



SAFETY MANUAL



CHIPPEWA COUNTY

OCCUPATIONAL HEALTH AND SAFETY

GENERAL SAFETY & HEALTH PROGRAM

SPS 332.203 SAFETY & HEALTH PROGRAM

TABLE OF CONTENTS

POLICY	2
SAFETY ORIENTATION	2
REPORTING INCIDENTS/INJURIES.....	2
RECORDKEEPING	2
PROFESSIONAL CONDUCT	2
PERSONAL PROTECTIVE EQUIPMENT (PPE).....	2
WORKING IN ROADWAYS.....	3
VEHICLE AND EQUIPMENT OPERATION.....	3
PUBLIC PROTECTION.....	3
BLOODBORNE PATHOGEN/EXPOSURE CONTROL PLAN	3
CONTROL OF HAZARDOUS ENERGY (LOTO)	3
EMERGENCY ACTION PLANS.....	3
HOUSEKEEPING	4
TOOLS & OTHER EQUIPMENT.....	4
HAZARD COMMUNICATION	4
HEARING CONSERVATION	4
TRENCHING & EXCAVATION SAFETY.....	4
CONFINED SPACE	4
ELECTRICAL SAFETY	5
RESPIRATORY PROTECTION	5
SNOW & ICE CONTROL.....	5
ERGONOMICS	5
SERVICING TIRES AND RIMS	5

POLICY

Chippewa County is committed to providing a safe work environment for all employees. As a condition of employment employees shall abide by established policies, programs, and procedures for their protection as well as the protection of other workers and civilians.

Employee's that work for Chippewa County are responsible for performing and complying with Federal, State, and Local Safety Standards. These rules will be strictly enforced.

Management also has a responsibility to follow and strictly enforce any applicable safety rules for the safety of their employees and themselves. Disciplinary action will follow County Policy.

SAFETY ORIENTATION

Employees must complete a safety orientation prior to performing work practices that compromise their safety per the guidelines set forth in the County's Safety Manual & Departmental Policies.

REPORTING INCIDENTS/INJURIES

All incidents and injuries shall be reported immediately to your direct supervisor. All Injury and Incident forms can be found by contacting your immediate Supervisors or on the employee portal. A supervisor will assist with filling out forms if the employee is unable to. The reports are then sent to the Human Resources Division.

RECORDKEEPING

Chippewa County will follow guidelines set forth by 29 CFR 1910.04 to record injuries and illnesses and SPS 332.205.

Files pertaining to safety activities (i.e. training records) shall be kept at minimum per the applicable OSHA Standard or County Policy, whichever is greater.

PROFESSIONAL CONDUCT

Horseplay, of any kind, is prohibited in the workplace that may lead to safety and health incidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Chippewa County will provide, at no cost, the necessary PPE that is required for employees for their job tasks per CFR 1910.132. Applicable employees will also be provided training under the standard as well.

Chippewa County will provide a certified assessment stating what PPE is necessary. Refer to the County's Personal Protective Equipment Program for more details.

WORKING IN ROADWAYS

Employees that are required to work in the right of way or roadways shall comply with the most recent version of the Manual of Uniform Traffic Control Devices. High visibility apparel must be worn while working in the right of way and must be consistent with the latest requirements under ANSI/ISEA 107 standards.

VEHICLE AND EQUIPMENT OPERATION

Employees that operate the County vehicles or equipment shall possess a valid license to operate. In the event driving privileges have been limited, suspended, or revoked the employee shall immediately inform supervisors prior to operating equipment, and will not operate such equipment.

PUBLIC PROTECTION

County employees shall keep the public away from areas that could expose them to hazard as conditions arise in work areas.

BLOODBORNE PATHOGEN/EXPOSURE CONTROL PLAN

Only employees that have been trained per CFR 1910.1030 will be able to work on jobs that may be reasonably anticipated to expose them to biological hazards such as bodily fluids. Not until this training takes place in accordance with the standard, will an employee be performing any job duties that are reasonably anticipated to have an exposure. See the County's Bloodborne Pathogen/Exposure Control Plan for specific details.

CONTROL OF HAZARDOUS ENERGY (Lock Out Tag Out)

All affected employees under the control of the hazardous energy standard, that are required to be around equipment maintenance operations, will be required to go through training according to CFR 1910.147. Affected employees will not be performing any maintenance to equipment. Only Authorized employees will be able to perform Hazardous Energy Control and maintain equipment as long as they have had appropriate training. All Training must be in accordance to CFR 1910.147. For more details see the County's Hazardous Energy Control (Lock Out Tag Out) program.

EMERGENCY ACTION PLANS

All employees shall be trained on the County's Emergency Action Plan to ensure they understand proper protocols in the event that an emergency occurs. Please see the County's Emergency Action Plan for more information.

HOUSEKEEPING

All employees are required to maintain a neat and clean work environment which also includes returning all tools and equipment back to its designated storage locations. Ensure there are proper safe clearances to equipment and that aisles and walkways are free of obstructions. Any slip, trip, or fall hazards shall be mitigated immediately to prevent injury.

TOOLS & OTHER EQUIPMENT

All tools and equipment should be kept in good working condition. They shall be inspected prior to their use. Any damaged tools or equipment should be reported immediately and taken out of service if the damages affect its safety integrity. Use only tools designated for the job they are meant to be used for. Employees must be trained on proper usage based on the manufacturer's instructions prior to their usage.

HAZARD COMMUNICATION

Prior to working with or around materials that have the potential to be hazardous, a County employee must be trained in Hazard Communication meeting the requirements of CFR 1910.1200. Such employees must be familiar with Safety Data Sheets, including its location. Also, the employee needs to know location of the written program. Refer to the County's Hazard Communication Program.

HEARING CONSERVATION

Employees that have job tasks that may be exposed to 85 decibels at an 8-hour time weighted average that have been determined by the County will be required to be included in the Hearing Conservation Program. Prior to exposure the employee will be trained per CFR 1910.95.

TRENCHING & EXCAVATION SAFETY

All Trenches and Excavations must follow CFR 1926.650-652 and SPS 332.38. All trenching and excavations will be inspected by a competent person. Underground utilities shall be located prior to digging begins. Please refer to the County's Excavation and Trenching Program for more information.

CONFINED SPACE

Only designated, trained employees will be able to work in Permit Required Confined Spaces in accordance with CFR 1910.146 and/or CFR 1926 Subpart AA. For more information refer to the County's Permit Required Confined Space Program.

ELECTRICAL SAFETY

Only designated trained and qualified employees will be allowed to perform work under OSHA 1910 Subpart S, NFPA 70E, and 1910.269.

RESPIRATORY PROTECTION

The County will strive to prevent occupational diseases associated with breathing harmful mists, dusts, fumes, gases, smokes, sprays, or vapors. Feasible engineering controls will be considered to prevent such hazards. If hazards still exist the County will follow CFR 1910.134 and provide proper respiratory equipment, training, inspections, medical evaluations, and fit testing in accordance with the standard.

