided with a suitable grounding device; either a connection from the frame of the tool to a spring clip for attachment to a ground, or a three-wire cord and polarized plug. When spring clip is used, the ground is to be attached before the tool is plugged in.
4. Guards shall be in place when a tool is in operation.

LADDERS

1. Never use a ladder which is defective in any respect, such as having broken or defective siderails or rungs. All extension ladders must be equipped with safety or non-skid feet.
2. Place a ladder so that the horizontal distance from the base to the vertical plane of the support is not more than one-fourth the ladder length. (For example: place a 12-foot ladder so that the bottom is not more than 3 feet away from the object against which the top is leaning.)
3. If the ladder is placed before a doorway, lock the door or have someone guard it. Protect the ladder base from traffic.
4. Always face a ladder when ascending or descending, and take each step in order. Always hold the siderails and not the rungs.
5. Stepladders must always be fully opened and the spreader locked before using.
6. Be sure the stepladder is long enough so you won't have to stand on the top step. Overreaching when working on a ladder is extremely hazardous and must be avoided.
7. Stepladders more than 10 feet in height must be held by another worker or must be securely lashed or blocked.
8. Ladders shall not be used as the horizontal platform of a scaffold.
9. Extreme caution should be used near electrical lines. Wear a hard hat and leather gloves.

HOISTS

1. No employee should be under a suspended load.
2. Special care should be taken not to twist or loop roller chains. Roller chains with bends or kinks shall be removed from service immediately.
3. Control should be clearly marked "up" and "down".
4. Each hoist should be clearly marked as to load capacity. The approximate weight of the load shall be known before attempting to hoist. Capacity shall be no more than a 50 lb. pull on the operating hand chain.
5. Suspended loads should not be left unattended.
6. Care should be taken that the load chain or sling does not go slack while lifting or lowering load.
7. Loads should not be transferred from one hoist to another while suspended.
8. Hoists should be inspected annually.

MAINTENANCE ON OR NEAR HINGED OR OVERHEAD DOORS

1. Work should not be done from a ladder on or near a hinged door, unless the door is locked or guarded.
2. Prior to doing any work on an overhead door, suitable work site protection such as cones, barricades, or lights should be placed on both sides of the door.
3. Prior to doing work on power-operated doors, the power supply should be turned off and a Hold Card placed on the switch.

CHEMICALS

1. All chemicals shall be considered a lethal poison and handled accordingly.
2. Chemicals shall be carried and stored in approved containers. The contents must be properly labeled. This includes any transfer containers.
3. All chemical containers shall be clearly labeled as to content.

4. When using solvents, cleaners, thinners, acids, etc., labels shall be read carefully before starting work.
5. Suitable protective equipment and clothing shall be worn while handling chemicals.
6. The type of protective clothing that is necessary to handle different types of chemicals will be determined by the supervisor. It shall be the responsibility of the supervisor to review the characteristics of all chemicals being used and based on the instructions and/or recommendations received with the chemical shall provide employees with the necessary protective clothing.
7. Protective equipment or clothing that has been contaminated by a chemical shall be thoroughly cleaned before further use or storage.
8. Keep areas well ventilated when using volatile or toxic chemicals.

Chemical Application

Danger - extremely toxic chemicals

Warning - mildly toxic chemicals

Caution - low toxicity chemicals

1. Know and observe all EPA and DNR laws which are posted.
2. MSDS (Material Safety Data Sheets) should be read prior to usage. The MSDS manual is located in the lunch room cupboard.
3. Avoid any chemical overspray which may endanger man, plants, and animals.
4. Know the chemical and types of formulation, including hazards associated with residues.
5. Keep any unauthorized persons away from the job site when spraying.
6. Use proper warning signs or devices denoting chemical use.

Protective Clothing and Equipment

1. Safety helmet, face shield or goggles;
2. Rubber or neoprene gloves--unlined;
3. Splash resistant coveralls, rain suits (rubber or plastic), light weight - unlined rubber boots;
4. Chemical cartridge respirators, chemical canister, supplied air;

5. Recommended chemical first aid kit.

Avoid Exposure

1. Do not work in spray drift or run off unless you are properly protected.
2. Do not wipe your hands on clothing if chemicals have been spilled on your gloves.
3. Never eat, drink, or smoke when handling or applying chemicals.
4. If you splash or spill a chemical while mixing or loading, stop immediately, remove contaminated clothing, and wash yourself thoroughly with soap and water.
5. Contaminated clothes should be kept away from the family laundry.

Hazardous Spills

1. Call the Village of Howard Fire Department immediately. They will notify the Brown County Haz Mat Team.
2. Unauthorized people should not be permitted to get into or near any spilled chemical.
3. Chemical work areas should be roped off or flagged to warn of possible danger. Evacuate the area and stand upwind.
4. Spills should be contained by diking with sand or soil.
5. If the spill is liquid, then activated charcoal, absorptive clay, vermiculite, pet litter or sawdust should be thrown over the entire spill.
6. Contaminated material should be swept or shoveled into a large leak-proof drum and then neutralized by applying either hydrated lime, a solution of lye, ammonia, sodium hypochlorite (bleach), or a strong detergent.
7. Finally, the area should be rinsed with plenty of water to wash away any remaining poison.

Chemical Containers (Rinse and Drain Procedure)

1. Empty the container into the spray tank and drain in a vertical position for 30 seconds.
2. Refill the container one-fifth to one-fourth full with rinse water or other diluent.
3. Rinse thoroughly, pour into spray tank, and drain in a vertical position for 30 seconds.

4. Repeat Steps 1 thru 3 until container has been rinsed three times.
5. After triple rinsing crush metal containers, break glass containers, or cut apart plastic containers until you can take them to a proper landfill.

TREE TRIMMING AND CHAIN-SAW SAFETY

1. No employee shall be assigned to work in a tree unless:
 - a. able to use a climbing rope and saddle.
 - b. able to tie all necessary knots.
 - c. able to use necessary hand tools.
2. Before starting any tree operations, time should be taken to check the trees in the surrounding area for any dangerous conditions.
3. Tree work should be avoided when trees are wet, during high winds, or during extreme low temperatures.
4. Only physically fit employees should be allowed to climb.
5. Tree trimmers should ask for assistance only from men on the crew, never from bystanders.
6. Danger signs and barriers will be placed around areas where tree work is to be done.
7. All employees are responsible for: compliance of all safety rules, inspection of tools and wearing suitable clothing and safety gear.
8. Ropes of a suitable strength should be used for lowering of large limbs.
9. Ropes shall be used for raising and lowering of tools.
10. Safety or climbing ropes should not be used for lowering limbs.
11. Ladders should not be used unless they can be set on a firm foundation.
12. Ladders should be frequently inspected for damage. All additional safety rules regarding ladders are to be followed.
13. Climbers should always call a warning before dropping limbs.

14. Never leave hangers or tools in a tree over noon hour or overnight.
15. The proper utility company should be contacted when it is necessary to work around live wires.
16. All wires broken during tree work should be reported to the proper utility company.
17. Fallen wires should be guarded until servicemen arrive.
18. In case of contact with live wires, do not touch the victim. He must be separated from wires by use of nonconductive materials. Call an ambulance at once.
19. For removal operations, fall ropes are used to guide fall of large trees. Once the notching has started, tree must not be left unguarded.
20. Only one-man saws should be used in a tree. All chain saws should be roped with their own rope using either a taut-line hitch or a groundman to hold the rope.
21. Never walk unnecessarily with the power saw running. Walk with the saw stopped and the guide bar pointing to the rear.
22. Always stand at the end of the saw when cutting, never at the side.
23. Avoid using the tip of the saw for cutting.
24. Never replace chain in guide rail groove while motor is running.
25. Clean and check saw thoroughly and lubricate daily as required. Maintain a proper tension on the chain. Always inspect the saw for sharpness as a sharp saw will reduce maintenance cost and result in faster, safer, easier cutting.
26. Refuel the saw before it runs out of gasoline to avoid a "bound saw" which is difficult to refuel and start; and to avoid the danger of fire when starting a saw at the refueling site.
27. Hard hats, steel-toed shoes and goggles are required.
28. Employees who operate a chain saw shall be provided with, and shall wear, ballistic nylon or equivalent protection covering each leg from upper thigh to boot top.
29. Employees shall wear either safety boots or heavy duty logging style boots with lug of calk soles, which are appropriate for the employee's job, the terrain, the timber type and weather conditions.
30. Safety helmets and eye or face protection shall be provided and worn. Hearing protection

will be provided and worn in accordance with applicable OSHA rules (see 29 CFR 1910.95).

SAFE OPERATING PRACTICES FOR LAWN MOWERS

1. Know the controls and how to stop quickly. Read the owner's manual.
2. Keep children and pets a safe distance away from mower operations.
3. Disengage all attachment clutches and shift into neutral before attempting to start the mower.
4. Disengage power to attachments and stop the motor before making any repairs or cleaning debris.
5. Disengage power to attachments when transporting or not in use.
6. Mower should not be used on slopes or dangerous areas when grass is slippery and wet.
7. Take all possible precautions when leaving the vehicle unattended, such as disengaging the power-take-off, lowering the attachments, shifting into neutral, setting the parking brake, stopping the motor, and removing the key.
8. Hands and feet should be kept away from blades.
9. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
10. Stay alert for holes in the terrain and other hidden hazards.
11. Handle gasoline with care.
 - a. Use safety approved gasoline containers.
 - b. Never remove the cap of the fuel or add gasoline to a running or hot engine or fill the fuel tank indoors. Wipe up spilled gasoline.
 - c. Properly vent all vehicles if the engine is running while in the garage.
12. Keep the vehicle and attachments in good operating condition, and keep safety devices in place.
13. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
14. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. If damage has occurred, inform your supervisor.
15. Shut the motor off when removing the grass catcher or unclogging chute.

16. Check the blade mounting bolts for proper tightness at frequent intervals.

COMPRESSED AIR

The use of compressed air for cleaning purposes is prohibited. Brushes should be used for cleaning machinery.

Air hammers:

1. Remove the piston or tool of an air hammer whenever it is not in use to avoid the danger of it flying out and striking someone.
2. Always close the valve on the air line and release the air from the hose before cleaning, repairing, trying to insert any tool or leaving any air powered unit.
3. Maintain your hold securely on the handle of an air motor to prevent it from flying around and striking you.
4. Be sure to check that the discharge end is made secure before turning compressed air into a hose so that it will not swing around and cause injury.
5. Hearing protection in the form of an ear muff is required; the use of safety goggles is required; and wearing of steel-toed shoes is highly recommended. In addition, meta-tarsal guards must be worn.

COMPRESSED GAS CYLINDERS

(Over 150 P.S.I.G.)

1. Refer to contents of gas cylinders by proper name.
2. Compressed gas cylinders, empty or full, should be secured by a chain or metal strap in an upright position while stored, transported, or in use.
3. The valve protection cap should be left on the cylinder at all times, except when the cylinder is in service.
4. Oxygen cylinders in storage should be in a separate area away from combustible gases a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire resistant rating of at least 1/2 hour.
5. Gauge testing devices using oil as a pressure medium should not be used to test any gauge on oxygen or combustible gas systems.

6. Gas cylinders should be handled in such a manner as to prevent them from dropping or striking each other.
7. Gas cylinders should not be dragged or rolled horizontally.
8. Safety devices in valves should not be tampered with.
9. Oil or grease should not be used to lubricate any valves exposed to oxygen.
10. When cylinders are not in use, the valves should be shut off and hoses depressurized.

WELDING AND CUTTING

1. General:
 - a. All personnel using welding equipment should be qualified and assigned by their supervisor to do this work.
 - b. All welding equipment should be in good mechanical condition and properly assembled. If such equipment is defective, it should be repaired and/or replaced. Always read and follow the manufacturer's instructions.
 - c. Cylinders, gauges, or other welding equipment should not be used for other than intended purposes.
 - d. When cutting or welding operations must be done from a suspended staging or scaffold, flammable fiber rope should not be used as a means of support for the staging or scaffold.
 - e. Welding and cutting should not be done without proper ventilation.
 - f. Caution should be exercised when handling or working near hot objects.
 - g. A welding shield should be used to protect other persons from an arc flash when electric welding.
 - h. Welding, chipping, and grinding should not be done without suitable goggles. Gas welding or cutting requires a #5 green caliber glass lens. Electric arc welding requires a complete face shield with #10 green caliber lens or darker. A Welder's helper must wear flash glasses unless he is required to look at the weld. He should then wear the prescribed face shield and lens.
 - i. Approved gloves and adequate eye protection should be worn when cleaning and dressing welds.
 - j. Operator's who are welding or cutting should be aware of possible welding burns and should wear protective clothing and gloves. Such clothing and gloves should be reasonably free of oil and grease.
 - k. Correct terms should be used to avoid confusion. Call acetylene "acetylene", not gas. Oxygen should be called "oxygen", not air.
 - l. Welding should not be done in the presence of flammable liquids or vapors, such as gasoline, kerosene, alcohol, propane, etc.

- m. Welding or cutting should not be done on containers such as drums, barrels, or tanks unless they have been properly steamed, purged, and vented.
- n. A lighted torch should not be lowered into an excavation to determine the presence of escaping gas. Proper methods of determining the presence of gas shall be used before starting welding operations in such an excavation.
- o. When cutting, welding or heating, care should be exercised in selecting working positions which will minimize sparks or molten metal from contacting head, legs, feet, arms, clothing, and welding equipment.
- p. When welding or cutting (either gas or electric), there are certain types of welding rods and metals that give off dangerous fumes. If a welding rod produces dangerous fumes, this fact will be stated on the box in which the rods were purchased. When required to weld with such rods or on metals such as cadmium or galvanized materials, the welder shall, in addition to making sure proper ventilation exists, wear a face mask under the welder's helmet. The two special cartridges in the face mask will give the welder additional protection from metal fumes. Each garage location should have a face mask and extra cartridges for welding.

2. Electric Welding Equipment:

- a. All electric welding machines should be maintained and operated according to the manufacturer's recommendations and state and national electrical codes.
- b. All insulated electrode holders and cables should be kept in good repair. Electrode holders shall be placed to avoid accidental contact with grounded objects.
- c. Extra caution should be taken while welding in a damp location to avoid the possibility of electric shock.
- d. All machines should be properly grounded.
- e. When welding operations are to be stopped for a substantial period of time, all electrodes shall be moved from the holders and the machine shut down or disconnected from any power source.

3. Gas Welding, Cutting, Heating, and Regulating Equipment:

- a. When operating a gasoline powered welder, caution should be used to avoid a concentration of carbon monoxide.
- b. Blow out the cylinder valve before attaching regulator.

- c. Release adjusting screw on regulator before opening cylinder valve.
 - d. Stand to one side of the regulator when opening cylinder valves.
 - e. Open cylinder valve slowly.
 - f. Do not use or compress acetylene in (free state) at pressure higher than 15 lbs.
 - g. Purge oxygen and fuel gas passages (individually) before lighting torch.
 - h. Light acetylene before opening oxygen valve on the torch.
 - i. Never use oil on regulators, torch fittings, or other equipment.
 - j. Do not use oxygen as a substitute for compressed air.
 - k. Keep heat, flames, and sparks away from combustibles.
4. Torches:
- a. Torches or furnaces should not be used in locations near highly combustible materials.
 - b. Leaky torches should not be used.
 - c. Avoid shielding a torch flame with your body or clothing.

OXYACETYLENE WELDING EQUIPMENT

1. All oxygen and oxyacetylene cylinders should be stored, transported, and used in the upright position. They shall be chained to a support at all times unless being moved individually. When cylinders are not in use or connected to regulators, protective cylinder caps shall be in place.
2. Identify cylinder content by the name marked on the cylinder. If a cylinder is unmarked, return it to the supplier. Do not rely on the color of the cylinder.
3. Keep oil and grease away from valves and cylinders. Keep cylinders away from exposure to sparks, hot slag, open flame and all possible sources of excessive heat. Do not handle oxygen equipment with oily hands or oily gloves.
4. Care shall be exercised in tightening brass fittings of oxyacetylene equipment. Particular attention should be paid to right or left handed threads. Standard hose connections are threaded right-handed for oxygen and left-handed for acetylene. Soapy water shall be used

to detect any leaks. Open flames shall not be used.

5. Only color-coded hoses should be used. A red hose should be used with acetylene and a green hose with oxygen. Never force connections that do not fit.
6. The valve wrench shall be left in position on acetylene cylinder valves when the cylinder is in operation.
7. If valves, tanks, or connections on welding equipment are leaking, they should be shut down as soon as possible. Leaking tanks shall be moved out into the open air, away from sources of ignition, notify the supplier immediately.
8. Oxygen and acetylene regulators, hoses, or other pieces of equipment should not be used with any other gas. Acetylene shall not be transferred from one cylinder to another.
9. The use of acetylene for cutting, welding, and heating at pressures in excess of 15-pound gauge pressure is prohibited.
10. Only friction lights should be used to light torches. Matches shall not be used. Blown out torches should not be relighted without first closing both torch valves and using the lighting sequence.
11. When the equipment is not used, cylinder valves should be closed and gas hoses and regulators shall be depressurized.

SEWERS

1. At least two men shall work on a sewer maintenance job, whether or not dangerous gases are suspected.
2. Before entering a manhole structure or sewer, tests should be made to determine whether explosive mixtures are present, or whether the lack of oxygen exists.
3. Proper ventilation is necessary.
4. Manholes, tunnels, and trenches known to be contaminated should be tagged or otherwise identified for the information of work crews.
5. Smoking will not be permitted in manholes and tunnels.
6. Use of open-flame devices will not be permitted in or near manholes, tunnels, or trenches in which tests indicated the presence of flammable gas.

REFUSE COLLECTION OPERATIONS

1. Truck drivers should inspect the truck and all power equipment before starting a route. Pay particular attention to hydraulic lines.
2. Before and during operation of trucks, be sure the directional brake lights are free from dirt, grease, ice or snow.
3. Do not jump on or off of moving vehicles.
4. Do not ride in the hopper of the compactor.
5. Watch out for traffic when getting in and out of the vehicle.
6. Always operate the compactor lever with your left hand. Make sure you are not standing at the rear of the truck when the compactor blade is in motion; always stand at the side of the truck where you cannot be injured from flying debris.
7. When there is more than one employee on a refuse truck, the passenger should direct the driver when backing up from the driver's side behind the truck.
8. Be careful of tree branches and low hanging tree limbs which can cause bumps to the head and injury to the face.
9. Any defects in machinery should be reported to your supervisor.
10. Employees should ride only in the cabs and rear body areas of the trucks. Steps provided on refuse collection trucks may be used to ride between pickups on routes.
11. Be especially watchful at the disposal site for sharp objects in the landfill surface which may puncture or cut tires, or tangle in the drive train.
12. Wait until the truck is completely stopped and in the proper unloading position before unfastening turnbuckles or latches to unload.
13. Make sure all employees or other persons are clear before raising a tailgate assembly.
14. Make sure all employees or other persons are standing clear of the vehicle before the dumping controls are activated to discharge the load.
15. Never take a position under a raised tailgate or allow anyone else to do so.
16. Drivers of refuse trucks should visually inspect their vehicles for cracks, broken welds, leaking hydraulic lines, etc., while unloading at the disposal site. The helper should stand

clear of the vehicle and the operator avoid taking a position under any raised portion of the vehicle while making such a visual inspection.

17. Be constantly watchful of the safety of helpers, bystanders, and particularly children when operating the powerful mechanisms of refuse compaction equipment.
18. Entry to the hopper or cargo space for inspection or maintenance should be accomplished only when proper action has been taken to lock out the power source and tag it.
19. Personal articles should not be stored or left in the cab or refuse trucks except for protective equipment.
20. Never reach into containers. Sharp objects such as razor blades, broken glass, etc. can injure your hands.
21. Discarded television tubes are dangerous when broken. The phosphorous coating inside is poisonous.
22. Plastic bags may contain sharp, pointed objects that can puncture the bag and inflict wounds upon the unsuspecting collector.
23. Inspect metal refuse containers carefully for rusted, insecure handles to avoid dropping them.
24. Do not press down on refuse or garbage with hands when transferring material from one container to another.
25. Put boards, sticks, glass tubes, etc. in the hopper so that no portion extends over the sill. If such is the case, the packer plate may snap the object in two and project the free end in any direction with considerable force.
26. Do not push refuse into the hopper with your hand or foot while the packer is in motion.
27. When driving one-man truck from right hand side it should not be operated above 10 mph.
28. When driving two-man truck with rider on the back it should not be operated above 10 mph.

CERTIFICATE

I, _____, certify that I have received,

PLEASE PRINT

read and fully understand the Village of Howard's Safety Manual.

Signature

Date

Supervisor's Signature

Date

CHAPTER B

VILLAGE OF HOWARD

WILLSON AIR RESPIRATOR W/ CANISTER

UTILIZATION PROCEDURES

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**VILLAGE OF HOWARD
WILLSON AIR RESPIRATOR W/ CANISTER
UTILIZATION PROCEDURES
7/12/90**

A. DESCRIPTION OF USE

The Willson 6000 Series Full Facepiece Respirator is an air-purifying full facepiece respirator which utilizes a single air-purifying element to provide limited protection against certain hazardous vapors, gases and particular matter. During the wearers inhalation cycle, the contaminated air is drawn through the air-purifying element where it is cleansed. The inhalation valve opens and the exhalation valve remains closed during the inhalation cycle. It is important that the exhalation valve is in good condition to prevent contaminated air from being drawn in during the inhalation cycle. The purified air then passes into the molded channels of the facepiece. These channels direct the purified air over the lens, thus reducing fogging.

During exhalation, exhaled air is expelled from the facepiece through the exhalation valve assembly. Design of this assembly also allows it to serve as a vent for moisture which may condense from the breath within the facepiece. An inhalation valve at the bottom of the air purifying element prevents the exhaled air from being expelled through the air purifying element.

Note that we currently have three (3) of the Willson respirators, Model No. BM14F-53, specifically used for chlorine.

B. LIMITATIONS AND WARNINGS

1. Respirators labels for protection against particulates only shall not be used for gases or vapors. Respirators labeled for protection against gases and vapors only shall not be used for particulates. Always read the NIOSH labels prior to use to ascertain that you are using the correct respirator for you application. If unsure, check with your Safety Director.

WARNING:

THIS RESPIRATOR DOES NOT SUPPLY OXYGEN. DO NOT USE IN ATMOSPHERES CONTAINING LESS THAN 19.5% OXYGEN BY VOLUME. DO NOT USE WHEN CONCENTRATIONS OF CONTAMINANTS ARE: (1) UNKNOWN, (2) HIGHER THAN LIMITS SPECIFIED ON THE NIOSH APPROVAL LABEL, OR (3) IMMEDIATELY DANGEROUS TO LIFE OR HEALTH. DO NOT USE IN POORLY VENTILATED OR CONFINED SPACES SUCH AS TANKS OR SMALL ROOMS UNLESS ADEQUATE VENTILATION IS PROVIDED, OR FOR ABRASIVE BLASTING, OR FIREFIGHTING, OR FOR ANY APPLICATION NOT COVERED BY THE APPLICABLE NIOSH APPROVAL LABEL.

2. This respirator is for use only by trained qualified personnel in accordance with a respirator program outlined in the current ANSI Standard Z88.2 and OSHA regulation 1910.134. Copies of the ANSI Standard may be obtained by writing ANSI, 1430 Broadway, New York 10018.
3. The assembled respirator may not provide a satisfactory facial seal with certain physical characteristics such as a beard or gross sideburns. These facial characteristics which may result in leakage around the facepiece which voids or limits the protection. If such a condition exists, the user assumes all risks of bodily injury which may possibly result.
4. Facial or barrier creams must not be used when wearing respirators. They do not aid in obtaining a leak proof seal and may cause deterioration of the facepiece material.

CAUTION:

THIS RESPIRATOR PROVIDES ONLY LIMITED PROTECTION FOR THE EYES AND FACE AGAINST VAPORS, GASES OR PARTICULATE MATTER THAT MAY IRRITATE OR BURN THE EYES OR SKIN OR THAT MAY BE ABSORBED BY THE BODY THROUGH THE SKIN. ADDITIONAL PROTECTIVE EQUIPMENT MAY BE REQUIRED FOR THOSE AREAS NOT COVERED BY THE RESPIRATOR.

5. Leave the area **immediately** if:
 - a. Breathing becomes difficult.
 - b. You smell or taste the contaminant or if your senses indicate any abnormal conditions.
 - c. Dizziness or other distress occurs.
 - d. The respirator is damaged.

CAUTION:

NEVER ALTER OR MODIFY THE RESPIRATOR. ALTERING OR MODIFYING THE RESPIRATOR WILL VOID ALL APPROVALS AND MAY CONTRIBUTE TO A REDUCTION IN PROTECTION TO THE USER.

WARNING:

FOLLOWING IS A PARTIAL LIST OF GASEOUS MATERIAL FOR WHICH CHEMICAL CARTRIDGES RESPIRATORS SHOULD NOT BE USED FOR RESPIRATORY PROTECTION REGARDLESS OF CONCENTRATION OR TIME OF EXPOSURE. THIS PARTIAL LIST IS OFFERED ONLY AS A GUIDE TO PROPER EVALUATION OF THE MANY CONTAMINANTS FOUND IN INDUSTRY.

- | | | | |
|-----|-------------------|-----|------------------------|
| 1. | Acrolein | 19. | Methyl Bromide |
| 2. | Aniline | 20. | Methyl Chloride |
| 3. | Arsine | 21. | Methyl Iodine |
| 4. | Boron Hydrides | 22. | Nitro Compounds: |
| 5. | Bromide | | Nitrogen Oxides |
| 6. | Carbon Dioxide | | Nitroglycerine |
| 7. | Carbon Monoxide | | Nitromethane |
| 8. | Carbonyls | | Nitrobenzene |
| 9. | Cyanogen | 23. | Ozone |
| 10. | Dimethylaniline | 24. | Perchloroethane |
| 11. | Demethylsulfate | 25. | Phosgene |
| 12. | Ethyl Cyanide | 26. | Phosphine |
| 13. | Flourine | 27. | Phosphorus Trichloride |
| 14. | Hydrogen Cyanide | 28. | Stibine |
| 15. | Hydrogen Selenide | 29. | Sulfur Chloride |
| 16. | Hydrogen Sulfide | 30. | Vinyl Chloride |
| 17. | Mercury Vapor | | |
| 18. | Isocyanates | | |
| | MDI | | |
| | TDI | | |
| | HDI | | |

WARNING:

NEGATIVE PRESSURE AIR PURIFYING RESPIRATORS ARE NOT TO BE USED FOR COMPOUNDS WHICH HAVE POOR OR INADEQUATE WARNING PROPERTIES AT OR BELOW THE PERMISSIBLE EXPOSURE LIMIT (PEL). THE USE OF ANY NEGATIVE PRESSURE AIR PURIFYING RESPIRATORS WILL NOT COMPLETELY ELIMINATE ALL OF THE HAZARDS ENCOUNTERED BY THE WEARER. CAUTION MUST BE TAKEN WHEN ENTERING AN ATMOSPHERE WHERE CARCINOGENS ARE SUSPECTED BELOW THE PEL.

CAUTION:

AIR PURIFYING ELEMENTS WILL NOT PROVIDE PROTECTION AGAINST ALL GASES AND VAPORS. EACH PURIFYING ELEMENT IS SPECIFICALLY LABELED AND COLOR CODED TO INDICATED THE TYPE OF PROTECTION IT AFFORDS.

Gas Mask Canisters used in emergency situations should be replaced after each use. During routine non-emergency situations, gas mask canisters should be replaced when:

1. Their "use before" shelf life date has been exceeded.
2. Leakage is detected by smell or taste or if the eye, nose or throat become irritated.
3. High resistance to breathing develops.
4. Inhaled air temperatures is uncomfortable.
5. Any symptoms of distress, nausea or dizziness develop.

C. TRAINING AND EDUCATION IN PROPER USE

For safe use of the respirator gas mask, it is essential that Village employees be properly instructed in its use and maintenance.

Minimum training shall include the following:

1. Instruction in the nature of the hazard: whether acute, chronic, or both and an honest appraisal of what may happen if the respirator is not used.
2. 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 respiratory protection.
3. A discussion of why this is the proper type of respirator for the particular job.
4. Instruction and training in actual use of the respirator followed by frequent supervisory inspections to assure that it continues to be used properly.
5. Classroom and field training to recognize and cope with emergency situations.
6. The wearer must be taught to detect the odor or other irritating effect of incipient concentrations of contaminant, so that he may immediately detect if the canister is no longer functioning properly.
7. Training shall provide the wearer with an opportunity to handle the respirator, fit it properly, test the facepiece to face seal, wear it in normal air for a long familiar period, and wear it in a contaminant test atmosphere.

D. DONNING INSTRUCTIONS

1. Make sure that respirator is assembled correctly and is equipped with the proper filter and/or canister for the work assignment to be performed.

CAUTION:

OSHA REQUIREMENTS STATE THAT A RESPIRATOR MUST BE INSPECTED BY THE WEARER BEFORE AND AFTER EACH USE TO INSURE THAT IT IS IN GOOD WORKING CONDITION.

2. Remove protective eyewear.
3. Putting of Respirator Head Gear:
 - a. LOOSEN BOTH RATCHET ADJUSTMENTS ON THE TITE-SEAL molded plastic headgear.
 - b. PLACE MASK ON FACE with Tite-Seal headgear raised over the head. (Fitting mask against chin first.) Grasp Outlet Valve at front with one hand to hold respirator facepiece against the face. With the other hand, move molded headgear down over the head. Tighten each ratchet adjustment for comfortable fit.

Once the Tite-Seal headgear has been fitted, it can be removed by simply flipping the headgear forward with no further adjustment of the ratchets.

CAUTION:

IF THE RESPIRATOR DOES NOT FIT YOU CORRECTLY, YOU MAY NOT RECEIVE ADEQUATE PROTECTION. EACH TIME YOU USE A RESPIRATOR YOU MUST CHECK FOR PROPER FIT BEFORE ENTERING A CONTAMINATED AREA.

E. INSTRUCTIONS FOR POSITIVE AND NEGATIVE PRESSURE FIT CHECK

Fit checks should be performed each time the respirator is donned. Attach the appropriate canister or filter before performing the fit test.

RESPIRATOR FIT TESTS

A respirator should not be assigned to a person unless the person is given a qualitative or quantitative respirator fit test and the results indicate that the respirator fits properly. Instructions for carrying out qualitative and quantitative respirator fit tests are given in Z88.2-1980 American Standards Practices for Respiratory Protection and respirator manuals published by government agencies such as NIOSH, ERDA, and NRC. Willson Safety Products has also produced a slide training presentation which discusses proper fit of a respirator as well as qualitative quantitative fit testing.

When qualitative fit testing has been performed the ANSI Z88.2-1980 respirator standard allows a protection factor 100, (protection for use up to 100 times the TLV for a given hazard) or the maximum use limit of the cartridge or canister for vapor or gas, whichever is less.

CAUTION:

IF YOU CANNOT ACHIEVE A PROPER FIT DO NOT ENTER CONTAMINATED AREAS. SEE YOUR SUPERVISOR.

F. POSITIVE PRESSURE FIT CHECK

Place palm of hand over the hole in the exhalation valve cover and exhale gently to cause a slight positive pressure inside the facepiece. If the facepiece bulges slightly and no air leaks between the face and facepiece are detected, a proper fit has been obtained. If air leakage is detected, reposition the respirator on the face and/or readjust the tension of the headbands to eliminate the leakage. Repeat the test until a satisfactory seal has been achieved.

G. NEGATIVE PRESSURE FIT CHECK

Test for tightness by closing the air inlet on the bottom of the canister or filter with the palm of the hand or reuse of the inlet seal. If a good facial fit seal has been obtained, the facepiece will collapse on inhalation and remain collapsed while breath is held; otherwise, the facepiece should be readjusted. If other than facial seal leakage is detected, inspect complete assembly until leakage is located and eliminated.

H. MAINTENANCE AND STORAGE

Cleaning of the respirator is recommended after each use. **DO NOT clean canister:** these should be removed from the respirator and either discarded or stored for future use.

1. Disassemble the respirator by removing the oral nasal mask (if used), threaded connector, and exhalation valve assembly. Remove the exhalation valve from the exhalation valve body. It is not necessary to remove the lens each time the respirator is cleaned.
2. The facepiece and other component parts should be washed with a soft brush in a mild detergent. **DO NOT** use solvents or abrasive materials to clean the lens.

Facepieces may be sanitized in either of these easily prepared disinfectant solutions for 2 minutes.

- a. 2 tablespoons household bleach mixed with 1 gallon of water.
- b. 1 teaspoon tincture of iodine with 1 gallon of water. Rinse thoroughly and dry at room temperature in a clean area.

NOTE: AIR AND WATER TEMPERATURE SHOULD NOT EXCEED 120 F.

3. All parts of this respirator assembly must be carefully examined for wear. Damaged parts must be immediately replaced. This device should be inspected every 30 days since it must be available in first class condition at a moment's notice. Parts should be checked for, but not limited to, the following:
 - a. Ratchet slippage on headgear (6600/s6600).
 - b. Secure attachment of Tite-Seal headgear to lens retainer (6600/s6600).
 - c. Worn or broken straps on six strap head harness (6600/s6600).
 - d. Lens is held securely in position by Lens Retainer and is not cracked or broken.
 - e. Exhalation Valve Assembly is properly assembled.

CAUTION:

IT IS EXTREMELY IMPORTANT THAT THE EXHALATION VALVE SYSTEM OF THE RESPIRATOR BE IN PERFECT OPERATING CONDITION. A DEFECTIVE EXHALATION VALVE SYSTEM MAY ALLOW CONTAMINATED AIR TO LEAK INTO THE FACEPIECE.

- f. Threaded canister washer (G758) is in place.
- g. Facepiece is not cut or punctured.
- h. Exhalation Valve Assembly is secure.
- g. Canister or filter is correctly threaded to the facepiece assembly.

4. Storage

When not in use keep bottom seal on canister and keep facepiece mask assembled ready for use. The facepiece should be located at a conspicuous and easily accessible place, away from dampness, heat, extreme cold, dust or damaging chemical contaminants. Facepieces not routinely used, but kept ready for use should be inspected at least monthly to insure that they are always in first class condition.

CHAPTER C

**VILLAGE OF HOWARD
CONFINED SPACE ENTRY
PROCEDURES MANUAL**

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CONFINED SPACE ENTRY PROCEDURES

A. Purpose

The purpose of these procedures is to insure that employees within the Public Works Department for the Village of Howard are properly trained and know the hazards involved in entering confined spaces. It will set up procedures to follow to insure that the employee or employees are adequately protected from these hazards and steps to be taken should an incident take place or a rescue be necessary. These procedures are designed to comply with the Confined Space Entry Procedure as contained in Section 1, Chapter 1 DILHR 31.

B. Scope

These procedures shall apply to all employees of the Public Works Department and to all places of employment and public buildings of the Village of Howard considered to be confined spaces, whether existing now or subsequently established or built.

C. Definitions

1. **"Confined Space"**: Shall mean an environment which by design or construction has limited openings for entry and egress, has unfavorable natural ventilation, which could contain or produce dangerous air contaminants, and which is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, storage tanks, compartments of ships, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, manholes, sewers, tunnels, underground utility vaults and pipelines.
2. **"Employer"**: Shall mean the Village of Howard and any subdivision thereof.
3. **"Employee"**: Shall mean any individual employed by the Village of Howard, be it a part time, full time or seasonal position.
4. **"Standby Employee"**: A person trained in emergency rescue procedures and assigned to remain on the outside of the confined space and to be in communication with those working inside.
5. **"Supervisor"**: Shall mean any employee of the Village of Howard who has been given supervisory responsibility and authority to act independent in directing employee activity.
6. **"Oxygen Deficiency"**: Normal atmosphere has an oxygen level of 20.5 percent. When the oxygen level reaches 19.5 percent or less of the atmosphere, the condition is known as oxygen deficiency.

7. **"Combustible Gases"**: Shall mean a vapor or gas capable of burning easily, is easily ignited and will readily burn.
8. **"Hydrogen Sulfide"**: A colorless, gaseous, poisonous compound having a characteristic odor of rotten eggs.
9. **"Lower Explosive Limit"**: (L.E.L.) means the lower limit of flammability of a gas or vapor at ordinary ambient temperatures expressed as a percentage of the gas or vapor in air by volume.

D. Responsibility

1. It shall be the responsibility of the Village, through its Committee as a whole and Village Board action, to insure adequate funds are available and that the necessary safety equipment is purchased to comply with the provisions of this directive.
2. It shall be the responsibility of the Village of Howard to insure that employees assigned to positions requiring that they enter confined spaces are properly trained in the operation of the safety equipment and further that they be trained in rescue procedures. In addition, appropriate records will be kept on all training conducted.
3. It shall be the responsibility of all supervisors to insure that only properly trained and instructed employees are assigned to positions requiring confined space entry. It shall further be their responsibility to provide reasonable supervision to insure employees are following procedures as outlined in this directive and to furnish employees with a copy of the confined space entry procedure. Disciplinary guidelines and procedures will be followed when violations occur.
4. It shall be the responsibility of employees to follow the procedure of "confined space entry", to use and follow procedures established for their safety and welfare and to promptly report to their supervisor any malfunction of testing or safety equipment. They shall be responsible for protecting and safeguarding all safety equipment from damage, loss or theft.