When respirators are not required, the County may issue dust masks on a voluntary basis if it is not creating additional hazards to employees. Those employees will be required to be trained and/or provided Appendix D from CFR 1910.134.

SNOW & ICE CONTROL

The County will perform snow and ice control as practicably possible to decrease slip, trips, or falls at their workplace.

ERGONOMICS

The County will strive to eliminate or reduce ergonomic hazards in the workplace by providing training, assessments, and other tools and resources. Employees should report job tasks or hazards they identify to their supervisors to review appropriate solutions.

SERVICING TIRES AND RIMS

Those employees that service tires and rims shall be trained on hazards associated with such job tasks prior to servicing.

BLOODBORNE PATHOGEN PROGRAM EXPOSURE CONTROL PLAN

OSHA Bloodborne Pathogens Standard CFR 1910.1030

TABLE OF CONTENTS

DEFINITIONS.....	2
POLICY	3
PROGRAM ADMINISTRATOR.....	3
EMPLOYEE EXPOSURE DETERMINATION.....	4
UNIVERSAL PRECAUTIONS.....	5
EXPOSURE CONTROL PLAN	6
ENGINEERING CONTROLS & WORK PRACTICES.....	6
COMMUNICATION OF HAZARDS (Biohazard Warning Label).....	6
PERSONAL PROTECTIVE EQUIPMENT(PPE).....	7
HOUSEKEEPING	8
LAUNDRY	8
HEPATITIS B VACCINATION	9
POST-EXPOSURE EVALUATION AND FOLLOW-UP.....	9
EMPLOYEE TRAINING	10
TRAINING RECORDS	11
MEDICAL RECORDS	11
OSHA RECORDKEEPING	11
SHARPS INJURY LOG.....	11
HEPATITIS B VACCINE DECLINATION (MANDATORY)	12

DEFINITIONS

Bloodborne Pathogens: Pathogenic microorganisms that are present in human blood and can cause disease in humans. These disease-causing organisms can be found in all bodily fluids, unfixed tissue, cell lines, and in situations where it is difficult or impossible to differentiate between bodily fluids and other materials.

Contamination: The presence of blood or other potentially infectious materials on an item or surface.

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

Decontamination: The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls: Controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure Incident: A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

HBC: Hepatitis C Virus.

HBV: Hepatitis B Virus.

HIV: Human Immunodeficiency Virus.

Occupational Exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Personal Protective Equipment (PPE): is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothing (e.g., uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard is not considered to be personal protective equipment.

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

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

Work Practice Controls: Controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two- handed technique).

POLICY

Chippewa County is committed to providing a safe work environment for all employees. The following exposure control plan has been established to prevent exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

The guidelines set forth in this program are to be adhered to by all management and employees for protection against exposure to bloodborne pathogens. The Exposure Control Plan has been established to assist Chippewa County in meeting compliance with the standard, thereby protecting our employees.

The Program includes:

- Implementation of various methods of exposure control, including:
 - Universal precautions
 - Engineering and work practice controls
 - Personal protective equipment
 - Housekeeping
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Communication of hazards to employees and training Recordkeeping
- Procedures for evaluating circumstances surrounding exposure
- Determination of employee exposure
- Incidents

Implementation methods for these elements of the standard are discussed in the subsequent pages of this Exposure Control Plan.

PROGRAM ADMINISTRATOR

The program administrators are responsible for implementation of the Exposure Control Plan. They will ensure that the Exposure Control Plan is maintained, reviewed, and updated on an annual basis, or whenever necessary to include new or modified tasks and procedures.

The Human Resources Division will be referred to as the "program administrators" and are responsible for the following:

- Employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this Exposure Control Plan.
- Ensure the departments maintain all necessary personal protective equipment (PPE), engineering controls, labels, and red bags as required by the standard. They will ensure that adequate supplies and equipment are available in the appropriate sizes.

- Ensuring that all medical actions required by the standard are performed and that appropriate employee health.
- Ensure that all OSHA records are maintained
- Ensure that training for employees takes place and documented,
- Ensure that the written program is made available to employees and compliance agencies.

EMPLOYEE EXPOSURE DETERMINATION

One of the keys to implementing a successful Exposure Control Plan is to identify exposures that employees may encounter. To facilitate this in our organization, we have prepared the following lists:

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

The program administrators will work to revise and update these lists as our tasks, procedures and classifications change.

JOB CLASSIFICATIONS SHOWING HAZARD DETERMINATION

Listed below are the job classifications in our organization showing potential exposure where employees may be exposed to human blood and other potentially infectious materials which may result in possible exposure to bloodborne pathogens.

Job Title	Department	Job Task involving potential Exposure
Community Health Division Manager	Public Health	Human Health Hazard Investigations, Immunizations
Public Health Director/Health Officer	Public Health	Human Health Hazard Investigations, Immunizations
Environmental Health Specialist	Public Health	Human Health Hazard Investigations
Immunization Nurse	Public Health	Patient Care
RN	Public Health	Patient Care
Nutrition Division Manager	Public Health	Clean Up/Render Care
Nutritionist	Public Health	Clean Up/Render Care
Nutrition Program Assistant	Public Health	Hemoglobin's & Lead Checks
Disease Investigator	Public Health	Human Health Hazard Investigations
Medical Services Screener	Public Health	Body Fluid Exposure
Case Manager	DHS	Collect Urine & Saliva Samples
Dementia Care Specialist	DHS	Body Fluid Exposure
Disability Benefit Specialist	DHS	Body Fluid Exposure
Elder Benefit Specialist	DHS	Body Fluid Exposure
Nutrition Transportation Supervisor	DHS	Body Fluid Exposure
Nutritionist	DHS	Body Fluid Exposure
Program Aid	DHS	Body Fluid Exposure
Site Aid	DHS	Body Fluid Exposure
Option Counselor	DHS	Body Fluid Exposure
Social Worker	DHS	Collect Urine & Saliva Samples
RN	DHS	Handling Sharps
Clinician	DHS	Body Fluid Exposure
Birth to 3 Program Coordinator	DHS	Body Fluid Exposure
Family Interaction Worker	DHS	Body Fluid Exposure
Early Intervention Specialists	DHS	Body Fluid Exposure
CYFS Manager	DHS	Body Fluid Exposure
CYFS Supervisor	DHS	Body Fluid Exposure