E. Training

1. Each employee assigned duties requiring that they either enter confined spaces or act as a standby for others entering confined spaces shall receive the following training:
 - a. Hazards of entering confined areas
 - b. Proper use of monitoring or testing equipment
 - c. Proper use of self-contained positive pressure breathing apparatus or air line respirator
 - d. Rescue and emergency procedures

- e. First aid and CPR training
 - f. Proper calibration of monitors or testing equipment
 - g. Traffic safety procedures
 - h. Use of proper protective clothing
2. Records will be kept on all training conducted to include dates, times and subjects covered. This information will be recorded on Safety Training Form enclosed as attachment #1.

F. Safety Equipment

1. The following equipment shall comprise standard safety equipment necessary to outfit a crew required to perform work in a confined space:
- a. Safety harness with waist belt, shoulder straps, leg straps and "D" rings or shoulder ring attached no lower than the shoulder blades for each employee.
 - b. Winch with warning flags
 - c. Combination air line respirator with 5 minute positive pressure emergency escape unit.
 - d. Oxygen deficiency, combustible gas and hydrogen sulfide sampling meter or tester.
 - e. Safety cones, barricades, signs
 - f. Safety Ladder
 - g. Safety vests, hard hats, protective clothing and gloves
 - h. Fire extinguisher and first aid kit
 - i. Portable ventilator
2. The above equipment represents a substantial investment and the proper function of this equipment is necessary should it be required to rescue an employee. The equipment should be protected or placed in protective carrying cases, when available, to insure its continued use and to prevent damage.

G. Space Levels

For the purpose of determining the specific entry procedure to be followed, a confined space which may be entered shall be classified as either a level 1 space or a level 2 space based upon the air quality and the sources of possible contamination.

1. The level 1 space shall be a confined space with an atmosphere within the limits specified on H4 (a) (b) (c) below, and the only source of contamination expected or likely to effect the atmosphere is the employee's presence or the employee's activities.

2. A level 2 space shall be confined space with an atmosphere which falls within one of the following conditions:
 - a. The air quality is within the limits specified in H4 (a) (b) (c) below and the confined space contains sources of contamination, other than the employee or the employee's activities, which may affect the atmosphere, or
 - b. The air quality is, or was at some time previously, not within any or all of the limits specified in H4 (a) (b) (c).

H. Air Quality Sampling

1. It is imperative that meters be calibrated before sampling. In the case of combustible gases and hydrogen sulfide, the sampling meter shall be zeroed before each use. Calibration of the meter for oxygen content shall be performed where the air is most likely to contain the natural 20.5 percent oxygen.
2. Sampling of the atmosphere throughout the confined space shall be performed before entry. The air quality shall be determined for all levels and all areas of the confined space.
3. The sampling meter has an audible and visible warning device which simultaneously incorporates tests for oxygen deficiency, combustible gases and hydrogen sulfide without manual switching. This unit will be used to test the atmosphere of the confined space.
4. When sampling in confined spaces, insure a non-sparking probe is used. For manholes, the probe shall be inserted through the pick-hole of the manhole cover, or the cover should be pried open on the down wind side to allow just enough room for insertion of the probe.
 - a. Upon testing, if the oxygen content is less than 19.5 percent, the confined space will not be entered until the provisions of paragraph I below are followed.
 - b. Upon testing, if the Lower Explosive Limit (LEL) on the sampling meter indicated 20 percent or more, the confined space will not be entered until the provisions of paragraph I below are followed.
 - c. Upon testing, if the sampling meter indicates 10 RPM or more of hydrogen sulfide, the confined space will not be entered until the provisions of paragraph I below are followed.
 - d. If the odor of toxic materials are suspected or detected, additional tests shall be conducted to determine the concentrations.

5. Continuous monitoring of the atmosphere shall be conducted in the employee's immediate area while in the confined space. This can be done by lowering a probe in to the confined space and reading the instrument at the surface or by wearing the instrument as the employee enters the confined space. A signal from the monitoring instrument shall indicate to the employee that the air quality in the confined space is inadequate and that the employee should immediately return to the surface.

I. Inadequate Air Quality

1. When sampling indicates the confined space air quality to be inadequate, a self-contained positive pressure breathing apparatus or air line respirator will be used when entering the confined space. In addition, the employee shall be equipped with the five (5) minute escape air tank in the event of an emergency.
2. Where inadequate air quality is prevalent in a confined space, employees shall determine if other means are available to accomplish their assigned tasks other than entering the confined area.
3. A confined space with an atmosphere which is not within the limit specified in paragraph H4 (b) for combustible gas will not be entered even if a breathing apparatus or respirator is used.

J. Guarding Street Openings

1. Approaching the work site
 - a. A vehicle beacon and 4-way flashers shall be activated upon approach to an entrance to a confined space.
 - b. Vehicles shall be parked in such a way that traffic will flow in an unobstructed manner, and where possible, the vehicle shall provide protection for the employee (s).
 - c. Vehicles shall be parked in such a manner that exhaust fumes cannot accumulate in the confined space. If this is not possible, the vehicles exhaust stack shall be extended away from the confined space.
2. Cone Placement
 - a. Before uncovering a manhole, traffic safety cones shall be placed around the manhole and any vehicle and shall be visible to traffic in all directions. Cones shall be placed to protect the employees and to channel traffic flow. Cones shall be placed at sufficient distances and intervals so as to adequately warn traffic and to prohibit traffic from traveling and weaving between cones.

K. Additional Safety Procedures

1. In areas of high traffic volume, or other sites warranting additional warning devices and barricades, "men working" sign shall be used around the entrance and any vehicle.
2. When placement of the vehicle creates a situation of having only one open lane of traffic in a congested area, a flagman shall be used to direct traffic flow.
3. Traffic safety vests shall be worn at all times when working on the street.
4. A manhole will not be left open when unattended unless it is protected by barricades or a cage. Cables, ropes, etc., extending into the manhole should, when possible, be threaded through the pick-hole of the cover and the cover placed on the manhole casting.

L. Confined Space Entry

Level 1 Space: Entry into or work in a level 1 space shall be in accordance with the following:

1. The atmosphere within the employees immediate area shall be continuously monitored for oxygen, hydrogen sulfide and combustible gas while in the confined space.
2. Signals from the monitoring device shall immediately indicate when the atmosphere falls outside any of the air quality limits specified above for oxygen, hydrogen sulfide or combustible gas.
3. While in a confined space, if the air quality falls outside any or all of the limits specified above for oxygen, hydrogen sulfide or combustible gas, the employee shall exit the confined space and the confined space shall be classified as a level 2 space.

Level 2 Space: In the event entry into or work in a level 2 space is necessary, the Confined Space Entry Permit, (see attachment #2), must be completed and signed in addition to the following:

1. The employee will be outfitted with protective clothing such as safety shoes or boots, coveralls or work suits, protective gloves and a hard hat.
2. The employee will put on and wear a shoulder harness having a waist belt, shoulder straps, leg straps and a "D" ring or shoulder rings attached no lower than the shoulder blades.

3. A winch shall be set up over the top entry to a confined space with sufficient safety lines to reach the bottom of the confined space. The safety line must be of such size, weight and strength, to adequately support the weight of the employee, plus equipment and must be attached to the winch. Safety hooks shall be used when attaching the line to the harness of the employee.
4. Steps leading into the confined area shall be checked to determine if they are adequate and that they will bear the weight of the employee, plus his equipment. Where it is doubtful a safe entry can be made using existing steps, a ladder will be lowered into the confined space and used as an entry device.
5. No employee shall enter a confined space without another employee standing by at the entrance. The person shall not leave the entrance for any reason except to summon help or assistance needed for a rescue. All parts, tools, equipment, supplies, etc., needed by the employee entering the confined space should be laid out adjacent to the entrance so they are in easy reach of the standby employee. A flagman shall not serve as part of this two person entry team.
6. Lights used in confined spaces shall be intrinsically safe for use in combustible atmospheres.
7. Voice communication shall be maintained between the employee entering the confined space and the standby. In unusual circumstances where voice communication would not be adequate, two-way radios may be used, but the employee must insure the units being used are intrinsically safe for use in combustible atmospheres.
8. A self-contained positive-pressure breathing apparatus, or an air line respirator shall be available for immediate use in the event of an emergency.
9. The atmosphere within the employee's immediate area shall be continuously monitored for oxygen, hydrogen sulfide and combustible gas while in the confined space.
10. Signals from the monitoring device shall immediately indicate when the atmosphere is not within any of the limits as specified above for oxygen, hydrogen sulfide and combustible gas.
11. While in the confined space, if the air quality fall outside either or both of the limits specified above for oxygen or hydrogen sulfide, the employee shall exit the confined space, except if equipped with a self-contained positive pressure breathing apparatus or air line respirator.

12. While in confined space, if the air quality falls outside limits specified above for combustible gas, the employee shall exit the confined space.
13. Confined space may be entered after ventilating when sampling indicated atmosphere within proper safe limits.
14. Forced ventilation may not be used in lieu of monitoring devices.

M. Horizontal Movement in Confined Space

In addition to paragraph 11 above, an employee making horizontal movement in a confined space will comply with the following additional procedures:

1. Will be equipped with self-contained positive pressure breathing apparatus or an air line respirator in the event of an emergency. Where an air line respirator unit is used, the unit must be equipped with an escape air tank.
2. Will have attached to his belt or person a sampling meter or tester to determine air quality. This unit shall have audible and visual warning devices.
3. A life line must be attached to the shoulder harness and the shoulder harness must be worn

N. Rescue

1. Employees entering a confined space for the purpose of rescuing a fellow employee shall be provided, and will wear, a self-contained positive pressure breathing apparatus or air line respirator. Where an air line respirator unit is used, the unit shall be equipped with an escape air tank.
2. Communications shall be made for additional help before a rescue attempt is made into a confined area.

CHAPTER D

VILLAGE OF HOWARD

SAFETY PROGRAM

BACK TO WORK / ALTERNATIVE DUTY

Back To Work/Alternative Duty

OBJECTIVE Return the injured employee back to work as soon as medically possible.

- A. **Purpose** The purpose of this policy is to define the requirements for assignment to alternative duty when an employee has returned to work with temporary physical limitation following a work-related or off-duty injury or illness.
- B. **Definition** Alternative Duty shall be defined as any assignment in which the employee is not required to meet all physical demands of his/her job or perform all functions which are normally a part of his/her job as outlined in a Village position description. Participation in the Alternative Duty Program shall not cause the employee to sacrifice wages and/or sick time that would not have been sacrificed otherwise, employees temporarily placed on alternative duty will receive regular full-rate compensation. There is no guarantee of an available position. Availability could be limited by season, size of work force, skill/training of work force, etc.

The Alternative Duty Program is to be considered a temporary program whereby the employee is on rehabilitation and works progressively until he/she returns to full capacity. The program will not exceed 6 weeks. The position is not optional, i.e. if an alternative work schedule is available the employee is obligated to accept the position. Sick time will be not granted during this program without a written doctor's excuse. Scheduled vacation and comp time will be allowed.

- C. **Qualification** An employee shall qualify for alternative duty when a physician indicates on an "Attending Physician's Return to Work Recommendations Record" that the employee is not capable of performing at full capacity and that his/her health condition/recuperation is temporary. The Village reserves the right to schedule an exam with a medical practitioner of its choice.
- D. **Departments** This policy applies to all Village regular full-time and regular part-time positions.
- E. **Placement** The Administrator and Department Head will be responsible for placing employees on jobs in keeping with the restrictions imposed by the physician and are also responsible for any discussion with labor unions that may be necessary. Written medical releases should be clear and specific stating the restrictions that apply both on and off the job.

The alternative work must be within the medical restrictions with minimal chance that the assignment will aggravate the existing injury/illness. The work assignment must be productive and within the employee's skill level. Employees must quickly report any symptoms that suggest their alternative work is aggravating the injury or interfering with recovery. Revised restrictions or reassignment to a different job may be necessary to prevent further aggravation of the injury.

Employees may be assigned work within their own department and/or another department. The employee's length of disability, work restrictions, and the availability of meaningful work, will all be taken into consideration when assigning work. The program is established as to not upset the regular production system or create employee relations problems. The program is equitable and designed to provide the earliest and most complete recovery for the injured employee. Any of the following placements may be considered:

1. Placement on his/her regular job.
2. Placement within his/her department.
3. Placement in another department.

F. Work Schedule The work day schedule may be changed by mutual agreement. Overtime will be offered as usual if restrictions do not apply. Specific overtime concerns should be noted in each individual's alternative work schedule.

G. Training Regardless of seniority or experience, the employee must be properly trained for the task. Caution will be used when assigning new or unfamiliar work.

CLARIFICATION OF CONCERNS

- 1 **TEMPORARY REPLACEMENT WORKER:** The temporary replacement worker may continue to work during Back To Work program until the employee returns to work with no restrictions.
- 2 **WORK SCHEDULE:** Consideration will be given to starting the program in the middle of the week. This allows for a short period of work followed by scheduled time off. If an alternative work day or work week schedule is agreed upon a holiday schedule will be developed with the union. Example: 2nd shift, 4-10's, weekend shift
- 3 **SENIORITY VS FIRST COME FIRST SERVE:** Seniority will not apply to being eligible for an Alternative Duty Position. Employees will be assigned on a first come first served basis and continue to completion. However, restrictions and village circumstances will dictate position availability.
- 4 **VACATION REGULAR WORK FORCE:** The size of the regular work force and extenuating circumstances may put the village in the position to right to deny vacation/comp time requests for a limited time.
- 5 **ALTERNATIVE DUTY:** The Village will assign the work and determine the duties. These will not be grievable.
- 6 **PROGRAM LIMITS:** The program will be limited to temporary assignments of 6 weeks maximum. Occupational injuries rarely require more than 30 - 60 days of rehabilitation. Periodic doctor examinations may be required. Employees should not expect to return to work immediately. A meeting with the department head must be set up in advance to determine employee eligibility and to create a position. Injuries with recoveries of 1 week or less will not be considered for the program and must use sick time.
- 7 **SIGNIFICANT DISABILITIES:** Injuries resulting in significant disabilities that cannot be accommodated in the work environment are candidates for special consideration.

CHAPTER E

LOCKOUT / TAGOUT

INFORMATION PROCEDURES

LOCKOUT/ TAGOUT PROCEDURE

A. PURPOSE

This procedure establishes the minimum requirements for the lockout/tagout of energy isolating devices. It shall be used to ensure that the machines of equipment are isolated from all potentially hazardous energy, and locked out or tagged out before employees perform any servicing or maintenance activities where the unexpected energization, start-up or release of stored energy could cause injury.

B. DEFINITIONS

LOCKOUT - Blocking the flow of energy from the power source to the equipment and keeping it blocked out. A lockout device is a key or combination lock arrangement that secures a valve or lever in the "off" position.

TAGOUT - Placing a tag on the power source to warn others not to turn the power on.

C. RESPONSIBILITY

Appropriate employees shall be instructed in the safety significance of the lockout/tagout procedures. Those employees authorized to lockout/tagout are the lead technician, technician, building custodian, janitors, or those persons delegated by them in emergency situations. Each new or transferred employee and all other employees whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout/tagout procedure.

D. USE OF LOCKOUT / TAGOUT

Lockout/tagout procedures are to be followed whenever an unexpected start-up or release of stored energy could cause injury. Such times may include, but are not limited to the following:

1. When making repairs
2. When performing routine maintenance
3. When clearing a jammed or blocked machine
4. To keep people out of a dangerous area
5. To prevent the use of equipment by unauthorized persons

E. PROCEDURE SEQUENCE

1. Notify all affected employees that a lockout or tagout system is going to be utilized and the reason for the lockout/tagout. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards involved.
2. Turn off the equipment and disconnect the energy source. Locate and identify all switches, valves, and other devices that will have to be locked and/or tagged. More than one energy source may be involved. Shut the machine down by the normal stopping procedure. Pull the plug, flip the power switch, break the circuit, pull a fuse, close a valve, or otherwise neutralize stored energy. Do whatever is necessary to turn off the equipment and disconnect the energy source. Test the "on" switch and turn it back to "off".
3. Lock out the energy sources. Use a lock to prevent the flow of energy from being restored. Test the disconnect to be sure it cannot be moved to the "on" position. If more than one person is working on the equipment, use a multiple lockout device.
4. Tagout at the disconnect point. Even when a lock is being used, a tag is important. The tag provides vital information as to the who, what, when, where, and why.
5. Release residual energy. Achieve the Zero Mechanical State for the machine or piece of equipment. This means that the machine/equipment has been put in a state in which the possibility of an unexpected mechanical movement has been reduced to a minimum. Protect yourself by means of the following:
 - a. Be sure the machine has stopped moving completely before starting work on it.
 - b. Release stored energy that could cause sudden movement. Block or remove the energy in those parts and lock off.
 - c. Secure loose and moveable parts before you begin.
 - d. Be sure that material that is supported or controlled by the machine cannot move or cause the machine to move.
 - e. Lock off or reduce accumulators and air surge tanks to atmospheric pressure.
 - f. Do Not overlook remote controls such as timers.
 - g. Be sure the atmosphere is safe by protecting yourself from chemicals and vapors that may be present.
6. **TEST EQUIPMENT.** Turn on the switch or push the start button to be sure that all energy sources have been blocked out. The wrong switch or a defective switch could leave the circuit energized.

E. STEPS FOR RESTART

1. Inspect the machine or equipment. Be sure that all tools and other materials have been removed, that the machine/equipment has been fully reassembled, and that guards and other safety devices are in place.
2. Notify others who are in the area that you are ready for start-up.
3. Remove lockout/tagout devices and restart.

F. PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place his/her own personal lockout device or tagout device on the energy isolating device (s). When an energy isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock. It is absolutely forbidden for any person to remove the lock or tag of another person.

G. BASIC RULES

All equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel or residents.

Do not attempt to operate any switch, valve, or other energy isolating device when it is locked or tagged out.

**EMPLOYER'S GUIDE TO SECTION 1910.147 --
THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT / TAGOUT)**
(Effective January 02, 1990)

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The standard covers the servicing and maintenance of machines and equipment in which the unexpected energization or start-up of the machines or equipment, or release of stored energy could cause injury to employees.

The standard establishes minimum performance requirements for the control of such hazardous energy.

The standard does not cover:

- (A) construction, agriculture and maritime employment.
- (B) electric utility installations for power generation, transmission and distribution.
- (C) exposure to electric hazards on, near or with conductors or equipment covered by Subpart S.
- (D) oil and gas drilling and servicing such.

The standard applies to the control of energy during **servicing and/or maintenance of machines and equipment.**

Normal production operations are **not** covered (See Subpart O). **Service during production operations** is covered only if:

- A) an employee is required to remove or bypass a guard or other safety device; or
- B) an employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

A special note specifies that: **Minor tool changes and adjustments, and other minor servicing activities**, which take place during normal production operations are not covered if they are routine, repetitive, and integral to the use of the equipment for production PROVIDED that the work is performed using alternative measures which provide effective protection (See Subpart O).

Equipment not covered:

- A) **Cord and plug connected electric equipment**
 - where deenergization is controlled by unplugging, and
 - the employee doing the service has exclusive control of the plug

- B) **Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water or petroleum products when performed on pressurized pipelines PROVIDED: employee demonstrates:**
 - 1) continuity of service is essential,
 - 2) shutdown of the system is impractical,
 - 3) documented procedures are followed and special equipment is used which will provide effective protection.

DEFINITIONS (par. (b))

Affected Employee: An employee whose job requires operation or use of a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or

An employee whose job requires his or her presence in an area in which such servicing or maintenance is being performed.

Authorized Employee: The person who performs the lockout or tagout procedure. (The authorized employee may be the same as the affected employee.)

Capable Of Being Locked Out: If the energy isolating device is either **designed with a hasp or other attachment or integral part to which, or through which, a lock can be affixed, or if it has a locking mechanism** built into it.

Other energy isolating devices will also be considered capable of being locked out if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

Energized:

- Connected to an energy source, or
- Containing residual or stored energy.

Energy Isolating Device:

- **A mechanical device** that physically prevents the transmission or release of energy.

Examples:

- manually operated electrical circuit breaker,
- disconnect switch,
- manually operated switch by which the conductors or a circuit can be disconnected from all underground supply conductors and no pole can be operated independently,
- slide gate,
- slip blind,
- line valve,
- any device similar to a block used to block or isolate energy.

Devices Not Considered To Be Energy Isolating Devices:

- push button,
- selector switch,
- other control circuit type devices.

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

Hot Tap: A procedure used in the repair, maintenance and service activities which involves welding on a piece of equipment (pipelines, vessels or tanks) under pressure in order to install connections or appurtenances.

(It is common to replace or add sections of pipeline without the interruption of service).

Lockout: The placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the device and equipment being installed cannot be operated until the device is removed.

Lockout Device: A device that utilizes a positive means such as a lock (either key or combination type) to hold an energy isolating device in the safe position and prevent the energizing of machine or equipment.

Normal Production Operations: The use of a machine or equipment to perform its intended production function.

Servicing and/or Maintenance: Workplace activities maintaining and/or servicing machines or equipment such as:

- constructing,
- installing,
- setting up,
- adjusting,
- inspecting,
- modifying,
- maintenance,
- service.

These activities include (among other activities):

- lubrication,
- cleaning,
- unjamming,
- marking adjustments,
- making tool changes.

Any of the above activities where the employee may be exposed to the unexpected energization or start-up or release of hazardous energy.

Setting Up: Any work performed to prepare a machine or equipment to perform its normal production operation.

Tagout: The placement of a tagout device on an energy isolating device (in accordance with an established procedure) to indicate that the device and the machine/equipment being controlled **may not be operated** until the tagout device is removed.

Tagout Device: A prominent warning device which can be securely fastened to an energy isolating device (in accordance with and established procedure) to indicate that the device and the machine/equipment may not be operated until the device is removed.

Example: A tag and the means to attach it.

The Energy Control Program (par.(c) (1))

The employer shall establish an energy control program.

The program shall consist of:

- an energy control procedure, and
- employee training.

The training is to ensure that before any employee performs any servicing or maintenance where the unexpected energizing or start-up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated and rendered inoperative (in accordance with par. (c) (4) of this section).

- Use **tagout system** if an energy isolator device is not capable of being locked out.
- Use a **lockout device** if an energy isolating device is capable of being locked out.
 - **EXCEPTION - UNLESS** the employer can demonstrate that the use of a tagout system will provide full employee protection (see below).
- **Future requirement for installation of lockout devices:** After October 31, 1989.
 - Any **new** machine/equipment shall be designed to accept a lockout device.
 - **Existing equipment** shall be modified to accept a lockout device whenever major replacement, repair, renovation or modification is performed.

Full Employee Protection (par. (c) (3))

- Full employee protection when tagout device is used:
 - The tagout device shall be attached at the same location that the lockout device would have been attached.
 - The employer shall demonstrate that the tagout program will provide an equivalent level of safety as a lockout program.
 - To demonstrate "equivalence" the employer shall:
 - demonstrate full compliance with all tagout related provisions of this standard together with such additional elements as are necessary to provide equivalent safety.
 - demonstrate additional means to be considered shall include:
 - implementation of additional safety means.
- Examples:**
- removal of an isolating circuit element,
 - blocking of a controlling switch,
 - opening of an extra disconnecting device,
 - removal of a valve handle to reduce the likelihood of inadvertent energization.

Energy Control Procedure Required (par. (c) (4))

Procedures shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this section (except for the following).

Exception: A documented energy control procedure is not required when all of the following elements exist:

1. The machine/equipment has **no potential for stored or residual energy** or reaccumulation after shutdown which could endanger employees.
2. The machine/equipment has a **single energy source which can be readily identified and isolated.**
3. The isolation and locking out of that source will completely disengage and deactivate the machine/equipment.
4. The machine/equipment is isolated from the source and locked out during servicing or maintenance.
5. **A single lockout device** will achieve a lockout condition.
6. The lockout device is under the **exclusive control of the authorized employee.**
7. The servicing/maintenance **does not create hazards for other employees.**
8. The employer, in using this exception, has had **no accidents** involving the unexpected activation or reenergization during maintenance/service.

What the procedures for control of hazardous energy and the means of compliance should cover:

- the scope,
- purpose,
- authorization,
- rules,
- techniques.

Outline For A "Procedure"

- A. Statement of the **intended use** of the procedure.
- B. Specific procedural steps for:
 - shutting down,
 - isolating,
 - blocking and securing.

- C. Steps regarding lockout and tagout devices:
 - placement,
 - removal,
 - transfer,
 - who is responsible.

- D. Specific requirements for testing to determine the effectiveness of lockout/tagout and other energy control measures.

Requirements For Lockout/Tagout Devices

- (i) Devices will be provided by the employer: locks, tags, chains, wedges, key blocks, adapter pins, self-locking fastener, etc.
- (ii) Lockout/Tagout devices shall be:
 - the only device(s) used for controlling energy; and
 - shall not be used for other purposes.

Requirements For Lockout/Tagout Devices

Must be: Durable, Standardized, substantial, Identifiable, as follows:

- A. **Durability**
 - 1. Must be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
 - 2. Must be able to withstand weather (so as not to deteriorate or become illegible).
 - 3. Tags must be able to withstand corrosive environments (where acid or alkaline chemicals are stored).

- B. **Standardization** of locks and tags according to at least one of the following criteria:
 - color,
 - shape,
 - size,
 - print and format (in the case of tags).

- C. **Substantial**
 - 1. **Lockout Devices** must be substantial enough to prevent removal without use of excessive force or unusual techniques (like bolt cutters, metal cutting tools).

- D. **Identifiable.** Lockout/tagout devices shall identify the name of the employee applying the device.

Warning must be clearly stated on a tagout device.

- Must warn against hazardous conditions if the machine/equipment is energized.
- Examples:
 - Do Not Start.
 - Do Not Open.
 - Do Not Close.
 - Do Not Energize.
 - Do Not Operate.

Periodic Inspections of the Energy Control Procedure

- **How often?** Must be conducted at least annually.
- **Purpose of Inspection:** To ensure that the procedure and the requirements of the standard are being followed.
- **Who performs the inspection?** An authorized employee **other than one(s)** using the procedure being inspected.
- **Corrective action** for deficiencies noted must be part of the inspection.
- **Inspection of a lockout procedure:**
 - Inspection shall include a review between the inspector and **each authorized and affective employee** of that employee's responsibilities under the tested procedure.
- **Inspection of tagout procedure:**
 - Inspection shall include a review between the inspector and **each authorized and affected employee** of those employee's responsibilities and training.
- **Certification of Inspection:**
 - **Employer must certify** that periodic inspections have been performed.
 - Certification must identify the machine/equipment.
 - Date of inspection.
 - Employees included in the inspection.
 - Person performing the inspection.

Training and Communication (par. (c) (7))

- **Training objective -- To ensure:**
 1. that the purpose and function of the energy control programs are understood by employees, and
 2. that the knowledge and skill required for the safe application, usage and removal of energy controls are required.

- **What training shall include:**
 1. **Each authorized employee** shall receive training;
 - in the recognition of applicable hazardous energy forces,
 - the type and magnitude of energy in the workplace,
 - the methods and means necessary for energy isolation and control.
 2. **Each affected employee** shall be instructed in the purpose and the use of the energy control procedure.
 3. **All other employees** where work may be in an area where procedures may be used shall be instructed about:
 - the procedure,
 - the prohibition against attempts to restart or reenergize machines/equipment which locked/tagged out.

Additional Instructions as to Limitation of Tags Required When Tagout Systems Are Used:

- **Tags are only warning devices.**
- **Tags do not lockout** the machine/equipment.
- **Tags are not to be removed** without authorization of the authorized person responsible for it.
- **Tags are never to be bypassed, ignored or otherwise gotten around.**
- **Tags and their means of attachment** must be made of materials that will **withstand environmental conditions encountered.**
- **Tags must not evoke a "false sense of security"** -- their meaning must be understood.
- **Tags must be securely attached.**

Employee Retraining

- **When is it required?** Retraining is required for all authorized and affected employees whenever there is a:
 - change in job assignments,
 - change in machines, equipment, or processes that present a new hazard,
 - change in the energy control procedures,
 - when a periodic inspection reveals deviation or deficiencies.
- **Objective of retraining:** To reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

Certification of Training (In Writing) (par. 7 (ii)(c))

- Certification shall note that employee training has been accomplished and is being kept up to date.
- Certification shall contain each employee's name and dates of training.

Only Authorized Employees May Lockout or Tagout. (par. (8))

Notification of Employees of Lockout/Tagout (par. (9))

- **Who notifies employees?** The employer or authorized employee.
- **When is notification required?**
 - When lockout or tagout is applied.
 - When lockout or tagout is removed.

Application of Control Procedure (par. (d))

Procedure shall cover the following elements and actions in the following sequence:

1. **Prior to shutdown**, the authorized employee shall have knowledge of:
 - the type and magnitude of the energy,
 - the hazards of energy to be controlled, and
 - the method or means necessary to control the energy.
2. **Machine or equipment shutdown.**
 - The machine/equipment shall be turned off or shut down using required procedures.
 - An orderly shutdown must be used to avoid increased hazard.
3. **Machine or equipment isolation.**

All energy isolating devices shall be so placed as to isolate the machine/equipment from the energy source (s).
4. **Lockout or tagout device application.**
 - Shall be done only by authorized employees.
 - **Lockout devices:** where used must hold the energy isolating device in a "safe" or "off" position.
 - **Tagout devices:** where used will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.
 - **Tags shall be attached** at the same point as a lock would have been attached (when used with energy isolating devices).
 - If a tag cannot be attached directly to the energy isolating device it shall be located as closely as safely possible to the device so that it will be immediately obvious to anyone attempting to operate the device.
5. **Stored energy. (par. (d)(5))**
 - First apply the lockout or tagout devices.
 - Then relieve, disconnect, restrain or otherwise render safe all hazardous stored energy.
 - If there is a possibility of a **reaccumulation** of stored energy to a hazardous level then **verification of isolation shall be continue** until the servicing/maintenance is completed or until the possibility of such accumulation no longer exists.

6. **Verification of isolation.**

Before maintenance/service work is started on machines that have been locked/tagged out **the authorized employee shall verify that isolation and deenergization has been completed.**

Release From Lockout or Tagout. (After Servicing)

1. **The machine or equipment.**

- Inspect the work area to be sure that all non-essential items have been removed; and
- The components of the machine/equipment are operationally intact.

2. **Employer.**

- Check the work area to be sure all employees have been safely positioned or removed.
- **Before** lockout/tagout devices are removed and before machines or equipment are energized **notify affected employees that the lockout/tagout devices have been removed.**

3. **Removal of lockout/tagout devices.**

- Normally, devices will only be removed by the employee who applied it.

EXCEPTION (When the employee who applied it is not available).

- If the employer's documented procedures and training program provide for this contingency it may be done by others under the employer's direction.
- The employer must demonstrate that its procedure will provide equivalent safety to the removal by the authorized employee who applied it.
- Elements that must be included in the specific procedure:
 1. The employer must verify that the employee who applied the device is not at the facility.
 2. The employer must make all reasonable efforts to contact the authorized employee to tell him/her that the device has been removed, and
 3. The employer must make certain that the authorized employee has that information before he or she resumes work at the facility.

Testing Or Positioning Of Machines/Equipment During Lockout (par. (f))

1. Clear tools and materials (same as in par. (e)(1)).
2. Remove employees from danger (as in par.(e)(2)).
3. Remove the lockout/tagout device (as in par. (e)(3)).
4. Energize and proceed with testing or positioning.
5. Deenergize and reapply energy control measures to continue servicing/maintenance.

Outside Service Personnel (par. (f)(2))

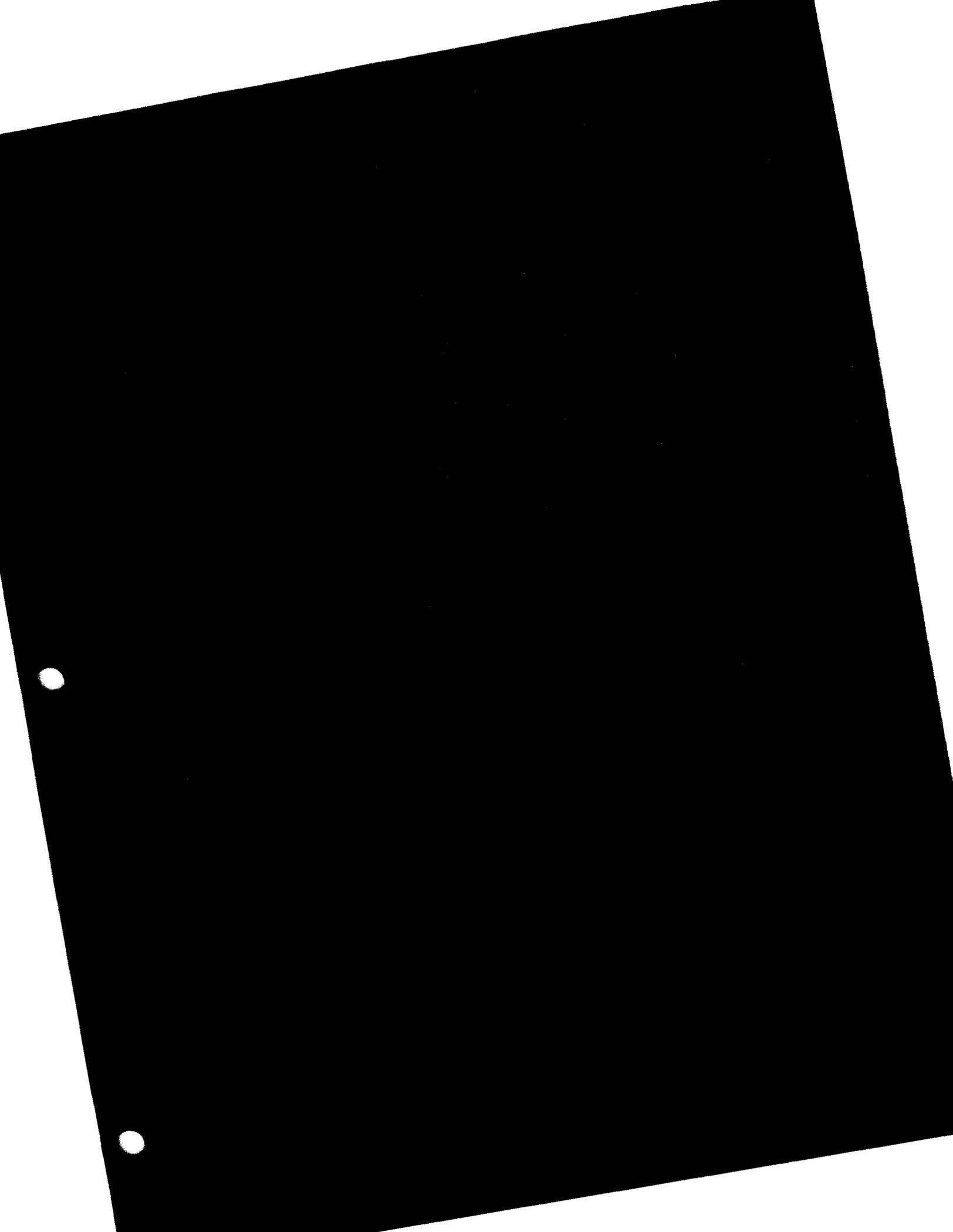
1. The on-site employer and outside employer shall inform each other of their respective lockout/tagout procedures.
2. The on-site employer shall make sure its employees understand and comply with the outside employer's energy control procedures

Group Lockout or Tagout (par. (f)(3))

1. When service is done by a crew they shall use a procedure that provides an equivalent level of protection as a personal lockout/tagout device.
2. **Requirements for a group lockout/tagout:**
 - a. **Primary responsibility** is vested in an **authorized employee** for the group.
 - b. The authorized employee is to know the exposure status of individual group members as to the lockout/tagout.
 - c. If more than one crew is involved then one authorized employee shall be designated to coordinate the affected work forces and ensure continued protection; and
 - d. Each authorized employee shall attach a personal lockout/tagout device, group lockbox, or comparable mechanism when beginning work and shall remove it when he or she is finished.

Shift Or Personnel Changes (par. (f)(4))

Specific procedures shall be used during shift or personnel changes to ensure continued lockout/tagout protection. Procedures must include the orderly transfer of lock/tagout devices between off-going and on-coming employees.



BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

In accordance with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030, the following exposure control plan has been developed:

A. PURPOSE

The purpose of this exposure control plan is to:

1. Eliminate or minimize employee occupational exposure to blood or certain other body fluids;
2. Comply with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030.

B. EXPOSURE DETERMINATION

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. The following job classifications are in this category:

SEE APPENDIX A

In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, task or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows:

SEE APPENDIX B

Job classifications which are exempt from occupational exposure are also listed as follows:

SEE APPENDIX C

C. IMPLEMENTATION SCHEDULE AND METHODOLOGY

OSHA also requires that this plan include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

1. Compliance Methods

Universal precautions will be observed in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, personal protective equipment (PPE) shall also be utilized. The following engineering controls will be utilized:

1. Biohazard Disposal Kit located at:
Village Hall (lunch room 1st Aid cabinet)
Public Works Facility (First Aid Room cabinet)
2. Rubber Gloves and Disinfectant Wipes located at:
All First Aid Kits at all locations/sites.
3. Sharps Containers located at:
Village Hall (cleaning closet)
Public Works Facility (First Aid Room counter)
Park Maintenance vehicle (Buildings & Grounds truck)
4. All Restrooms are designated as Biohazard Waste Disposal sites.

The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows:

Weekly- Park Laborer to check biohazardous waste containers and have properly disposed of when necessary.

Monthly- Recreation Supervisor will check and insure that all PPE's and Disposal Kits are in proper locations and conditions.