Case Manager	Child Support	Genetic Testing
Facilities and Parks Director	Facilities & Parks	Body Fluid Clean Up
Facilities Maintenance Manager	Facilities & Parks	Body Fluid Clean Up
Facilities Maintenance Tech	Facilities & Parks	Body Fluid Clean Up
Custodial Supervisor	Facilities & Parks	Body Fluid Clean Up
Parks Manager	Facilities & Parks	Body Fluid Clean Up, Render Aid
Parks Maintenance Technician	Facilities & Parks	Body Fluid Clean Up, Render Aid
Parks Caretaker	Facilities & Parks	Body Fluid Clean Up
Custodians	Facilities & Parks	Body Fluid Clean Up
Environmental Engineer	Land & Conservation	Body Fluid Exposure
Project Engineer	Land & Conservation	Body Fluid Exposure
Forest Administrator	Land & Conservation	Body Fluid Exposure
Assistant Forest Administrator	Land & Conservation	Body Fluid Exposure
Forest Maintenance Technician	Land & Conservation	Body Fluid Exposure
Engineer Intern	Land & Conservation	Body Fluid Exposure
Land Resources Technician Intern	Land & Conservation	Body Fluid Exposure
Land & Water Resources Technician Intern	Land & Conservation	Body Fluid Exposure
Program Agronomist	Land & Conservation	Body Fluid Exposure
Chief Deputy	Sheriff & Jail	Render Care, Restraint/Dispute
Lieutenant – Jail and Field Services	Sheriff & Jail	Render Care, Restraint/Dispute
Investigator	Sheriff & Jail	Render Care, Restraint/Dispute
Jail Captain	Sheriff & Jail	Render Care, Restraint/Dispute
Transport Officer	Sheriff & Jail	Render Care, Restraint/Dispute
Jail Sergeant	Sheriff & Jail	Render Care, Restraint/Dispute
Jailer I, II	Sheriff & Jail	Render Care, Restraint/Dispute
Reserve Officer	Sheriff & Jail	Render Care, Restraint/Dispute
Recruit Deputy	Sheriff & Jail	Render Care, Restraint/Dispute
Patrol Officer & Patrol Sergeant	Sheriff & Jail	Render Care, Restraint/Dispute
Emergency Management Director	Sheriff & Jail	Render Care/Used Sharps
911 GIS Coordinator	Sheriff & Jail	Render Care/Used Sharps
Sheriff	Sheriff & Jail	Render Care, Restraint/Dispute
County Patrol Superintendent	Highway	Render Care
Operator II – IV, Seasonal	Highway	Render Care
State Patrol Superintendent	Highway	Render Care
Highway Paving & Crushing Superintendent	Highway	Render Care
Project Engineer II	Highway	Render Care
Mechanic I, II	Highway	Render Care
Traffic Control Technician	Highway	Render Care
Bridge Project Manager	Highway	Render Care
Project Manager	Highway	Render Care
Highway Custodian Maintenance Assistant	Highway	Render Care, Body Fluid Clean Up
Coroner	Coroner	Exposure to Body Fluid
Deputy Coroner	Coroner	Exposure to Body Fluid
Recovery Court Case Manager	Criminal Justice Department	Urinalysis, Mouth Swabs
Diversion Specialist	Criminal Justice Department	Urinalysis, Mouth Swabs
CJS Support Professional	Criminal Justice Department	Urinalysis, Mouth Swabs
CJS Specialist	Criminal Justice Department	Urinalysis, Mouth Swabs
CJS Director	Criminal Justice Department	Urinalysis, Mouth Swabs

METHODS OF IMPLEMENTATION AND CONTROL

UNIVERSAL PRECAUTIONS

All employees will utilize universal precautions. See definitions for more details.

EXPOSURE CONTROL PLAN

All employees covered by the bloodborne pathogens standard receive an explanation of this Exposure Control Plan during their initial training session. It will also be reviewed in their annual refresher training. All employees can review this plan at any time during their work shifts by contacting their supervisor or reviewing the plan on the employee portal. At the employee's request we will provide a copy of the Exposure Control Plan within 15 days of the request.

The program administrators will ensure the Exposure Control Plan is reviewed and updated annually or when tasks and procedures occur that will affect occupational exposure. If a new position is created or changes to an existing position occur, the Exposure Control Plan will be updated to reflect those addition/changes.

ENGINEERING CONTROLS & WORK PRACTICES

Engineering and work practice controls will be used to eliminate or minimize employee exposure. Engineering controls will be examined and maintained or replaced to ensure their effectiveness. Personal protective equipment will also be used if there is exposure potential.

Chippewa County will provide readily accessible hand washing facilities for employees use. When hand washing facilities are not possible, appropriate antiseptic hand cleanser or antiseptic towelettes will be provided. Employees will be trained to wash their hands with soap and running water as soon as possible after any exposures or after removing personal protective equipment.

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

Food and drink will not be kept in refrigerators, freezers, shelves, cabinets or on countertops or bench tops where blood or other potentially infectious materials are present.

Equipment which may become contaminated with blood or other potentially infectious materials will be decontaminated prior to servicing or shipping.

COMMUNICATION OF HAZARDS (Biohazard Warning Label)

Biohazard warning labels (like the one pictured below) will be affixed to containers of blood or regulated waste, or other potentially infectious material. Biohazard labels will be fluorescent orange or orange-red with lettering and symbols in a contrasting color. These labels will be affixed as close as feasible to the container to prevent their loss or unintentional removal.



PERSONAL PROTECTIVE EQUIPMENT(PPE)

Personal protective equipment is to be used when engineering controls are unable to take away the hazards associated with bloodborne pathogens. Because of this, our organization provides (at no cost to our employees) the Personal Protective Equipment that they need to protect themselves against such exposure. This equipment may include, but is not limited to:

- Gloves
- Gowns
- Face Shields/Masks
- Safety Glasses
- Goggles
- Mouthpieces
- Pocket Masks
- Hoods
- Shoe Covers

Hypoallergenic gloves, glove liners and similar alternatives will be made available to employees who are allergic to the gloves our organization normally provides.

The administrators and/or the departments must assess and determine the appropriate personal protective equipment (PPE), ensure that personal protective equipment is provided and worn by employees as needed, and that training in the proper wearing and use of such equipment is provided.

To ensure that personal protective equipment has not been contaminated and is in good condition to protect employees from potential exposure, our organization adheres to the following practices:

- All personal protective equipment is inspected periodically and repaired or replaced as needed to maintain its effectiveness.
- Reusable personal protective equipment is cleaned and decontaminated as needed.
- Single-use contaminated personal protective equipment (or equipment that cannot, for whatever reason, be decontaminated) is disposed of as bio hazardous waste.

To make sure that this equipment is used as effectively as possible, our employees adhere to the following practices when using their personal protective equipment:

- Any garments penetrated by blood or other infectious materials are removed immediately, or as soon as feasibly possible.
- All personal protective equipment is removed prior to leaving the work area.
- Gloves are worn in the following circumstances:
 - Whenever employees anticipate hand contact with potentially infectious materials.
 - When performing vascular access procedures.
 - When handling or touching contaminated items or surfaces.
- Disposable gloves are replaced as soon as practical after contamination or if they are torn, punctured, or otherwise lose their ability to function as an exposure barrier.
- PPE is decontaminated for reuse unless they are cracked, peeling, torn or exhibit other signs of deterioration, at which time they are disposed of.
- Masks and eye protection (such as goggles, face shields, etc.) are used whenever splashes or sprays may generate droplets of infectious material.
- Protective clothing (such as lab coats, gowns and/or aprons) should be worn whenever potential exposure to the body is anticipated.