As Needed- Full Sharps containers will be disposed of by Med Waste.

Handwashing facilities are also available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure. Handwashing facilities are located at:

Village Hall, Public Works Facility and Park Facilities

Utilize the restrooms at the site. When restrooms are not available, anti-bacterial towelettes from Disposal Kits shall be utilized.

Supervisor shall ensure that after the removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

Supervisor shall ensure that if employees incur exposure to their skin or mucous membranes then those areas shall be washed or flushed with water as soon as feasible following contact.

2. Needles

Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken. OSHA allows an exception to this if the procedure would require that the contaminated needle be recapped or removed and no alternative is feasible and the action is required by the medical procedure. If such action is required then the recapping or removal of the needle must be done by the use of a mechanical device or a one-handed technique. Recapping or removal is only permitted for the following procedures:

If any needles or potentially infectious sharps are found, notify the Brown County Sheriff's Department. The Park Maintenance Department will be contacted for removal.

3. Containers for REUSABLE Sharps

Contaminated sharps that are reusable are to be placed immediately, or as soon as possible, after use into appropriate sharps containers. The sharps containers are puncture resistant, labeled with a biohazard label and are leak proof.

4. Work Area Restrictions

In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.

5. Specimens

Specimens of blood or other potentially infectious materials will be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of the specimens.

The container used for this purpose will be labeled or color coded in accordance with the requirements of the OSHA standard.

Any specimens which could puncture a primary container will be placed within a secondary container which is puncture resistant.

If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

6. Contaminated Equipment

Park & Recreation Director is responsible for ensuring that equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible. If it is not feasible to decontaminate immediately the equipment must be designated as biohazard.

7. Personal Protective Equipment

PPE Provision

Park & Recreation Director is responsible for ensuring that the following provisions are met:

All personal protective equipment will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

SEE APPENDIX D

PPE Use

Park & Recreation Director shall ensure that the employee uses appropriate PPE unless the supervisor shows that the employee temporarily and briefly declined to use PPE when under rare and extraordinary circumstances, it was the employee's professional judgement that in the specific instance its use would have prevented the delivery of healthcare or posed an increased hazard to the safety of the worker or co-worker. When the employee makes this judgement, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

PPE Accessibility

Park & Recreation Director shall ensure that appropriate PPE in the appropriate sizes is readily accessible at the work site or is issued without cost to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

PPE Cleaning and Disposal

All personal protective equipment will be disposed of by the employer at no cost to the employees. All repairs and replacements will be made by the employer at no cost to employees.

All garments which are penetrated by blood shall be removed immediately or as soon as feasible. All PPE will be removed prior to leaving the work area.

When PPE is removed, it shall be placed in an appropriate designated area or container for disposal.

Gloves

Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes; when performing vascular access procedures and when handling or touching contaminated items or surfaces.

Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Eye and Face Protection

Masks in combination with eye protection devices, such as goggles or glasses with solid side shield are required to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated. Situations which would require such protection are as follows:

Injury to patron or employee in which conditions warrant such protection.

Additional Protection

Additional protective clothing, such as disposable gowns, shall be worn in instances when gross contamination can reasonably be anticipated.

8. Housekeeping

Decontamination will be accomplished by utilizing the following materials:

Bleach solution (1:10) or disinfectant wipe

All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially infectious materials.

All bins, pails, cans, and similar receptacles shall be inspected and decontaminated on a regularly scheduled basis monthly by the Park Laborer.

Any broken glassware which may be contaminated will not be picked up directly with the hands.

Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the container where these sharps have been placed.

9. Regulated Waste Disposal

Disposable Sharps

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are closeable, puncture resistant, leak proof on sides and bottom, labeled or color coded.

During use, containers for contaminated sharps shall be easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found.

The containers shall be maintained upright throughout use and replaced routinely and not be allowed to overfill.

When moving containers of contaminated sharps from the area of use, the containers shall be closed, immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

The container shall be placed in a secondary container if leakage of the primary container is possible. The second container shall be closeable, constructed to contain all contents and prevent leakage during handling, storage and transport, or shipping. The second container shall be labeled or color coded to identify its contents.

Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

Other Regulated Waste

Other regulated waste shall be placed in containers which are closeable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transportation or shipping.

The waste must be labeled or color coded and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

NOTE: Disposal of all regulated waste shall be in accordance with applicable United States, state and local regulations. (The DNR is the controlling agency in Wisconsin.)

10. **Laundry Procedures** -- Not applicable.

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

General

The Village of Howard shall make available the Hepatitis B vaccine and vaccination series to all employees, post exposure along with a post exposure medical evaluation, who have had an exposure incident within 24 hours.

The Park & Recreation Director shall ensure that all medical evaluations and procedures including the Hepatitis B vaccine and vaccination series and post exposure follow-up, including prophylaxis are:

- a.) Made available at no cost to the employee;
- b.) Made available to the employee at a reasonable time and place.
- c.) Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional; and
- d.) Provided according to the recommendations of the U.S. Public Health Service and Center for Disease Control.

All laboratory tests shall be conducted by an accredited laboratory at no cost to the employee.

Hepatitis B Vaccination

Village Clerk is in charge of the vaccination program. Our preferred provider for a Hepatitis B Vaccination Program is *Clinic? Bellin Hospital? Brown County Nurses?*

Hepatitis B vaccination will be made available within 24 hours of exposure.

If the employee has previously received the complete Hepatitis B vaccination series, an antibody test will be done to verify immunity.

If the employee initially declines Hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the vaccination shall then be made available.

All employees who decline the Hepatitis B vaccination offered shall sign the OSHA required waiver indicating their refusal.

SEE APPENDIX E

If a routine booster dose of Hepatitis B vaccine is recommended by the Center For Disease Control at a future date, such booster doses shall be made available.

Post Exposure Evaluation and Follow-up

All exposure incidents shall be reported, investigated, and documented as soon as possible. When the employee incurs an exposure incident, it shall be reported to Park & Recreation Director. An Incident Report will be filed.

SEE APPENDIX F

Following a report of an exposure incident, the exposed employee shall immediately receive, within 24 hours, a confidential medical evaluation and follow-up, including at least the following elements:

- a.) Documentation of the route of exposure, and the circumstances under which the exposure incident occurred;
- b.) Identification and documentation of the source individual unless it can be established the identification is infeasible or prohibited by State or local law;
- c.) The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the County District Attorney shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented;
- d.) When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated;
- e.) Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

Collection and testing of blood for HBV and HIV serological status will comply with the following:

- a.) The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained;
- b.) The employee will be offered the option of having their blood collected for testing of the employees HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status.

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. All post exposure follow-up will be performed by our preferred provider....*Clinic? hospital?*

Information Provided To The Healthcare Professional

The Park & Recreation Director shall ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided with the following:

- a.) A copy of 29 CFR 1910.1030;
- b.) A written description of the exposed employee's duties as they relate to the exposure incident;
- c.) Written documentation of the route of exposure and circumstances under which exposure occurred;
- d.) Results of the source individuals blood testing, if available; and
- e.) All medical records relevant to the appropriate treatment of the employee including vaccination status;

Healthcare Professional's Written Opinion

The Park & Recreation Director shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

The healthcare professional's written opinion for HBV vaccination shall be limited to whether HBV vaccination is indicated for an employee, and if the employee has received such vaccination.

The healthcare professional's written opinion for post exposure follow-up shall be limited to the following information:

- a.) A statement that the employee has been informed of the results of the evaluation; and
- b.) A statement that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

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

12. Labels and Signs

Park & Recreation Director shall ensure that biohazard labels shall be affixed to containers of regulated waste containing blood or other potentially infectious materials, and other containers used to store, transport, or ship blood or other potentially infectious materials.

The universal biohazard symbol shall be used.

Red bags or containers may be substituted for labels. However, regulated wastes must be handled in accordance with the rules and regulations of the organization having jurisdiction.

13. Information and Training

Park & Recreation Director shall ensure that training is provided at the time of initial assignment to tasks where occupational exposure may occur, and that it shall be repeated annually. Training shall be tailored to the education and language level of the employee, and offered during the normal work shift. The training will be interactive and cover the following:

- a.) A copy of the standard and an explanation of its contents;
- b.) A discussion of the epidemiology and symptoms of bloodborne diseases;
- c.) An explanation of the modes of transmission of bloodborne pathogens;
- d.) An explanation of the Village of Howard Park & Recreation Department Bloodborne Pathogen Exposure Control Plan, and a method for obtaining a copy;
- e.) The recognition of tasks that may involve exposure;
- f.) An explanation of the use and limitations of methods to reduce exposure, for example engineering controls, work practices and personal protective equipment (PPE);
- g.) Information on the types, use, location, removal, handling, decontamination, and disposal of PPEs;
- h.) An explanation of the basis of selection of PPEs;
- i.) Information on the Hepatitis B vaccination, including efficacy, safety, method of administration, benefits, and that it will be offered free of charge;
- j.) Information on the appropriate action to take and persons to contact in an emergency involving blood or other potentially infectious materials;
- k.) An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up;
- l.) Information on the evaluation and follow-up required after an employee exposure incident;
- m.) An explanation of the signs, labels, and color coding systems.

The person conducting the training shall be knowledgeable in the subject matter.

Employees who have received training on bloodborne pathogens in the twelve months preceding the effective date of this policy shall only receive training in provisions of the policy that were not covered.

Additional training shall be provided to employees when there are any changes or tasks or procedures affecting the employee's occupation exposure.

14. Record keeping

Medical Records

The Village Clerk is responsible for maintaining medical records as indicated below. These records will be kept at the Village Hall.

Medical records shall be maintained in accordance with OSHA Standard 29 CFR 1910.20. These records shall be kept confidential, and must be maintained for at least the duration of employment plus 30 years. The records shall include the following:

- a.) The name and social security number of the employee;
- b.) A copy of the employee's HBV vaccination status, including the dates of vaccination;
- c.) A copy of all results of examinations, medical testing, and follow-up procedures;
- d.) A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure.

Training Records

Park & Recreation Department is responsible for maintaining the following training records. These records will be kept at the Village Hall.

Training records shall be maintained for three years from the date of training. The following information shall be documented:

- a.) The dates of the training sessions;
- b.) An outline describing the material presented;
- c.) The names and qualifications of persons conducting the training;
- d.) The names and job titles of all persons attending the training sessions.

Availability

All employee records shall be made available to the employee in accordance with 29 CFR 1910.20.

All employee records shall be made available to the Assistant Secretary of Labor for the Occupational Safety and Health Administration and the Director of the National Institute for Occupational Safety and Health upon request.

Transfer of Records

If this department is closed or there is no successor employer to receive and retain the records for the prescribed period, the Director of the NIOSH shall be contacted for final disposition.

15. Evaluation and Review

Park & Recreation Director is responsible for annually reviewing this program, and its effectiveness, and for updating this program as needed.

16. Dates

All provisions required by this standard will be implemented by December 1, 1993.

APPENDIX A
VILLAGE OF HOWARD
BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

A. Job classifications where employees may incur occupational exposure:

1. none

APPENDIX B
HOWARD PARK & RECREATION DEPARTMENT
BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

B. Job classifications where employees may have tasks with occupational exposure: (By administering First-aid as necessary on the job.)

<u>Job Classification</u>	<u>Task/Procedure</u>
1. Park Laborers Full-time, Seasonal and Temporary	Cleaning & disposal
2. Ice Rink Attendants	Administering First Aid
3. Sled Hill Attendants	Administering First Aid
4. Playground Leaders	Administering First Aid
5. Site Supervisors	Administering First Aid
6. Sport Officials	Removing/stabilizing player from play area
7. Scorekeepers/Timers	Giving out the 1st Aid Kit

APPENDIX C
VILLAGE OF HOWARD
BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

C. Employees determined to be exempt from occupational exposure:

1. Park & Recreation Director
2. Recreation Supervisor
3. Recital Workers
4. Instructors
 Clinics, Cross Country Ski, Dance, Exercise, Golf, Guitar, Pom Pom, Tae Kwon Do, Step
 Aerobics, Tennis, Tumbling

APPENDIX D

VILLAGE OF HOWARD

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

Personal Protective Equipment

Personal protective equipment will be accessible at each site in the Disposal Kits. This equipment should be utilized anytime a threat of exposure exists. Primarily this will be in administering first aid in serious injury or accident conditions.

The Park & Recreation Director will be responsible for insuring that these protection kits are accessible at all sites.

Personal Protective Equipment Disposal Kits at Village Hall & Public Works Facility include:

1. Disposable gown
2. Disposable goggles
3. Disposable shoe covers
4. Disposable face mask
5. Disposable gloves
6. Antiseptic towelettes
7. Disposable CPR mask

First Aid Kits at park sites/locations include:

1. Disposable gloves
2. Biohazard baggie & twist
3. Antibacterial wipes

VILLAGE OF HOWARD

Hepatitis B Vaccine Declination Form

I understand that, due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring the Hepatitis B virus (HBV). I have been given the opportunity to be vaccinated with 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 the Hepatitis B vaccine, I can receive the vaccine at no charge to me.

Signature

Date

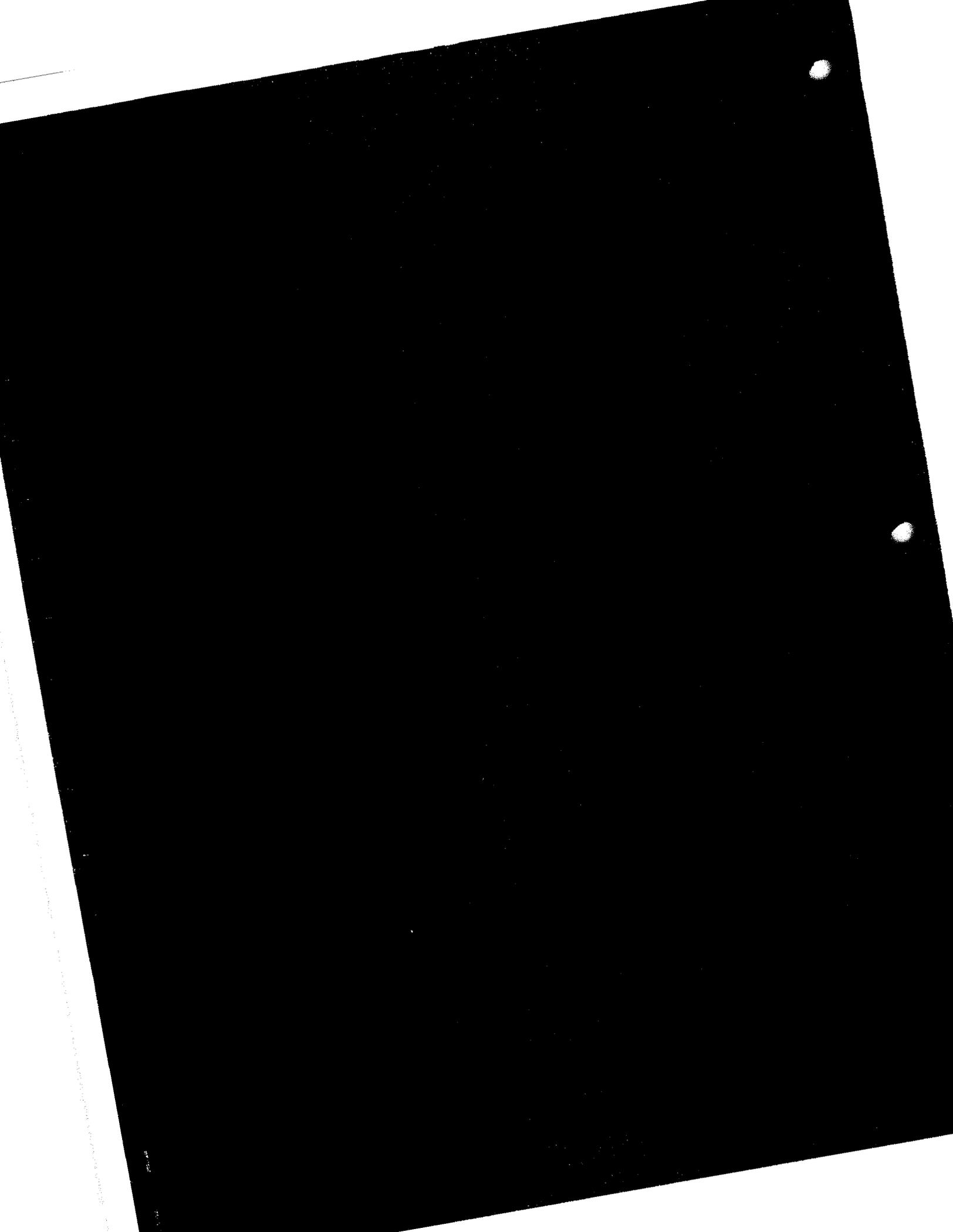
Witness

Date

APPENDIX F

VILLAGE OF HOWARD

Hepatitis B Vaccine Incident Report



Hazard Communication Sample Written Program

Note: The written program must include the specific methods that are used to achieve compliance with the requirements of the Hazard Communication Standard 29 CFR 1910.1200). The specific methods described in this sample written program are for illustrative purposes, and other effective methods may be subscribed to satisfy local needs or practices.

I. General

The purpose of this instruction is to ensure that the Village of Howard is in compliance with the OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200 or 1926.59.

The [occupational safety and health manager (OSHA manager) or other technically qualified designee] is the overall coordinator of the facility program acting as the representative of [senior facility official], who has overall responsibility.

In general, each employee in the facility will be appraised of the substance of the HCS, the hazardous properties of chemicals they work with, and measures to take to protect themselves from these chemicals.

II. List of Hazardous Chemicals

The [OS & H manager or designee] will maintain a list of all hazardous chemicals used in the facility, and update the list as necessary. The hazardous chemicals list will be updated upon receipt of hazardous chemicals at the facility. The list of hazardous chemicals is maintained at [location].

III. Material Safety Data Sheets (MSDSs)

The [OS & H manager or designee] will maintain an MSDS library on every substance on the list of hazardous chemicals in the [location]. The MSDS will consist of a fully completed OSHA form 174 or equivalent. The [location manager or supervisor] will ensure that each [work area or shop] maintains an MSDS for hazardous materials used in that area. MSDSs will be readily available to all employees.

The [local OS & H manager or designee] is responsible for acquiring and updating MSDSs. The [local OS & H manager or designee] will review each MSDS for accuracy and completeness and will consult with the [area/region/headquarters OS & H manager] if additional research is necessary. All new procurements for the facility must be cleared by the [local OS & H manager or designee]. Whenever possible, the least hazardous substance will be procured.

MSDSs that meet the requirements of HCS must be fully completed and received at the facility either prior to, or at the time of, receipt of the first shipment of any potentially hazardous chemical purchased from a vendor. It may be necessary to discontinue procurements from vendors failing to provide approved MSDSs in a timely manner.