HOUSEKEEPING

Chippewa County will ensure that the worksite is maintained in a clean and sanitary condition. The administrators and/or departments will determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, type of surface to be cleaned, type of contaminant, and tasks or procedures being performed in the area.

- All contaminated equipment and work surfaces will be decontaminated immediately or as soon as feasible with an appropriate disinfectant after completion of procedures and at the end of the work shift if the surface may have become contaminated since the last cleaning.
- Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces will be removed and replaced when they become contaminated.

All bins, pails, cans, and similar receptacles intended for reuse will be decontaminated immediately if they are contaminated with blood or other potentially infectious materials. Broken glassware which may be contaminated will not be picked up directly with the hands. Mechanical means, such as a brush and dust pan, tongs, or forceps will be utilized for cleaning.

LAUNDRY

In the event contaminated laundry will be handled the following protocols shall be followed:

- It shall be handled as little as possible while being placed in biohazard labeled transport bags or containers.
- Contaminated laundry will not be sorted or rinsed in the location of use.

- Wet contaminated laundry will be placed in appropriate leak proof bags or containers.
- Chippewa County will ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

If uniforms or floor mats are contaminated the administrators will contact the Facility's Department to inform them of potentially contaminated materials and arrange for pickup instructions.

HEPATITIS B VACCINATION

The program administrators will provide training to employees on Hepatitis B vaccinations, addressing safety, benefits, efficacy, methods of administration, and availability.

The Hepatitis B vaccination series is available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of this plan. Vaccination is encouraged unless: 1) documentation exists that the employee has previously received the series; 2) antibody testing reveals that the employee is immune; or 3) medical evaluation shows that vaccination is contraindicated.

However, if an employee declines the vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept with Human Resources or their designee.

Vaccination can be provided by the County Public Health Department or area Hospital.

Following the medical evaluation, a copy of the health care professional's written opinion will be obtained and provided to the employee within 15 days of the completion of the evaluation. It will be limited to whether the employee requires the hepatitis vaccine and whether the vaccine was administered.

POST-EXPOSURE EVALUATION AND FOLLOW-UP

After an exposure incident, Chippewa County will provide the exposed employee with a confidential medical evaluation and follow-up. The exposed employee will be asked to document the route of exposure, the circumstances under which the exposure incident occurred, and asked for the identification of the source individual. The source individual's blood will be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity.

If consent is not obtained, Chippewa County will 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, will be tested and the results documented. 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.

Results of the source individual's testing will be made available to the exposed employee, and the employee will be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service will be provided. Medical counseling and evaluations of reported illnesses will be available.

Chippewa County will ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided with:

- A copy of the Bloodborne Pathogen regulation
- A description of the exposed employee's duties as they relate to the exposure incident
- Documentation of the route(s) of exposure
- The circumstances under which exposure occurred.

If available, the results of the source individual's blood testing and all medical records relevant to the appropriate treatment of the employee, including vaccination status, will be provided.

Chippewa County will 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 Hepatitis B vaccination will be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination. All other findings or diagnoses will remain confidential and will not be included in the written report.

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

- Results of the evaluation
- Any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

EMPLOYEE TRAINING

All at risk employees shall participate in a training program. Training will occur before assignment to a task where occupational exposure may take place and at least annually thereafter. Additional training will be provided when changes such as modification of tasks or procedures affect the employee's occupational exposure. Any employee who is exposed to infectious materials shall receive training, even if the employee was allowed to receive the HBV vaccine after exposure.

The training program will include at least the following elements:

- An accessible copy of the regulatory text of 29 CFR 1910.1030 and an explanation of its contents.
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of the modes of transmission of bloodborne pathogens.
- An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood or other potentially infectious materials.
- An explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices, and personal protective equipment.
- Information on the types, proper use, location, removal, handling, decontamination, and disposal of

- personal protective equipment.
- An explanation of the basis for selection of personal protective equipment.

TRAINING RECORDS

Training records shall be maintained in Chippewa County and shall include the following information:

- dates of training sessions
- contents or summary of the training sessions
- names and qualifications of persons conducting the training
- names and job titles of all persons attending the training sessions

Training records shall be maintained for three years from the date on which the training occurred. Training records shall be provided on request for examination and copying to employees and to employee representatives.

MEDICAL RECORDS

Medical records are maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records."

The Human Resources Division is responsible for maintenance of the required medical records. These confidential records are kept with Human Resources access for at least the duration of employment plus 30 years.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to the Human Resources Division.

OSHA RECORDKEEPING

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 *CFR* 1904). This determination and the recording activities are done by the Human Resources Division.

SHARPS INJURY LOG

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in a Sharps Injury Log. All incidences must include at least:

- date of the injury
- type and brand of the device involved (syringe, suture needle)
- department or work area where the incident occurred
- explanation of how the incident occurred

This log is reviewed as part of the annual program evaluation and maintained for at least five years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

HEPATITIS B VACCINE DECLINATION (MANDATORY)

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

PRINT: (Employee Name) _____

SIGNATURE: (Employee Name) _____ Date: _____

CONFINED SPACE PROGRAM

OSHA Permit Required Confined Space Standard (29 CFR 1910.146) (29 CFR 1926.1204)

TABLE OF CONTENTS

DEFINITIONS	2
POLICY	5
EVALUATION OF PERMIT REQUIRED CONFINED SPACES	6
PERMIT SPACE UNAUTHORIZED ENTRY PREVENTION	6
PERMISSIBLE ENTRY CONDITIONS	6
BARRICADING SPACES	6
ISOLATION & CONTROLLING HAZARDOUS ENERGY	6
ATMOSPHERIC CONTROLS.....	7
VERIFICATION OF CONTROLS.....	7
PERMIT REQUIRED CONFINED SPACE OPERATIONS.....	7
CONCLUDING PERMIT-REQUIRED CONFINED SPACE OPERATIONS	8
PERSONAL PROTECTIVE EQUIPMENT (PPE).....	9
CONFINED SPACE EQUIPMENT	9
ENTRY SUPERVISORS	9
AUTHORIZED ENTRANTS.....	10
ATTENDANT	11
RESCUE TEAM	12
NOTIFICATION OF RESCUE SERVICES.....	12
CONTRACTOR.....	12
TRAINING	13
CONFINED SPACE INVENTORY	15
CONFINED SPACE ASSESSMENT.....	16
CONFINED SPACE ENTRY PERMIT	17

DEFINITIONS

Acceptable entry conditions - means the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Attendant - means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

Authorized entrant - means an employee who is authorized by the employer to enter a permit space.

Blanking or blinding - means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

Confined space - means a space that: (1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and (2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and (3) Is not designed for continuous employee occupancy.

Double block and bleed - means the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Emergency - means any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

Engulfment - means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Entry - means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry permit - means the written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in paragraph (f) of this section.

Entry supervisor - means the person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

NOTE: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

Hazardous atmosphere - means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

- Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
- Airborne combustible dust at a concentration that meets or exceeds its LFL;
- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
- Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, of this Part and which could result in employee exposure in excess of its dose or permissible exposure limit;
- Any other atmospheric condition that is immediately dangerous to life or health.