IV. Labels and Other Forms of Warning

[Person] is designated to ensure that all hazardous chemicals in the facility are properly labeled. Labels should list at least the chemical identify, appropriate hazard warnings, and the name and address of the manufacturer, importer or other responsible party. [Person] will refer to the corresponding MSDS to verify label information. Immediate use containers, small containers into which materials are drained for use on that shift by the employee drawing the material, do not require labeling. To meet the labeling requirements of HCS for other in-house containers, refer to the label supplied by the manufacturer. All labels for in-house containers will be approved by [Person] prior to their use.

[Person] will check on a monthly basis to ensure that all containers in the facility are labeled and the labels are up to date.

V. Training

Each employee who works with or is potentially exposed to hazardous chemicals will receive initial training on the HCS and the safe use of those hazardous chemicals. Additional training will be provided for employees whenever a new hazard is introduced into their work area. Hazardous chemical training is conducted by [person/department/vendor]. (Attach a copy of course outline, training schedules, and a description of course materials.)

The training will emphasize these elements:

- * A summary of the standard and this written program;
- * Hazardous chemical properties including visual appearance and odor and methods that can be used to detect the presence of release of hazardous chemicals;
- * Physical and health hazards associated with potential exposure to workplace chemicals;
- * Procedures to protect against hazards, e.g., personal protective equipment, work practices, and emergency procedures;
- * Hazardous chemical spill and leak procedures; and
- * Where MSDSs are located, how to understand their content, and how employees may obtain and use appropriate hazardous information.

The [local OS & H manager or designee] will monitor and maintain records of employee training and advise the facility manager on training needs.

VI. Contractor Employers

The [local OS & H manager or designee], upon notification from the [responsible supervisor], will advise outside contractors of any chemical hazards which may be encountered in the normal course of their work on the premises.

VII. Nonroutine Tasks

[Maintenance or other supervisors] contemplating a nonroutine task, e.g., broiler repair, will consult with the [local OS & H manager or designee] and will ensure that employees are informed of chemical hazards associated with the performance of these tasks and appropriate protective measures. This will be accomplished by meeting of supervisors and the OS & H manager with affected employees before such work begun.

VIII. Additional Information

Further information on this written program, the hazard communication standard, and applicable MSDSs is available at [location/telephone number].

Material Safety Data Sheet (MSDS)

Name

Title

will be responsible for obtaining and maintaining the data sheets for the plant.

Name

Title

will review incoming data sheets for new and significant health and safety information. He/she will see that any new information is passed on to the affected employees.

A master copy of all MSDSs for all hazardous chemicals to which employees of this company may be exposed will be kept in [location] office.

Each department will maintain a loose-leaf binder with MSDSs required for the shift, crew, or department. Each department head shall be responsible. The MSDSs will be available to all employees in their work area for review during each work shift. If MSDSs are not available or new chemicals in use do not have MSDSs, immediately contact:

Name

Title

Procedures to follow when the MSDSs is not received at the time of the first shipment of material:

If no MSDS has been received, the person responsible for obtaining MSDSs shall call the chemical manufacturer or the distributor. If the MSDS is not received within seven days, the responsible person shall follow up the telephone request in writing. Copies of letters and documentation of telephone calls must be kept and made available for OSHA inspection when requested. A sample letter may be found under Appendix A.

Description of alternatives to the MSDS:

While MSDSs shall be available for all hazardous materials, job safety analysis shall also be used as a method of training and emphasizing work procedures pertaining to the use of chemicals. The use of the JSAs will be recorded as safety contracts or group meetings.

Labels and Other Hazard Warnings

Name

Title

will verify that all department heads and all areas of the plant have complied with container labeling. The label will be either the original manufacturer's label or generic labels which have a block for identity and blocks for the hazard warning. The identity can be any chemical or common name designation for the individual chemical or mixture, as long as the term is also the one used on the list of hazardous chemicals and the MSDS.

Labels on shipped containers must also include the format and content of labels, as long as the minimal importer, or other responsible party.

The standard allows considerable flexibility in format and content of labels, as long as the minimal information requirements are met.

Labeling of portable containers of ten gallons or less in volume is not required if used by the person making the transfer from labeled containers for immediate use. However, if other employees use the container on other shifts, it should have a label.

Employee Information and Training

Name

Title

will be responsible for the employee information and training program. He/she will ensure that all elements specified below are carried out.

- * An overview of the requirements contained in the hazard communication standard.
- * Location and availability of the written hazard communication program.
- * Physical and health effects of hazardous chemicals.
- * Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area.
- * How to lessen or prevent exposure to hazardous chemicals through the usage of control/work.
- * Steps the company has taken to lessen or prevent exposure to chemicals.
- * Emergency procedures to follow if they are exposed chemicals.
- * How to read labels and review MSDSs to obtain appropriate information.
- * Location of MSDS file and location of hazardous chemical list.
- * After attending the training class, each employee will sign a form to verify that they attended the training session, received our written materials and handout, and understand our company's policy on hazard communication. (Printed form sample is shown under appendix a.)

Hazardous and Nonroutine Tasks

Periodically, employees are required to perform hazardous nonroutine tasks such as cleaning ovens or other equipment, furnace rebuilding, etc. Prior to starting work on such projects, each affected employee will be given information by their supervisor about hazardous materials to which they may be exposed during such activity.

This information will include:

- * Specific chemical and material hazards.
- * Protective / safety measures the employee can take.
- * Measures the company has taken to lessen the hazards including ventilation, respirators, other special protective equipment, presence of another employee where required, and emergency procedures.

On-Site Contractors

It is the responsibility of

Name

Title

to provide contractors with the following information:

- * Hazardous chemicals to which they may be exposed while on the job site.
- * Precautions the contractor and his employees may take to lessen the possibility of exposure by usage of appropriate protective measures.

It is the responsibility of

Name

Title

to contact each contractor before work is started in the plant to gather and disseminate any information concerning chemical hazards that the contractor is bringing into the workplace.

Letter to Contractors

Dear _____
(Name or position of responsible company representative)

The OSHA hazard communication standard 19____ requires that we inform any contractor employers with employees working in our workplace of the hazardous chemicals their employees may be exposed to while performing this work, and any suggestions for appropriate protective measures.

Name

Title

will be responsible for contacting each contractor before work is started in the plant for the purpose of providing the contractor with information on the hazard communication program, and any hazardous chemicals to which the contractor's employee's may be exposed while on the job site. He/she will also discuss with the contractor any information on hazardous chemicals that the contractor is bringing into the workplace.

MSDS Query

Dear _____
(Name or position of responsible company representative)

You are required under OSHA's hazard communication standard (29CFR 19____) to perform hazard determinations, label containers, and provide the material safety data sheet (MSDS) for all hazardous chemicals which you produce or import. Please send immediately a completed material safety data sheet for the following chemical (s) purchase from your firm:

Name of chemicals

Thank you for your assistance. If you have any questions, please feel free to contact me at 414-434-4060.

Sincerely,

CHAPTER H

**VILLAGE OF HOWARD
PERSONAL PROTECTIVE EQUIPMENT SAMPLE PROGRAM**

**OSHA Personal Protective Equipment (PPE) Standard
(1910.132 - 1910.138)
Summary of Changes/Additions**

1910.132 General Requirements:

- A. Application**
Personal Protective Equipment (PPE) has to be provided, used and maintained whenever it is "necessary by reason of hazards of processes of environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment of any function of the body."
- B. Employee Owned Equipment**
Whenever employees provide their own PPE, the employer is responsible for assuring its adequacy including proper maintenance and sanitation.
- C. Design**
All PPE must be of safe design and construction for the work to be performed.
- D. Hazard Assessment**
Each employer must assess the workplace to determine if there are any hazards present or likely to be present which require the use of PPE. The assessment must match the PPE to the particular hazard(s).
- E. Hazard Assessment Certification**
Each worksite assessment must be documented by the issuance of a written Hazard Assessment Certification. This document must:
1. Identify the workplace evaluated.
 2. Name the individual who conducted the evaluation.
 3. Give the date of the hazard assessment.
 4. Identify the document as a certification of hazard assessment.
- F. Selection**
The selection of Personal Protective Equipment (PPE) must be based upon:
1. A written assessment of the hazards present in the workplace.
 2. A comparison of the hazards with the capabilities of available PPE to prevent injuries and illnesses.
 3. Careful consideration for comfort and fit.
 4. Use of "common sense and appropriate expertise."
- G. Training**
Each employee required to wear PPE must be trained to know the following:
1. When PPE is necessary.
 2. What PPE is necessary.
 3. How to properly wear PPE.

4. Limitations of the PPE.
5. Proper care, maintenance, useful life and disposal of the PPE.

Note: Each employee must demonstrate an understanding of how to use the PPE before he/she is allowed to perform the work and wear the PPE.

H. Retraining

Retraining is required whenever:

1. Situations/hazards change in the workplace
2. There is a change in the types of available PPE.
3. Employees are not using PPE properly.

I. Training Documentation

Training documentation must include:

1. Name of employee
2. The subject of the training/certification (type of PPE)
3. Name of trainer
4. Date of training

1910.133 EYE and FACE PROTECTION:

Appropriate eye or face protection must be used when employees are exposed to hazards from flying particle, molten metal, liquid chemicals, acids, or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

1. Eye protection with sideshields is required when there is a potential hazard from flying objects. This doesn't mean that employees have to be working on the specific job that presents the exposure. If workers are exposed to the potential of flying objects, safety sideshields will be required.
2. Employees who wear prescription lenses while working in eye hazard areas must wear ANSI Z87.1 approved prescription eye wear or wear the PPE approved eye protection over their prescription lenses. If worn over prescription lenses, they should not disturb the proper position of the lenses.
3. Eye and face PPE must be distinctly marked with the ID of the manufacturer.
4. Employees exposed to injurious light radiation must use filter lenses that have the shade number appropriate for the work.
5. All eye protection and face protection purchased after July 5, 1995 must comply with ANSI Z87.1-1989.
6. Face shields and/or goggles may be needed to provide added protection to the face and eyes.

1910.135 HEAD PROTECTION:

Protective helmets are necessary when employees are working in areas where there is a potential for injury to the head from falling objects. If exposed to overhead electrical conductor, protective helmets designed for electrical shock hazards must be worn.

Protective helmets purchased after July 5, 1994 must comply with ANSI 89.1-1989. Protective helmets purchased before July 5, 1994 must comply with ANSI Z89.1-1969.

1910.136 FOOT PROTECTION:

Protective footwear is required when employees are working in areas where there is a danger of foot injuries due to falling and rolling objects piercing the sole, and/or where such employee's feet are exposed to electrical hazards.

Protective footwear purchased after July 5, 1994 must comply with ANSI Z41-1991. Footwear purchased before July 5, 1994 must comply with Z41-1967.

1910.138 HAND PROTECTION (New Standard):

Each employer must select and require employees to use appropriate hand protection when their hands are exposed to hazards such as:

1. Absorption of harmful substances
2. Severe cuts or lacerations
3. Severe abrasions
4. Punctures
5. Chemical burns
6. Thermal burns
7. Harmful temperature extremes (cold/heat)

Selection of hand protection must be based on the performance characteristics of the PPE relative to the task being performed including:

1. Condition(s) present
2. Duration of use
3. The hazard(s) and potential hazard(s) identified

Special Notes:

1. PPE devices alone should not be relied on to provide protection from hazards, but should be used in conjunction with guards, engineering and administrative controls and sound manufacturing practices.
2. OSHA has recently clarified its position that employers, in most cases, must provide and pay for workers' personal protective equipment. In a compliance memorandum sent to field offices,

OSHA noted that its general PPE standard, as well as specific standards, should be interpreted to require employers to provide and pay for personal protective equipment required by the company to do his or her job safely and in compliance with OSHA standards.

If the equipment is very personal in nature and is usable by the workers off the job, the matter of payment may be left to labor-management negotiations. Examples of PPE that would not normally be used away from the worksite include, but are not limited to: welding gloves, wire mesh gloves, respirators, hard hats, specialty glasses and goggles (such as those designed for laser or ultraviolet radiation protection), specialty foot protection (such as metatarsal shoes and linemen's shoes with built-in gaffs), face shields and rubber gloves, blankets, cover ups, hot sticks and other live-line tools used by power generation workers.

Examples of PPE that is personal in nature and often used away from the worksite include: non-specialty safety glasses, safety shoes and cold weather outer wear of the type worn by construction workers. However, shoes or outerwear subject to contamination by carcinogens or other toxic or hazardous substances which cannot be safely worn off-site must be paid for by the employer.

Failure of the employer to pay for PPE that is not personal and not used away from the job is a violation of OSHA standards and shall be cited.

Hazard Assessment Guide*

The new ILHR/OSHA Personal Protective Equipment Standard (1910.132) requires that each employer (state agency/institution) conduct a hazard assessment to determine if there are any hazards present or likely to be present which require the use of PPE. The assessment must match the PPE to the particular hazard.

The following is a **recommended** procedure for conducting a hazard assessment.

Review Injury and Accident Data:

Two sources of injury data can provide helpful information for assessing hazards:

1. OSHA Form 200 Log.
2. Worker's Compensation Claims.

Inform Employees and Supervisors of the Process:

Involve the employees and supervisors from each work area that is being assessed. Review the job procedures, potential hazards and the PPE currently in use. Discuss the reasons for the survey and the procedures being used for the assessment. Point out that the assessment is *not* a review of their job performance.

Conduct a Walk-Through Survey:

Conduct a walk-through survey of the work areas that may need PPE. The purpose of the survey is to identify sources of hazards to workers and co-workers. Observe the following: layout of the workplace, location of the workers, work operations, hazards and places where PPE is currently used including the device and reason for use.

Consideration should be given to the following basic hazard categories:

1. Impact (falling/flying objects)
2. Penetration (sharp objects piercing foot/hand)
3. Compression (roll-over or pinching objects)
4. Chemical exposure (inhalation, ingestion, skin contact, eye contact or injection)
5. Heat
6. Dust
7. Light (optical) radiation (welding, brazing, cutting, furnaces, etc.)
8. Respiratory System
9. Extreme Cold
10. Noise
11. Water (potential for drowning or fungal infections caused by wetness)
12. Vibration
13. Electrical

Organize the Data:

Following the walk-through survey, organize the data and information for use in the hazard assessment. The objective is to prepare for an analysis of the hazards in the environment to enable proper selection of PPE.

Analyze the Data:

Having gathered and organized the data, an estimate of the potential for injuries and illnesses should be made. Each of the basic hazards should be reviewed (see walk-through survey) and determination made as to the type, level of risk and seriousness of potential injury from each of the hazards found in the area. The possibility of exposure to several hazards simultaneously should be considered.

Selection Guidelines:

After completion of the hazard assessment, the general suggested process for the selection of PPE is to:

1. Become familiar with the potential hazards and what PPE is available and what it can do (splash protection, impact protection, etc.) to prevent injuries and illnesses.
2. Compare the hazards associated with the work environment and the capabilities of the available PPE (such as shaded lenses for welding or flying objects during a grinding operation).
3. Select the PPE which ensures a level of protection greater than the minimum required to protect employees from the hazards.
4. Fit the user with the device and provide instruction on care, use and limitations of PPE.

Note: Personal protective equipment alone should **not** be relied upon to provide protection against hazards but should be used in conjunction with engineering controls, administrative controls and procedural controls.

Fitting the Device:

1. Careful consideration must be given to comfort and fit. The right size should be selected to encourage continued use of the device.
2. Adjustments should be made on an individual basis for a comfortable fit while still maintaining the PPE in proper position.

Reassessment of the Hazards:

Reassess the workplace as necessary by identifying and evaluation:

1. New equipment and processes.
2. Review accident records.
3. Re-evaluate the suitability of previously selected PPE.

Eye and Face Protection Chart:

1. Refer to the Eye and Face Protection Chart for guidance on the proper selection of PPE for eye and face protection.
2. Some occupations for which eye and face protection should be routinely considered are: carpenters, electricians, machinists, lathe operators, mechanics, plumbers, pipe fitters, sheet metal workers, assemblers, foundry workers, machine operators, welders, laborers and timber cutting and logging operators.

Head Protection Chart:

1. Refer to the Head Protection Chart for guidance on proper selection of PPE for head protection.
2. Some examples of the occupations for which head protection should be routinely considered are: carpenters, electricians, mechanics, plumbers, pipe fitters, packers, welders, laborers, freight handlers, timber cutting, logging, stock handlers, warehouse laborers, etc.

Foot Protection Chart:

1. Refer to the Foot Protection Chart for guidance on proper selection of PPE for -foot protection.
2. Some examples of the occupations for which foot protection should routinely considered are: shipping and receiving clerks, stock clerks, carpenters, electricians, machinists, mechanics, plumbers, welders, pipe fitters, gardeners, groundskeepers, etc.

Hand Protection Chart:

1. No one type or style of glove can provide protection against ALL potential hand hazards. Therefore, it is important to select the most appropriate glove for a particular application and determine how long it can be worn and whether it can be reused. It is important to know the performance characteristics of gloves relative to the specific hazard. Documentation from the manufacturer should be requested.
2. The work activities of the employee should be analyzed to determine the degree of dexterity required, the duration, frequency, degree of exposure and physical stresses that will be applied.
3. Consider the following factors for glove selection for chemical hazards:
 - A. Toxic properties of the chemical **must** be determined in relation to skin absorption.
 - B. MSDS's are an excellent source of information.
 - C. For mixtures and formulated chemicals, a glove selected on the basis of the chemical component with the shortest breakthrough time.
 - D. Employees must be able to remove the gloves in such a manner as to prevent skin contamination.

Upper/Lower Body Protection Chart:

1. Refer to the Upper/Lower Body Protection Chart for guidance on the proper selection of PPE for upper or lower body protection.
2. Some occupations for which body protection should be routinely considered include lab technicians and researchers, fire control, highway construction, welders, timber cutting, etc.

Cleaning and Maintenance:

1. All PPE must be kept clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision.
2. All PPE should be cleaned, inspected and maintained at regular intervals so that PPE can provide the requisite protection.
3. Contaminated PPE which cannot be decontaminated must be disposed of in a manner that protects employees from exposure to hazards.

Hazard Assessment Certification:

Each PPE assessment must be documented by the issuance of a written Hazard Assessment Certification. This document must:

1. Identify the workplace evaluated.
2. Name the individual who conducted the evaluation.
3. Give the date of the hazard assessment.
4. Identify the document as a certification of hazard assessment.

* Source: Adapted from a hazard assessment procedure originally developed by the Department of Corrections.

EYE AND FACE PROTECTION – SELECTION

The following chart shows some common workplace activities performed by state employees and the proper eye and face protection equipment needed for each activity. Contact your supervisor and/or safety coordinator for more information about the selection of eye and face protection for these and other work activities.

<u>ACTIVITY</u>	<u>EYE/FACE HAZARDS</u>	<u>EYE/FACE PROTECTION</u>
Acetylene welding	Sparks, optical radiation, flying particles	Welding goggles or welding helmet worn over safety glasses with sideshields.
Chemical handling, laboratory operations	Chemical splash or spill, acid burns, fumes, glass breakage	Chemical goggles. Use a faceshield plus chemical goggles for severe exposure.
Cutting, brazing, soldering	Sparks, optical radiation, flying particles, flashburns	Safety glasses with shaded lenses or welding shield. Use faceshield plus safety glasses for severe exposure.
Electric arc welding	Sparks, optical radiation, flying particles	Welding shield or welding helmet worn over safety glasses with sideshields.
Grinding, sawing	Flying particles, dust	Impact goggles or safety glasses with sideshields. Use faceshield plus impact goggles or safety glasses for severe exposure.
Laser operations	Reflected or direct laser beam impact	Narrow or broad spectrum laser spectacles or goggles. Selection is based on type of laser.
Machining	Flying particles, mists, vapors	Safety glasses with sideshields or goggles.
Medical examinations, First Aid procedures	Contact with body fluids/bloodborne pathogens	Safety glasses with solid sideshields. Use safety goggles or faceshield plus goggles for severe exposure.
Pesticide/fertilizer application with hand sprayer	Chemical splash or spill, airborne chemicals	Chemical goggles or safety glasses. Use faceshield plus safety glasses/goggles for severe exposure

EYE AND FACE PROTECTION CHART

Source	Assessment of Hazard	Protection
IMPACT	Flying fragments, objects, large chips, particles of sand, dirt, etc.	Spectacles with side protection, goggles, face shields. See notes (1), (3), (5), (6) and (10). For severe exposure, use face shield.
HEAT	Hot sparks	Face shields, goggles, spectacles with side protection. For severe exposure use face shield. See notes (1), (2) and (3).
	Splash from molten metals	Face shields worn over goggles. See notes (1), (2) and (3).
	High temperature exposure	Screen face shields, reflective face shields. See notes (1), (2), and (3).
CHEMICALS	Splashing liquids	Goggles, eyecup and cover types. For severe exposure, use face shield. See notes (3) and (11).
	Irritating mists	Special purpose goggles.
DUST	Nuisance dust	Goggles, eyecup and cover types. See note (8).
LIGHT &/or RADIATION		
Welding: Electric arc	Optical radiation	Welding helmets or welding shields. Typical shades: 10 -14. See notes (9) and (12).
Welding: Gas	Optical radiation	Welding goggles or welding face shield. Typical shades: gas welding 4-8, cutting 3-6, and brazing 3-4. See note (9).
Cutting, Torch brazing, Torch soldering	Optical radiation	Spectacles or welding face shield. Typical shades: 1.5-3. See notes (3) and (9).
Glare	Poor vision	Spectacles with shaded or special purpose lenses, as suitable. See notes (9), (10).

Notes to Eye and Face Protection Chart:

1. Care should be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each of the hazards should be provided. Protective devices do not provide unlimited shaded lenses are *not* filter lenses unless they are marked or identified as such protection.
2. Operations involving heat may also involve light radiation. As required by the standard, protection from both hazards must be provided.
3. Face shields should only be worn over primary eye protection (spectacles or goggles).
4. As required by the standard, filter lenses must meet the requirements for shade designations in 1910.133(a)(5). Tinted and shaded lenses are not filter lenses unless they are marked as such.
5. As required by the standard, persons whose vision requires the use of prescription (Rx) lenses must wear either protective devices fitted with prescription (Rx) lenses or protective devices designed to be worn over regular prescription (Rx) eyewear.
6. Wearers of contact lenses must also wear appropriate eye and face protection devices in a hazardous environment. It should be recognized that dusty and/or chemical environments may represent an additional hazard to contact lens wearers.
7. Caution should be exercised in the use of metal frame protective devices in electrical hazard areas.
8. Atmospheric conditions and the restricted ventilation of the protector can cause lenses to fog. Frequent cleansing may be necessary.
9. Welding helmets or face shields should be used only over primary eye protection (spectacles or goggles).
10. Non-sideshield spectacles are available for frontal protection only, but are not acceptable protection for the sources and operations listed for "impact".
11. Ventilation should be adequate, but well protected from splash entry. Eye and face protection should be designed and used so that it provides both adequate ventilation and protects the wearer from the splash entry.
12. Protection from light radiation is directly related to filter lens density. See note (4). Select the darkest shade that allows task performance.

HEAD PROTECTION CHART

Source	Assessment of Hazard	Protection
Impact	Falling objects	Hard Hat. Specify type. (See ANSI performance requirements)
	Collision with fixed object	Hard Hat. (See ANSI performance requirements)
Electrical	Contact with exposed electrical wires, conductors	Class A or Class B Hard Hat, depending upon exposure. (See ANSI performance requirements)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL HEAD PROTECTION

	Class A	Class B	Class C
Description	General service, limited voltage protection	Utility service, high voltage protection	General service, metallic no voltage protection
Material	Water resistant, slow burning	Water resistant, slow burning	Water resistant, slow burning
Insulation Resistance	2200V, 60Hz for 1 min. with 3 MA max. leakage	20,000V, 60Hz for 3 min. with 9 MA max. leakage	N/A
Flammability (Burn Rate)	3 in/min. max	3 in/min. max	N/A
Impact Resistance (Transmitted Force)	850 lb average 1000 lb maximum	850 lb average 1000 lb maximum	850 lb average 1000 lb maximum
Penetration Resistance	3/8 in maximum	3/8 in maximum	7/16 in maximum
Standard	Z89.1-1969	Z89.2-1971	Z89.1-1969

FOOT PROTECTION CHART

Source	Assessment of Hazard	Protection
Impact	Falling objects, parts, heavy tools	Safety shoes. For severe exposure use metatarsal guards. (See ANSI performance requirement)
Penetration	Nails, scrap metal, and other sharp objects	Footwear with puncture-resistant soles/steel insert.
Compression	Rolling or pinching objects, rolls, carts or vehicles	Safety shoes. For severe exposure use metatarsal guards. (See ANSI performance requirement)
Chemicals	Splashing/spilling liquids, i.e., solvents, oils, paints, corrosives, acids, etc.	Leather shoes for mild exposures. Rubber boots or shoes with spats for severe exposure.
Electrical	Contact with power lines, conductors, arcing, sparks or static discharges.	Footwear with special conductive/insulated soles.
Heat	Splash from molten metal	Safety shoes with metatarsal guards or spats.
	Flying sparks, flux, and metal from cutting/welding operations	Leather safety shoes. For severe exposure, use metatarsal guards or spats.
Water	Wetness/moisture from prolonged exposure	Insulated shoes or boots.
	Slipping hazard	Footwear with slip-resistant soles.
Temperature	Exposure to extreme cold	Insulated shoes/boots.

ANSI PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL FOOT PROTECTION

Class	Compression Resistance (pounds)	Impact Resistance (foot-pounds)
75	2,500	75
50	1,750	50
30	1,000	30

**Personal Protective Equipment (PPE)
Hazard Assessment Survey and Analysis**

Organization: _____ Location: _____
 Job Classification: _____ Operation/Process: _____
 Person performing assessment: _____ Title: _____

THE FOLLOWING HAZARDS HAVE BEEN NOTED

Part of Body	Hazard	Required PPE	Notes
Hands	<input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Penetration-animal bites <input type="checkbox"/> Penetration-rough objects <input type="checkbox"/> Chemical(s) _____ <input type="checkbox"/> Extreme cold <input type="checkbox"/> Extreme heat <input type="checkbox"/> Blood <input type="checkbox"/> Electrical shock <input type="checkbox"/> Vibration-power tools <input type="checkbox"/> Other _____	<input type="checkbox"/> Leather/cut resistant gloves <input type="checkbox"/> Leather/cut resistant gloves <input type="checkbox"/> General purpose work gloves <input type="checkbox"/> Chemical resistant gloves <input type="checkbox"/> Type _____ <input type="checkbox"/> Insulated gloves <input type="checkbox"/> Heat/flame resistant gloves <input type="checkbox"/> Latex or nitrile gloves <input type="checkbox"/> Insulated rubber gloves <input type="checkbox"/> Type _____ <input type="checkbox"/> Cotton, leather or anti-vibration gloves <input type="checkbox"/> Other _____	
Eye & Face	<input type="checkbox"/> Impact-flying objects, chips, sand or dirt <input type="checkbox"/> Nuisance dust <input type="checkbox"/> UV light-welding, cutting, torch brazing or soldering <input type="checkbox"/> Chemical-splashing liquid <input type="checkbox"/> Chemical-irritating mists <input type="checkbox"/> Hot sparks-grinding <input type="checkbox"/> Splashing molten metal <input type="checkbox"/> Glare/High Intensity lights <input type="checkbox"/> Laser operations <input type="checkbox"/> Other _____	<input type="checkbox"/> Safety glasses w/side shields <input type="checkbox"/> Glasses/goggles w/face shield <input type="checkbox"/> Impact goggles <input type="checkbox"/> Welding goggles <input type="checkbox"/> Welding helmet/shield w/safety glasses & side shields <input type="checkbox"/> Chemical goggles/ face shield <input type="checkbox"/> Chemical splash goggles <input type="checkbox"/> Safety glasses w/side shields <input type="checkbox"/> Glasses/goggles w/face shield <input type="checkbox"/> Safety goggles w/face shield <input type="checkbox"/> Shaded safety glasses <input type="checkbox"/> Laser spectacles or goggles <input type="checkbox"/> Other _____	
Ears	<input type="checkbox"/> Exposure to noise levels (> 85 dBA 8-hour TWA) <input type="checkbox"/> Exposure to sparks <input type="checkbox"/> Other _____	<input type="checkbox"/> Earmuffs, plugs or ear caps <input type="checkbox"/> Leather welding hood <input type="checkbox"/> Other _____	

Part of Body	Hazard	Required PPE	Notes
Respiratory System	<input type="checkbox"/> Nuisance dust/mist <input type="checkbox"/> Welding fumes <input type="checkbox"/> Asbestos <input type="checkbox"/> Pesticides <input type="checkbox"/> Paint spray <input type="checkbox"/> Organic vapors <input type="checkbox"/> Acid gases <input type="checkbox"/> Oxygen deficient/toxic or IDLH atmosphere <input type="checkbox"/> Other _____	<input type="checkbox"/> Disposable dust/mist mask <input type="checkbox"/> Welding respirator <input type="checkbox"/> Respirator w/HEPA filter <input type="checkbox"/> Respirator w/pesticide cartridges <input type="checkbox"/> Respirator w/paint spray cartridges <input type="checkbox"/> Respirator w/organic cartridges <input type="checkbox"/> Respirator w/acid gas cartridges <input type="checkbox"/> SCBA or Type C airline respirator <input type="checkbox"/> Other _____	
Feet	<input type="checkbox"/> Impact-heavy objects <input type="checkbox"/> Compression-rolling or pinching objects/vehicles <input type="checkbox"/> Slippery or wet surface <input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Penetration-chemical <input type="checkbox"/> Splashing-chemical <input type="checkbox"/> Exposure to extreme cold <input type="checkbox"/> Other _____	<input type="checkbox"/> Steel toe safety shoes <input type="checkbox"/> Leather boots or safety shoes w/metatarsal guards <input type="checkbox"/> Slip resistant soles <input type="checkbox"/> Puncture resistant soles <input type="checkbox"/> Chemical resistant boots/covers <input type="checkbox"/> Rubber boots/closed top shoes <input type="checkbox"/> Insulated boots or shoes <input type="checkbox"/> Other _____	
Head	<input type="checkbox"/> Struck by falling object <input type="checkbox"/> Struck against fixed object <input type="checkbox"/> Electrical-contact with exposed wires/conductors <input type="checkbox"/> Other _____	<input type="checkbox"/> Hard hat/cap <input type="checkbox"/> Class A <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Other _____	
Body	<input type="checkbox"/> Impact-flying objects <input type="checkbox"/> Moving vehicles <input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Electrical-static discharge <input type="checkbox"/> Hot metal or sparks <input type="checkbox"/> Chemical(s) _____ <input type="checkbox"/> Exposure to extreme cold <input type="checkbox"/> Unprotected elevated walking/working surface <input type="checkbox"/> Other _____	<input type="checkbox"/> Long sleeves/ apron/ coat <input type="checkbox"/> Traffic vest <input type="checkbox"/> Cut-resistant sleeves, wristlets <input type="checkbox"/> Static control coats/coveralls <input type="checkbox"/> Flame-resistant jacket/ pants <input type="checkbox"/> Lab coat or apron/sleeves <input type="checkbox"/> Insulated jacket, hood <input type="checkbox"/> Body harness and lanyard <input type="checkbox"/> Other _____	

CERTIFICATION: I certify that I personally performed the above Hazard Assessment on the date indicated. *This document is a Certification of the Hazard Assessment.*

Signed by: _____ Date: _____

**OSHA Personal Protective Equipment (PPE) Standard
(1910.132 - 1910.138)
Summary of Changes/Additions**

1910.132 General Requirements:

A. Application

Personal Protective Equipment (PPE) has to be provided, used and maintained whenever it is "necessary by reason of hazards of processes of environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment of any function of the body."

B. Employee Owned Equipment

Whenever employees provide their own PPE, the employer is responsible for assuring its adequacy including proper maintenance and sanitation.

C. Design

All PPE must be of safe design and construction for the work to be performed.

D. Hazard Assessment

Each employer must assess the workplace to determine if there are any hazards present or likely to be present which require the use of PPE. The assessment must match the PPE to the particular hazard(s).

E. Hazard Assessment Certification

Each worksite assessment must be documented by the issuance of a written Hazard Assessment Certification. This document must:

1. Identify the workplace evaluated.
2. Name the individual who conducted the evaluation.
3. Give the date of the hazard assessment.
4. Identify the document as a certification of hazard assessment.

F. Selection

The selection of Personal Protective Equipment (PPE) must be based upon:

1. A written assessment of the hazards present in the workplace.
2. A comparison of the hazards with the capabilities of available PPE to prevent injuries and illnesses.
3. Careful consideration for comfort and fit.
4. Use of "common sense and appropriate expertise."

G. Training

Each employee required to wear PPE must be trained to know the following:

1. When PPE is necessary.
2. What PPE is necessary.
3. How to properly wear PPE.
4. Limitations of the PPE.
5. Proper care, maintenance, useful life and disposal of the PPE.

Note: Each employee must demonstrate an understanding of how to use the PPE before he/she is allowed to perform the work and wear the PPE.

H. Retraining

Retraining is required whenever:

1. Situations/hazards change in the workplace
2. There is a change in the types of available PPE.
3. Employees are not using PPE properly.

I. Training Documentation

Training documentation must include:

1. Name of employee
2. The subject of the training/certification (type of PPE)
3. Name of trainer
4. Date of training

1910.133 EYE and FACE PROTECTION:

Appropriate eye or face protection must be used when employees are exposed to hazards from flying particle, molten metal, liquid chemicals, acids, or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

1. Eye protection with sideshields is required when there is a potential hazard from flying objects. This doesn't mean that employees have to be working on the specific job that presents the exposure. If workers are exposed to the potential of flying objects, safety sideshields will be required.
2. Employees who wear prescription lenses while working in eye hazard areas must wear ANSI Z87.1 approved prescription eye wear or wear the PPE approved eye protection over their prescription lenses. If worn over prescription lenses, they should not disturb the proper position of the lenses.
3. Eye and face PPE must be distinctly marked with the ID of the manufacturer.

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4. Employees exposed to injurious light radiation must use filter lenses that have the shade number appropriate for the work.
5. All eye protection and face protection purchased after July 5, 1995 must comply with ANSI Z87.1-1989.
6. Face shields and/or goggles may be needed to provide added protection to the face and eyes.

1910.135 HEAD PROTECTION:

Protective helmets are necessary when employees are working in areas where there is a potential for injury to the head from falling objects. If exposed to overhead electrical conductor, protective helmets designed for electrical shock hazards must be worn.

Protective helmets purchased after July 5, 1994 must comply with ANSI 89.1-1989. Protective helmets purchased before July 5, 1994 must comply with ANSI Z89.1-1969.

1910.136 FOOT PROTECTION:

Protective footwear is required when employees are working in areas where there is a danger of foot injuries due to falling and rolling objects piercing the sole, and/or where such employee's feet are exposed to electrical hazards.

Protective footwear purchased after July 5, 1994 must comply with ANSI Z41-1991. Footwear purchased before July 5, 1994 must comply with Z41-1967.

1910.138 HAND PROTECTION (New Standard):

Each employer must select and require employees to use appropriate hand protection when their hands are exposed to hazards such as:

1. Absorption of harmful substances
2. Severe cuts or lacerations
3. Severe abrasions
4. Punctures
5. Chemical burns
6. Thermal burns
7. Harmful temperature extremes (cold/heat)

Selection of hand protection must be based on the performance characteristics of the PEP relative to the task being performed including:

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1. Condition(s) present
2. Duration of use
3. The hazard(s) and potential hazard(s) identified

Special Notes:

1. PPE devices alone should not be relied on to provide protection from hazards, but should be used in conjunction with guards, engineering and administrative controls and sound manufacturing practices.
2. OSHA has recently clarified its position that employers, in most cases, must provide and pay for workers' personal protective equipment. In a compliance memorandum sent to field offices, OSHA noted that its general PPE standard, as well as specific standards, should be interpreted to require employers to provide and pay for personal protective equipment required by the company to do his or her job safely and in compliance with OSHA standards.

If the equipment is very personal in nature and is usable by the workers off the job, the matter of payment may be left to labor-management negotiations. Examples of PPE that would not normally be used away from the worksite include, but are not limited to: welding gloves, wire mesh gloves, respirators, hard hats, specialty glasses and goggles (such as those designed for laser or ultraviolet radiation protection), specialty foot protection (such as metatarsal shoes and linemen's shoes with built-in gaffs), face shields and rubber gloves, blankets, cover ups, hot sticks and other live-line tools used by power generation workers.

Examples of PPE that is personal in nature and often used away from the worksite include: non-specialty safety glasses, safety shoes and cold weather outer wear of the type worn by construction workers. However, shoes or outerwear subject to contamination by carcinogens or other toxic or hazardous substances which cannot be safely worn off-site must be paid for by the employer.

Failure of the employer to pay for PPE that is not personal and not used away from the job is a violation of OSHA standards and shall be cited.



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1. Condition(s) present
2. Duration of use
3. The hazard(s) and potential hazard(s) identified

Special Notes:

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Failure of the employer to pay for PPE that is not personal and not used away from the job is a violation of OSHA standards and shall be cited.

Hazard Assessment Guide*

The new ILHR/OSHA Personal Protective Equipment Standard (1910.132) requires that each employer (state agency/institution) conduct a hazard assessment to determine if there are any hazards present or likely to be present which require the use of PPE. The assessment must match the PPE to the particular hazard.

The following is a recommended procedure for conducting a hazard assessment.