NOTE: For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, section 1910.1200 of this Part, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Hot work permit - means the employer's written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

Immediately dangerous to life or health (IDLH) - means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

NOTE: Some materials -- hydrogen fluoride gas and cadmium vapor, for example -- may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Inerting - means the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

NOTE: This procedure produces an IDLH oxygen-deficient atmosphere.

Isolation - means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

Line breaking - means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Non-permit confined space - means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Oxygen deficient atmosphere - means an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere - means an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required confined space (permit space) - means a confined space that has one or more of the following characteristics:

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

Permit-required confined space program (permit space program) - means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

Permit system - means the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

Prohibited condition - means any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

Rescue service - means the personnel designated to rescue employees from permit spaces.

Retrieval system - means the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Testing - means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

NOTE: Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

POLICY

Chippewa County is committed to providing a safe work environment for all employees. The following Confined Space Program has been established to prevent incidents while working in or around Confined Spaces in accordance with OSHA standard 29 *CFR* 1910.147 and OSHA standard 29 *CFR* 1926.1204.

The guidelines set forth in this program are to be adhered to by all management and employees for protection against incident while working around Confined Spaces. The Confined Space Program has been established to assist Chippewa County in meeting compliance with the standard, thereby protecting our employees.

The Program includes:

- Evaluation of Permit Required Confined Spaces
- Unauthorized Entry Prevention
- Permissible Entry Conditions
- Barricading Spaces
- Isolating and Controlling Hazardous Energy
- Atmospheric Controls
- Verification of Controls
- Permit Required Confined Space Operations
- PPE & Equipment
- Roles and Responsibilities
- Rescue Procedures
- Contractors
- Confined Space Forms

PROGRAM ADMINISTRATOR

The Program Administrator or Designee is responsible for implementation of the Confined Space Program. The Program Administrator or Designee will maintain, review, and update the Confined Space Program whenever necessary to include new or modified tasks and procedures, and or regulations.

The Human Resources Department is designated as the Program Administrator.

Additional Responsibilities include:

- Provide Permits and enforce compliance with permit required confined space entry
- Use canceled permits to review effectiveness of procedures and program
- Ensure training is being conducted prior to entry and update as this program requires

EVALUATION OF PERMIT REQUIRED CONFINED SPACES

Chippewa County has conducted a survey of this facility and determined that the following locations are permit required confined spaces. The employer performed an analysis to determine the hazards, entry procedures, protective equipment required, rescue and emergency services necessary.

Entry supervisors will review the analysis for the location for which they are to issue a permit. A template used to inventory applicable spaces will be provided of the County's Confined Spaces in this program. The departments shall maintain their space inventory.

PERMIT SPACE UNAUTHORIZED ENTRY PREVENTION

Chippewa County has taken administrative measures to prevent unauthorized entries. These measures may include the use of signs, barriers, covers, guardrails, fences, and locks.

Entry Supervisors will remove unauthorized individuals who enter or attempt to enter the permit required confined spaces.

Attendants will advise unauthorized persons that they must exit immediately if they have entered the permit required confined space. Attendants will also inform authorized entrants and the entry supervisor if unauthorized persons have entered the confined space.

It is the responsibility of the individual(s) entering a permit required confined space to be sure they have been issued a confined space entry permit. Entering a permit required confined space without a permit or required training is an unauthorized entry.

PERMISSIBLE ENTRY CONDITIONS

The entry supervisor shall test permit required confined spaces for acceptable entry conditions prior to entry and during entry. Permissible Entry Conditions include, but are not limited to, acceptable Barriers, Isolation, Hazardous Energy Control, Atmospheric Controls, and verification that controls are effective.

BARRICADING SPACES

The entry supervisor will provide (if applicable) barriers around the permit space opening:

- preventing unauthorized entry into the space
- protecting authorized entrants inside the space from objects and persons outside the space

ISOLATION & CONTROLLING HAZARDOUS ENERGY

The entry supervisor shall confirm the isolation of the permit-required confined space from serious hazards. Mechanical equipment in the space must be "locked out" in accordance with Chippewa County's Hazardous Energy Control Program and/or CFR 1910.147.

Chemical or gas lines that are open within the permit space must be isolated by appropriate means. These include blanking, misaligning or removing sections of lines, pipes, or ducts, or a double block and bleed system.

ATMOSPHERIC CONTROLS

The entry supervisor will assure acceptable purging, inerting, flushing, or ventilation of the space before authorized entrants enter a permit-required confined space. This is accomplished by ventilating the atmosphere, after purging, if the space is a flammable liquid container or if purging is otherwise necessary, before an authorized entrant enters the space.

Inerting is the displacement of the atmosphere in a permit space by a noncombustible gas to such an extent that the resulting atmosphere is noncombustible. This procedure produces an IDLH oxygen-deficient atmosphere. The entry supervisor must ensure proper respiratory protection is provided to the authorized entrant before entering the permit space if using this procedure.

Permissible atmospheric conditions prior to entering a confined space are:

- more than 19.5%, but less than 23.5% oxygen, and
- less than 10% of the Lower Flammable Limit (LFL) of a flammable liquid or gas, and
- not to exceed the Permissible Exposure Level (PEL) of a toxic chemical.

The entry supervisor will evaluate permit-required confined space conditions when entry operations take place. The entry supervisor will ensure to:

- Test conditions in the permit space to determine if acceptable entry conditions exist before entry is authorized.
- Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during the course of entry operations.
- When testing for atmospheric hazards, test for oxygen first, then flammables (LFL), and then for toxic substances (PEL).

VERIFICATION OF CONTROLS

The entry supervisor will confirm that conditions in the permit space are acceptable for entry before and throughout the duration of entry operations. To accomplish this, the supervisor will use properly calibrated testing instruments to monitor the atmosphere within the space and make inspections to assure that isolation is being maintained for the space.

PERMIT REQUIRED CONFINED SPACE OPERATIONS

Before entry begins, the entry supervisor identified on the permit shall sign the entry permit to authorize entry after he or she verifies controls are in place for safe entry.

The permit will be made available to all authorized entrants by posting it at the confined space opening or by equally effective means. This enables entrants to confirm the pre-entry preparations are complete.

The duration of the permit may not exceed the time required to complete the task or job identified on the permit in accordance with the purpose of the entry. The duration of the permit cannot exceed one shift. If the job requires two shifts for completion, then two permits, at least, are necessary.

The entry supervisor should terminate entry and cancel the permit when any of the following conditions arise:

- The entry operations defined in the permit are complete
- A condition outside the scope of the permit arises in or near the permit space

Any individual designated as the entry supervisor has the authority to terminate entry and cancel a permit

The entry supervisor will provide at least one attendant outside the permit space into which entry is authorized for the duration of entry operations. An entry supervisor who receives adequate training may serve as the attendant.