Review Injury and Accident Data:

Two sources of injury data can provide helpful information for assessing hazards:

1. OSHA Form 200 Log.
2. Worker's Compensation Claims.

Inform Employees and Supervisors of the Process:

Involve the employees and supervisors from each work area that is being assessed. Review the job procedures, potential hazards and the PPE currently in use. Discuss the reasons for the survey and the procedures being used for the assessment. Point out that the assessment is *not* a review of their job performance.

Conduct a Walk-Through Survey:

Conduct a walk-through survey of the work areas that may need PPE. The purpose of the survey is to identify sources of hazards to workers and co-workers. Observe the following: layout of the workplace, location of the workers, work operations, hazards and places where PPE is currently used including the device and reason for use.

Consideration should be given to the following basic hazard categories:

1. Impact (falling/flying objects)
2. Penetration (sharp objects piercing foot/hand)
3. Compression (roll-over or pinching objects)
4. Chemical exposure (inhalation, ingestion, skin contact, eye contact or injection)
5. Heat
6. Dust
7. Light (optical) radiation (welding, brazing, cutting, furnaces, etc.)
8. Respiratory System
9. Extreme Cold
10. Noise
11. Water (potential for drowning or fungal infections caused by wetness)
12. Vibration
13. Electrical

Organize the Data:

Following the walk-through survey, organize the data and information for use in the hazard assessment. The objective is to prepare for an analysis of the hazards in the environment to enable proper selection of PPE.

Analyze the Data:

Having gathered and organized the data, an estimate of the potential for injuries and illnesses should be made. Each of the basic hazards should be reviewed (see walk-through survey) and determination made as to the type, level of risk and seriousness of potential injury from each of the hazards found in the area. The possibility of exposure to several hazards simultaneously should be considered.

Selection Guidelines:

After completion of the hazard assessment, the general suggested process for the selection of PPE is to:

1. Become familiar with the potential hazards and what PPE is available and what it can do (splash protection, impact protection, etc.) to prevent injuries and illnesses.
2. Compare the hazards associated with the work environment and the capabilities of the available PPE (such as shaded lenses for welding or flying objects during a grinding operation).
3. Select the PPE which ensures a level of protection greater than the minimum required to protect employees from the hazards.
4. Fit the user with the device and provide instruction on care, use and limitations of PPE.

Note: Personal protective equipment alone should **not** be relied upon to provide protection against hazards but should be used in conjunction with engineering controls, administrative controls and procedural controls.

Fitting the Device:

1. Careful consideration must be given to comfort and fit. The right size should be selected to encourage continued use of the device.
2. Adjustments should be made on an individual basis for a comfortable fit while still maintaining the PPE in proper position.

Reassessment of the Hazards:

Reassess the workplace as necessary by identifying and evaluation:

1. New equipment and processes.
2. Review accident records.
3. Re-evaluate the suitability of previously selected PPE.

Eye and Face Protection Chart:

1. Refer to the Eye and Face Protection Chart for guidance on the proper selection of PPE for eye and face protection.

2. Some occupations for which eye and face protection should be routinely considered are: carpenters, electricians, machinists, lathe operators, mechanics, plumbers, pipe fitters, sheet metal workers, assemblers, foundry workers, machine operators, welders, laborers and timber cutting and logging operators.

Head Protection Chart:

1. Refer to the Head Protection Chart for guidance on proper selection of PPE for head protection.
2. Some examples of the occupations for which head protection should be routinely considered are: carpenters, electricians, mechanics, plumbers, pipe fitters, packers, welders, laborers, freight handlers, timber cutting, logging, stock handlers, warehouse laborers, etc.

Foot Protection Chart:

1. Refer to the Foot Protection Chart for guidance on proper selection of PPE for foot protection.
2. Some examples of the occupations for which foot protection should routinely considered are: shipping and receiving clerks, stock clerks, carpenters, electricians, machinists, mechanics, plumbers, welders, pipe fitters, gardeners, groundskeepers, etc.

Hand Protection Chart:

1. No one type or style of glove can provide protection against ALL potential hand hazards. Therefore, it is important to select the most appropriate glove for a particular application and determine how long it can be worn and whether it can be reused. It is important to know the performance characteristics of gloves relative to the specific hazard. Documentation from the manufacturer should be requested.
2. The work activities of the employee should be analyzed to determine the degree of dexterity required, the duration, frequency, degree of exposure and physical stresses that will be applied.
3. Consider the following factors for glove selection for chemical hazards:
 - A. Toxic properties of the chemical must be determined in relation to skin absorption.
 - B. MSDS's are an excellent source of information.
 - C. For mixtures and formulated chemicals, a glove selected on the basis of the chemical component with the shortest breakthrough time.
 - D. Employees must be able to remove the gloves in such a manner as to prevent skin contamination.

Upper/Lower Body Protection Chart:

1. Refer to the Upper/Lower Body Protection Chart for guidance on the proper selection of PPE for upper or lower body protection.

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2. Some occupations for which body protection should be routinely considered include lab technicians and researchers, fire control, highway construction, welders, timber cutting, etc.

Cleaning and Maintenance:

1. All PPE must be kept clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision.
2. All PPE should be cleaned, inspected and maintained at regular intervals so that PPE can provide the requisite protection.
3. Contaminated PPE which cannot be decontaminated must be disposed of in a manner that protects employees from exposure to hazards.

Hazard Assessment Certification:

Each PPE assessment must be documented by the issuance of a written Hazard Assessment Certification. This document must:

1. Identify the workplace evaluated.
2. Name the individual who conducted the evaluation.
3. Give the date of the hazard assessment.
4. Identify the document as a certification of hazard assessment.

* Source: Adapted from a hazard assessment procedure originally developed by the Department of Corrections.

EYE AND FACE PROTECTION - SELECTION

The following chart shows some common workplace activities performed by state employees and the proper eye and face protection equipment needed for each activity. Contact your supervisor and/or safety coordinator for more information about the selection of eye and face protection for these and other work activities.

<u>ACTIVITY</u>	<u>EYE/FACE HAZARDS</u>	<u>EYE/FACE PROTECTION</u>
Acetylene welding	Sparks, optical radiation, flying particles	Welding goggles or welding helmet worn over safety glasses with sideshields.
Chemical handling, laboratory operations	Chemical splash or spill, acid burns, fumes, glass breakage	Chemical goggles. Use a faceshield plus chemical goggles for severe exposure.
Cutting, brazing, soldering	Sparks, optical radiation, flying particles, flashburns	Safety glasses with shaded lenses or welding shield. Use faceshield plus safety glasses for severe exposure.
Electric arc welding	Sparks, optical radiation, flying particles	Welding shield or welding helmet worn over safety glasses with sideshields.
Grinding, sawing	Flying particles, dust	Impact goggles or safety glasses with sideshields. Use a faceshield plus impact goggles or safety glasses for severe exposure.
Laser operations	Reflected or direct laser beam impact	Narrow or broad spectrum laser spectacles or goggles. Selection is based on type of laser.
Machining	Flying particles, mists, vapors	Safety glasses with sideshields or goggles.
Medical examinations, First Aid procedures	Contact with body fluids/bloodborne pathogens	Safety glasses with solid sideshields. Use safety goggles or faceshield plus goggles for severe exposure.
Pesticide/fertilizer application with hand sprayer	Chemical splash or spill, airborne chemicals	Chemical goggles or safety glasses. Use faceshield plus safety glasses/goggles for severe exposure.

EYE AND FACE PROTECTION CHART

Source	Assessment of Hazard	Protection
IMPACT	Flying fragments, objects, large chips, particles of sand, dirt, etc.	Spectacles with side protection, goggles, face shields. See notes (1), (3), (5), (6) and (10). For severe exposure, use face shield.
HEAT	Hot sparks	Face shields, goggles, spectacles with side protection. For severe exposure use face shield. See notes (1), (2) and (3).
	Splash from molten metals	Face shields worn over goggles. See notes (1), (2) and (3).
	High temperature exposure	Screen face shields, reflective face shields. See notes (1), (2), and (3).
CHEMICALS	Splashing liquids	Goggles, eyecup and cover types. For severe exposure, use face shield. See notes (3) and (11).
	Irritating mists	Special purpose goggles.
DUST	Nuisance dust	Goggles, eyecup and cover types. See note (8).
LIGHT and/or RADIATION- Welding: Electric arc	Optical radiation	Welding helmets or welding shields. Typical shades: 10 -14. See notes (9) and (12).
Welding: Gas	Optical radiation	Welding goggles or welding face shield. Typical shades: gas welding 4-8, cutting 3-6, brazing 3-4. See note (9).
Cutting, Torch brazing, Torch soldering	Optical radiation	Spectacles or welding face shield. Typical shades: 1.5-3. See notes (3) and (9).
Glare	Poor vision	Spectacles with shaded or special-purpose lenses, as suitable. See notes (9), (10).

Notes to Eye and Face Protection Chart:

- Care should be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each of the hazards should be provided. Protective devices do not provide unlimited shaded lenses are *not* filter lenses unless they are marked or identified as such protection.

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2. Operations involving heat may also involve light radiation. As required by the standard, protection from both hazards must be provided.
3. Face shields should only be worn over primary eye protection (spectacles or goggles).
4. As required by the standard, filter lenses must meet the requirements for shade designations in 1910.133(a)(5). Tinted and shaded lenses are not filter lenses unless they are marked as such.
5. As required by the standard, persons whose vision requires the use of prescription (Rx) lenses must wear either protective devices fitted with prescription (Rx) lenses or protective devices designed to be worn over regular prescription (Rx) eyewear.
6. Wearers of contact lenses must also wear appropriate eye and face protection devices in a hazardous environment. It should be recognized that dusty and/or chemical environments may represent an additional hazard to contact lens wearers.
7. Caution should be exercised in the use of metal frame protective devices in electrical hazard areas.
8. Atmospheric conditions and the restricted ventilation of the protector can cause lenses to fog. Frequent cleansing may be necessary.
9. Welding helmets or face shields should be used only over primary eye protection (spectacles or goggles).
10. Non-sideshield spectacles are available for frontal protection only, but are not acceptable protection for the sources and operations listed for "impact".
11. Ventilation should be adequate, but well protected from splash entry. Eye and face protection should be designed and used so that it provides both adequate ventilation and protects the wearer from the splash entry.
12. Protection from light radiation is directly related to filter lens density. See note (4). Select the darkest shade that allows task performance

HEAD PROTECTION CHART

Source	Assessment of Hazard	Protection
Impact	Falling objects	Hard Hat. Specify type. (See ANSI performance requirements)
	Collision with fixed object	Hard Hat. (See ANSI performance requirements)
Electrical	Contact with exposed electrical wires, conductors	Class A or Class B Hard Hat, depending upon exposure. (See ANSI performance requirements)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL HEAD PROTECTION

	Class A	Class B	Class C
Description	General service, limited voltage protection	Utility service, high voltage protection	General service, metallic, no voltage protection
Material	Water resistant, slow burning	Water resistant, slow burning	Water resistant, slow burning
Insulation Resistance	2200V, 60Hz for 1 min. with 3 mA max. leakage	20,000V, 60Hz for 3 min. with 9 MA max. leakage	N/A
Flammability (Burn Rate)	3 in/min max	3 in/min. max	N/A
Impact Resistance (Transmitted Force)	850 lb average 1000 lb maximum	850 lb average 1000 lb maximum	850 lb average 1000 lb maximum
Penetration Resistance	3/8 in maximum	3/8 in maximum	7/16 in maximum
Standard	Z89.1-1969	Z89.2-1971	Z89.1-1969

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FOOT PROTECTION CHART

Source	Assessment of Hazard	Protection
Impact	Falling objects, parts, heavy tools	Safety shoes. For severe exposure use metatarsal guards (See ANSI performance requirement)
Penetration	Nails, scrap metal, and other sharp objects	Footwear with puncture-resistant soles/steel insert
Compression	Rolling or pinching objects, rolls, carts or vehicles	Safety shoes. For severe exposure use metatarsal guards (See ANSI performance requirement)
Chemicals	Splashing/spilling liquids, i.e., solvents, oils, paints, corrosives, acids, etc.	Leather shoes for mild exposures. Rubber boots or shoes with spats for severe exposure
Electrical	Contact with power lines, conductors, arcing, sparks or static discharges.	Footwear with special conductive/insulated soles
Heat	Splash from molten metal	Safety shoes with metatarsal guards or spats
	Flying sparks, flux, and metal from cutting/welding operations	Leather safety shoes. For severe exposure, use metatarsal guards or spats.
Water	Wetness/moisture from prolonged exposure	Insulated shoes or boots
	Slipping hazard	Footwear with slip-resistant soles
Temperature	Exposure to extreme cold	Insulated shoes/boots

ANSI PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL FOOT PROTECTION

Class	Compression Resistance (pounds)	Impact Resistance (foot-pounds)
75	2,500	75
50	1,750	50
30	1,000	30

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Personal Protective Equipment (PPE) Hazard Assessment Survey and Analysis

Organization: _____ Location: _____
 Job Classification: _____ Operation/Process: _____
 Person performing assessment: _____ Title: _____

THE FOLLOWING HAZARDS HAVE BEEN NOTED

Part of Body	Hazard	Required PPE	Notes
Hands 	<input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Penetration-animal bites <input type="checkbox"/> Penetration-rough objects <input type="checkbox"/> Chemical(s) _____ <input type="checkbox"/> Extreme cold <input type="checkbox"/> Extreme heat <input type="checkbox"/> Blood <input type="checkbox"/> Electrical shock <input type="checkbox"/> Vibration-power tools <input type="checkbox"/> Other _____	<input type="checkbox"/> Leather/cut resistant gloves <input type="checkbox"/> Leather/cut resistant gloves <input type="checkbox"/> General purpose work gloves <input type="checkbox"/> Chemical resistant gloves; <input type="checkbox"/> Type _____ <input type="checkbox"/> Insulated gloves <input type="checkbox"/> Heat/flame resistant gloves <input type="checkbox"/> Latex or nitrile gloves <input type="checkbox"/> Insulated rubber gloves; <input type="checkbox"/> Type _____ <input type="checkbox"/> Cotton, leather or anti-vibration gloves <input type="checkbox"/> Other _____	
Eyes and Face 	<input type="checkbox"/> Impact-flying objects, chips, sand or dirt <input type="checkbox"/> Nuisance dust <input type="checkbox"/> UV light-welding, cutting, torch brazing or soldering <input type="checkbox"/> Chemical-splashing liquid <input type="checkbox"/> Chemical-irritating mists <input type="checkbox"/> Hot sparks-grinding <input type="checkbox"/> Splashing molten metal <input type="checkbox"/> Glare/High Intensity lights <input type="checkbox"/> Laser operations <input type="checkbox"/> Other _____	<input type="checkbox"/> Safety glasses w/side shields <input type="checkbox"/> Glasses/goggles w/face shield <input type="checkbox"/> Impact goggles <input type="checkbox"/> Welding goggles <input type="checkbox"/> Welding helmet/shield w/safety glasses & side shields <input type="checkbox"/> Chemical goggles/ face shield <input type="checkbox"/> Chemical splash goggles <input type="checkbox"/> Safety glasses w/side shields <input type="checkbox"/> Glasses/goggles w/face shield <input type="checkbox"/> Safety goggles w/face shield <input type="checkbox"/> Shaded safety glasses <input type="checkbox"/> Laser spectacles or goggles <input type="checkbox"/> Other _____	
Ears 	<input type="checkbox"/> Exposure to noise levels (> 85 dBA 8-hour TWA) <input type="checkbox"/> Exposure to sparks <input type="checkbox"/> Other _____	<input type="checkbox"/> Ear muffs, plugs or ear caps <input type="checkbox"/> Leather welding hood <input type="checkbox"/> Other _____	

Part of Body	Hazard	Required PPE	Notes
<p style="text-align: center;">Respiratory System</p> 	<input type="checkbox"/> Nuisance dust/mist <input type="checkbox"/> Welding fumes <input type="checkbox"/> Asbestos <input type="checkbox"/> Pesticides <input type="checkbox"/> Paint spray <input type="checkbox"/> Organic vapors <input type="checkbox"/> Acid gases <input type="checkbox"/> Oxygen deficient/toxic or IDLH atmosphere <input type="checkbox"/> Other _____	<input type="checkbox"/> Disposable dust/mist mask <input type="checkbox"/> Welding respirator <input type="checkbox"/> Respirator w/HEPA filter <input type="checkbox"/> Respirator w/pesticide cartridges <input type="checkbox"/> Respirator w/paint spray cartridges <input type="checkbox"/> Respirator w/organic cartridges <input type="checkbox"/> Respirator w/acid gas cartridges <input type="checkbox"/> SCBA or Type C airline respirator <input type="checkbox"/> Other _____	
<p style="text-align: center;">Feet</p> 	<input type="checkbox"/> Impact-heavy objects <input type="checkbox"/> Compression-rolling or pinching objects/vehicles <input type="checkbox"/> Slippery or wet surface <input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Penetration-chemical <input type="checkbox"/> Splashing-chemical <input type="checkbox"/> Exposure to extreme cold <input type="checkbox"/> Other _____	<input type="checkbox"/> Steel toe safety shoes <input type="checkbox"/> Leather boots or safety shoes w/metatarsal guards <input type="checkbox"/> Slip resistant soles <input type="checkbox"/> Puncture resistant soles <input type="checkbox"/> Chemical resistant boots/covers <input type="checkbox"/> Rubber boots/closed top shoes <input type="checkbox"/> Insulated boots or shoes <input type="checkbox"/> Other _____	
<p style="text-align: center;">Head</p> 	<input type="checkbox"/> Struck by falling object <input type="checkbox"/> Struck against fixed object <input type="checkbox"/> Electrical-contact with exposed wires/conductors <input type="checkbox"/> Other _____	<input type="checkbox"/> Hard hat/cap <input type="checkbox"/> Class A <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Other _____	
<p style="text-align: center;">Body</p> 	<input type="checkbox"/> Impact-flying objects <input type="checkbox"/> Moving vehicles <input type="checkbox"/> Penetration-sharp objects <input type="checkbox"/> Electrical-static discharge <input type="checkbox"/> Hot metal or sparks <input type="checkbox"/> Chemical(s) _____ <input type="checkbox"/> Exposure to extreme cold <input type="checkbox"/> Unprotected elevated walking/working surface <input type="checkbox"/> Other _____	<input type="checkbox"/> Long sleeves/ apron/ coat <input type="checkbox"/> Traffic vest <input type="checkbox"/> Cut-resistant sleeves, wristlets <input type="checkbox"/> Static control coats/coveralls <input type="checkbox"/> Flame-resistant jacket/ pants <input type="checkbox"/> Lab coat or apron/sleeves <input type="checkbox"/> Insulated jacket, hood <input type="checkbox"/> Body harness and lanyard <input type="checkbox"/> Other _____	

CERTIFICATION: I certify that I personally performed the above Hazard Assessment on the date indicated. *This document is a Certification of the Hazard Assessment.*

Signed by: _____ Date: _____