Additional Operations per SPS 332:

- A confined space with an atmosphere that has a combustible gas content of 10% or more of the lower explosive limit may not be entered even if a breathing apparatus or respirator is used.
- Smoking and open flames may not be allowed within 10 feet of a confined space.
- Work at confined spaces which are in streets shall be performed in accordance with the following:
 - A vehicle's beacon and 4-way flashers shall be activated upon approach to an entrance of a confined space.
 - A vehicle shall be parked to permit traffic to flow in an unobstructed manner and, where possible, to provide protection for the employees.
 - A vehicle shall be parked so vehicle exhaust cannot accumulate in the confined space. If this is not possible, the vehicle's exhaust pipe shall be extended away from the confined space.

CONCLUDING PERMIT-REQUIRED CONFINED SPACE OPERATIONS

The entry supervisor must perform four major tasks to conclude a permit-required confined space entry:

- Make sure that all employees are out of the confined space
- Secure the permit-required confined space and assure that the appropriate employees remove all lockout devices, replace any safety guards that they may have removed, and will assure that the opening to the space is securely closed
- Assure that the appropriate personnel perform the proper maintenance on equipment
- Notifying rescue and emergency services that the entry is complete

Chippewa County shall retain each canceled entry permit for at least one year to facilitate the review of the permit-required confined space entry program. The entry supervisor should note any problems encountered during an entry operation on the appropriate permit so that revisions to the permit space program can be made.

Chippewa County will review procedures used when an unexpected hazard has arisen and will mitigate any deficiencies in procedure before authorizing subsequent entries.

The Confined Space Entry Permit shall be filled out to its entirety. An Entry Permit can be found on page 17 of this Program.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Chippewa County will provide any personal protective equipment (PPE) necessary for safe entry into and rescue from permit-required confined spaces at no cost to employees. The employer will maintain that equipment properly and ensure proper usage.

CONFINED SPACE EQUIPMENT

Confined space equipment may include the following based on space.

- Air Monitoring & Testing Equipment
- Communication Equipment (when necessary)
- Proper Lighting (when necessary)
- Barriers or Shields (when necessary)
- Access & Egress Equipment
- Rescue & Emergency Equipment
- PPE
- Other

ENTRY SUPERVISORS

Only the entry supervisor may issue permit-required confined space entry permits. The entry supervisor has had training in permit-required confined space entry procedures. The training includes:

- Hazard recognition
- Recognition of the physical signs and symptoms of exposure to a hazard, understanding the consequences of exposure to a hazard
- Communication requirements
- Personal protective equipment requirements
- Written permit-required confined space information
- Rescue procedures
- Use of appropriate air testing equipment
- Details of the confined space program
- Confined space controls and verification procedures

ENTRY SUPERVISOR RESPONSIBILITIES

- Know the hazards (or potential hazards) that workers may face during entry, including information on the mode, signs and symptoms, and consequences of the exposure(s) to the entrants.
- Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit are in place before endorsing the permit and allowing entry to begin.
- Terminates the entry and cancels the permit as required.
- Verifies that rescue services are available (during entry operations) and that the attendant has a means of communications available for calling rescue services.
- Removes unauthorized individuals who enter or attempt to enter the permit space during entry operations
- Determines whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained.

AUTHORIZED ENTRANTS

Only those individuals who received training in permit-required confined space entry and stand-by procedures may enter confined spaces. Authorized entrants will receive training in:

- Recognizing and understanding the hazards that they may face during entry operations
- Recognizing the physical signs and symptoms of exposure to a hazard(s) and understanding the consequences of exposure to a hazard(s)
- Communication requirements for confined space entry operations
- Procedures for notifying the attendant when the entrant(s) initiate the evacuation of a permit space
- The use of PPE, such as retrieval lines, body harness, respirators/SCBA, and protective clothing needed for safe work operations, entry, and exit
- Verifying that the atmosphere of a confined space is tested before entering the space after an any absence of space
- The external barriers required to protect entrants from external hazards and the proper use of those barriers
- Evacuating a confined space when ordered by the attendant, entry supervisor, or another entrant
- Evacuating a confined space when an alarm is activated
- Evacuating a confined space when entrants perceive that they may be in danger
- Evacuating a confined space when atmospheric monitoring equipment alarms

AUTHORIZED ENTRANT RESPONSIBILITIES

- Knowing the hazards (or potential hazards) that they may be faced during entry, including the mode, signs or symptoms, and consequences of the exposure(s)
- Properly using all equipment

- Communicating with the attendant as necessary to enable the attendant to monitor entrant status and enable the attendant to alert entrants of the need to evacuate the space as required
- Alerting the attendant whenever entrant recognizes any warning sign or symptom of exposure to a dangerous situation; or the entrant detects a prohibited condition
- Immediately exiting from the space as quickly as possible whenever the attendant, the entry supervisor, or another entrant gives an order to evacuate
- Immediately exiting the space when the entrant recognizes any physical warning sign or symptom of exposure to a dangerous condition (that is, the entrant feels better or worse than before he or she did before entering the confined space), the entrant detects a prohibited condition, an evacuation alarm goes off; or the atmospheric monitoring equipment alarms

ATTENDANT

The attendant is aware of the hazards of the permit-required confined space, of the actions necessary to make the space safe for entry, and any condition can change. Attendants have received training in:

- The duties of the attendant: this includes the requirement that the attendant must be stationed and remain outside the permit space at all times during entry operations (unless another attendant relieves him or her)
- The need to continuously maintain an accurate count of all persons in the space
- Knowing and recognizing potential hazards and the symptoms of exposure to a hazard
- Monitoring activities inside and outside the permit space to determine if it is safe for entrants to remain in the space
- The need to maintain effective and continuous communication with the entrants
- Summoning rescue services
- Entry permits.

ATTENDANT RESPONSIBILITIES:

- Knowing the hazards (or potential hazards) that workers may face during entry
- Knowing what the physical signs or symptoms and consequences of the exposure(s) are
- Being aware of possible behavioral effects of hazard exposure to authorized entrants
- Maintaining an accurate count of authorized entrants in the permit space and assuring that the means used to identify authorized entrants accurately identifies who is in the permit space
- Remaining outside the permit space during entry operations unless another trained attendant relieves him or her
- Communicating with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space
- Monitoring activities inside and outside the permit space to determine if it is safe for entrants to remain in the space
- Ordering the entrants to evacuate the permit space immediately if the attendant:
 - detects a prohibited condition such as an alarm on the air monitor,
 - detects the behavioral effects of hazard exposure in an entrant,
 - detects a situation outside the space that could endanger the entrants,
 - the entry supervisor orders an evacuation, or
 - cannot effectively and safely perform all the duties required.

- Summoning rescue and other emergency services as soon as the attendant determines that the entrants may need help to exit from the permit space.
- Taking the following actions when an unauthorized person(s) approach or enter a permit space while entry operations are underway:
 - Warn the unauthorized person(s) that they should stay away from the permit space
 - Advise the unauthorized person(s) that they must exit immediately if they have entered the permit space
 - Inform the authorized entrants and the entry supervisor if unauthorized person(s) have entered the permit space.

In addition, attendants can perform non-entry rescues if they have received proper training, however, will not perform any duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

RESCUE TEAM

Chippewa County will ensure a trained rescue team is present or on standby during Chippewa County's permit-required confined space operations.

In the event Chippewa County decides to perform their own rescue service they will identify and train employees on rescue or provide and third-party emergency services team. Rescue team members will receive training in:

- personal protective equipment, including respirators and rescue equipment necessary for making rescues from the permit spaces in our facility,
- assigned rescue functions,
- authorized entrant training,
- making confined space rescues at least once every 12 months using mannequins or personnel through representative openings and portals whose size, configuration, and accessibility closely approximate those of the permit spaces from which rescues may be required at the site
- basic first aid & CPR

Chippewa County will only perform non-entry rescues unless they receive the training necessary to go beyond. Personnel required to perform non-entry rescue will be onsite.

NOTIFICATION OF RESCUE SERVICES

The Entry Supervisor will establish a procedure by which the attendant will notify rescue and emergency services before issuing a permit-required confined space permit. This must be pre-planned in the event a rescue is activated and is discussed during the permit process.

CONTRACTOR

When Chippewa County arranges to have employees of another employer perform work that involves permit space entry, the responsibilities of the County include:

- Informing the contractor that the workplace contains permit-required confined spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements CFR 1910.146 and/or DSDS Standards
- Informing the contractor of the elements, including the hazards identified and the County's experience with the space (copies of canceled permits or assessments), that make the space in question a permit space. The Contractor is also required to perform their own assessment.
- Informing the contractor of any precautions or procedures that the County has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
- Coordinate entry operations with the contractor if County employees and contracted employees will be working in or near permit spaces. This includes developing and implementing procedures to coordinate entry operations when employees of more than one contractor are working simultaneously as authorized entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer.
- Debriefing the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in the permit spaces during entry operations.

CONTRACTOR'S RESPONSIBILITIES

In addition to complying with the permit-required confined space requirements that apply to all employers, each contractor whom the County retains to perform permit space entry operations should:

- Obtain any available information regarding permit space hazards and entry operations from Chippewa County
- Coordinate entry operations with the County when both the County employees and contractor employees will be working in or near permit-required confined spaces. This includes developing and implementing procedures to coordinate entry operations when employees of more than one employer are working simultaneously as authorized entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer.
- Inform the County of the permit space program that the contractor will follow and any hazards confronted or created in a permit space, either through a debriefing or during entry operations.

TRAINING

Chippewa County will provide training to each employee whose work is affected by this program, at no cost to the employee, and ensure that the employee possesses the understanding, proficiency, knowledge, and skills necessary for the safe performance of the duties assigned under this standard.

Training will be provided upon assignment to and when there is a change of a position assignment where the employee may serve as Entry Supervisor, Entrant, or Attendant. Additional training shall be provided when there has been a change in the procedures referenced in this program, whenever there is a change in the permit spaces entry operations that presents a hazard an employee has not been previously trained and whenever there is evidence of a deviation from the permit space entry

procedures of this standard or there are inadequacies in the employee's knowledge of use of these procedures.

All Entry Supervisors, Entrants and Attendants receive the same training. Training must address the following:

- What makes a permit required confine space;
- Understanding of the hazards of permit space and the methods used to isolate, control or in other ways protect employees from these hazards;
- Countermeasures for controlling the hazards identified;
- Review of the applicable OSHA standards;
- Review procedures for confined space entries established in this Program;
- Dangers of attempting a rescue if not an authorized entrant;
- Procedures for evacuating spaces during entries, rescue, and retrieval

CONFINED SPACE INVENTORY

#	SPACE DESCRIPTION	LOCATION	PERMIT REQUIRED	UPDATED
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

<div> <div>CONFINED SPACE ASSESSMENT</div> </div>			
SPACE NUMBER	SPACE LOCATION	SPACE DESCRIPTION	DATE
Fits Definition of Confined Space? <input type="checkbox"/>		Fits Definition of Permit Required Permit Required Confined Space? <input type="checkbox"/> <i>(Must Contain at least one of the following Conditions Below)</i>	
(✓) Large enough and so an employee can bodily enter and perform assigned work (✓) Limited or restricted means for entry or exit (✓) Not designed for continuous employee occupancy.		<input type="checkbox"/> Contains Potential for Hazardous Atmosphere <input type="checkbox"/> Contains Material with Potential to Engulf an Entrant <input type="checkbox"/> Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section <input type="checkbox"/> Contains any Other Recognized Hazard	
POTENTIAL HAZARDS	EQUIPMENT NESSESARY	RESCUE	PROCEDURES NESSESARY
<input type="checkbox"/> Hazardous Atmosphere <input type="checkbox"/> Engulfing Substance <input type="checkbox"/> Converging Walls <input type="checkbox"/> Toxic Materials <input type="checkbox"/> Mechanical <input type="checkbox"/> Electrical <input type="checkbox"/> Visibility/Lighting <input type="checkbox"/> Heat/Cold <input type="checkbox"/> Slips/Falls <input type="checkbox"/> Radiation <input type="checkbox"/> Noise <input type="checkbox"/> Slippery/Wet <input type="checkbox"/> Other <input type="checkbox"/> Other	<input type="checkbox"/> Monitoring/Testing Equipment <input type="checkbox"/> Ventilation Equipment <input type="checkbox"/> Tripod/David Arm <input type="checkbox"/> Harness/Fall Protection <input type="checkbox"/> Respiratory Equipment <input type="checkbox"/> Lighting Equipment <input type="checkbox"/> Ladders <input type="checkbox"/> Hard Hat <input type="checkbox"/> Safety Glass/Goggles <input type="checkbox"/> Protective Gloves <input type="checkbox"/> Protective Suit <input type="checkbox"/> Explosion Proof Tools/Equipment <input type="checkbox"/> Other <input type="checkbox"/> Other	<input type="checkbox"/> Retrieval System <input type="checkbox"/> Rescue Onsite <input type="checkbox"/> Rescue on Standby <input type="checkbox"/> Communication Devices <input type="checkbox"/> Resuscitation Equipment <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other	<input type="checkbox"/> Pre-Entry Briefing <input type="checkbox"/> Test/Monitor Atmosphere <input type="checkbox"/> Ventilate <input type="checkbox"/> Lockout Tagout <input type="checkbox"/> Review Safety Data Sheets <input type="checkbox"/> Hot Work Permit <input type="checkbox"/> Clean/Purge <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other

CONFINED SPACE ENTRY PERMIT

This Permit is only issued by an Entry Supervisor and will be displayed at each entry point of space

Permit Requester:	Date of Issuance:	Time:	
Space Name/Number:	Purpose of Entry:		
Name(s) of Authorized Entrants			
Name(s) of Authorized Attendants			
Expiration Date:	Expiration Time:		
SAFETY VERIFICATION			
<i>SAFETY CHECKS</i>	YES	NO	N/A
Is Hazardous Energy Locked Out and Dissipated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Access Clear and/or Barricaded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Acceptable Air Quality Verified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Space Adequately Ventilated? (Natural) or (Mechanical)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a Designated Attendant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Hot Work Permit Filled Out? (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do Employees have Proper Personal Protective Equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a Rescue System Available and in Place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have Arrangements been made for Stand by Rescue?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a Safety Briefing been Conducted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ATMOSPHERIC MONITORING EQUIPMENT			
Make/Model:	Serial #:		
<i>MONITORING SAFETY CHECKS</i>		YES	NO
Bump Test Performed and Passed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annual Calibration Current?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ADDITIONAL COMMENTS			

ATMOSPHERIC TESTING RESULTS					
ACCEPTABLE AIR QUALITY					
Oxygen – 19.5% to 23.5% LFL – Less than 10% CO – Less than 35 PPM H2S – Less than 25 PPM					
		(20.9)	(0)	(0)	(0)[-p3
	TIME	% O2	%LEL	CO (PPM)	H2S (PPM)
	INITIAL				
	15 minutes				
	30 minutes				
	30 minutes				
	30 minutes				
	30 minutes				
	30 minutes				
	30 minutes				
	30 minutes				
	30 minutes				

EMERGENCY RESCUE PLAN
RESCUE SERVICES MUST BE AVAILABLE FOR SPACE. NON-ENTRY RESCUE EQUIPMENT MUST BE IN PLACE IN WORKING CONDITIONS PRIOR TO ENTRY. IF ENTRY RESCUE IS REQUIRED THE WRITTEN PROGRAM ENTRY PROCEDURES MUST BE ACTIVATED.

PERMIT APPROVAL
<i>I certify that I have reviewed the permit, understand the hazards that are or may be present, and have verified that the appropriate controls have been implemented. I understand the procedures necessary to ensure safe entry. No entry can be initiated until this permit is completed and signed by all Entrants, Attendants and the Entry Supervisor.</i>

ENTRY SUPERVISOR SIGNATURE: _____ DATE: _____

AUTHORIZED ENTRANTS SIGNATURE: _____ DATE: _____

AUTHORIZED ENTRANTS SIGNATURE: _____ DATE: _____

AUTHORIZED ENTRANTS SIGNATURE: _____ DATE: _____

AUTHORIZED ATTENDANT SIGNATURE: _____ DATE: _____

PERMIT CLOSED/CANCELED AT: _____ (TIME) ON THIS DATE _____

PERMIT CLOSED/CANCELED BY: _____

EMERGENCY ACTION PLAN

Emergency Action Plans (29 CFR 1910.38)

TABLE OF CONTENTS

POLICY.....	1
PROGRAM ADMINISTRATOR.....	2
MEDICAL EMERGENCY.....	2
FIRE EMERGENCY	2
SEVERE WEATHER	3
CHEMICAL SPILLS.....	4
WORKING FROM HEIGHTS	4
BOMB THREATS.....	4
ACTIVE SHOOTER.....	5
EMPLOYEE TRAINING.....	6
TRAINING RECORDS.....	6

POLICY

Chippewa County is committed to providing a safe work environment for all employees. The following emergency action plan has been established to prevent incidents during emergency events in accordance with OSHA standard 29 *CFR* 1910.38, "Emergency Action Plans."

The guidelines set forth in this program are to be adhered to by all management and employees for their protection during emergency events. The Emergency Action Plan has been established to assist Chippewa County in meeting compliance with the standard, thereby protecting our employees.

The Program includes information on the following types of Emergency Situations:

- Medical
- Fire
- Severe Weather
- Chemical Spills
- Working from Heights

- External/Internal Threats

PROGRAM ADMINISTRATOR

The program administrators are responsible for implementation of the Emergency Action Plan. They will ensure the plan will be maintained, reviewed, and updated on an annual basis, or whenever necessary to include new or modified tasks and procedures.

The Human Resources Division and their designees will be referred to as the program administrators.

MEDICAL EMERGENCY

In the event of a medical emergency call 911 and be prepared to provide the following information:

- Nature of medical emergency
- Location of Emergency (address, building, room, etc.)
- Remain on the line as directed by Dispatch

If providing care to the level of your training ensure the following are considered after calling 911:

- Ensure the scene is safe prior to entering the area
- Do not move victim unless necessary
- Perform assistance to level of your training
- Keep bystanders as clear as possible

FIRE EMERGENCY

If a fire is discovered in your area perform the following:

- Activate the alarm system or verbally yell "Fire"
- Exit the area or building

Upon hearing an Evacuation or Fire Alarm you should:

- Leave the building or area using the designated escape routes
- Assemble in your designated areas for head counts (unless otherwise advised)
- Only re-enter areas when a Designated Official says it is safe

During a Fire Event Department Supervisors or their designees should:

- Be prepared to provide fire department facility information
- Coordinate orderly evacuation and head counts
- Locate missing personnel
- Assemble in your designated areas

- Only re-enter areas when a Designated Official says it is safe

Only fight fires if:

- The fire is small and not spreading to other areas
- The fire is not near flammable materials
- The fire does not endanger your life or endangers your escape route
- You have been designated and receive annual training on portable fire extinguishers

Designated Meeting Areas	
Building	Location
Courthouse – 711 N Bridge St.	Cedar Street Parking Lot, Parking lot behind Olsen's Ice Cream, West Side Bridge Parking Lot
Cornell Parks & Highway	End of Driveway by Highway K
Shooting Range Training Facility	Range Safety Officer Hut
Chippewa Highway	Grand Ave City Park
Boyd Highway	Driveway Entrance next to Clark Street
Bloomer Highway	Driveway Entrance next to 200 th Street
Otter Lake Park	Park Entrance next to Park Sign
Round Lake Park	Large Parking Lot near Shelter
Pine Point Park	Pine Point Entrance next to park sign
Morris Erickson Park	Boat Landing Parking Lot

SEVERE WEATHER

Department supervisors should monitor the weather when coordinating and scheduling projects. If there is potential for inclement weather near work buildings or work locations it should be communicated via meeting, phone, or radio.

If a tornado or other life-threatening weather is in or by the work area Department Supervisors or their designees shall seek shelter and contact all staff informing them to seek shelter until its communicated that the weather has passed.

Upon hearing to take shelter an employee will:

- Get to shelter as safely and quickly as possible
- Stay away from doors, windows, unsecured objects and exterior walls
- Stay in the shelter until they have been given the ok to continue working

If caught outdoors by a sudden unforeseen inclement weather event consider:

- Getting to the nearest shelter or safe structure to protect you
- Lay in the lowest lying area such as a ditch away from powerlines or any other overhead obstruction face down protecting your head and body.
- Avoiding staying in vehicles that could be picked up by tornado

The County has the following locations that can be accessed if needed during a severe weather event.

Severe Weather Shelters	
Building	Room Location
Courthouse	Lowest Level away from windows
Cornell Parks & Highway	Bathrooms
Chippewa Highway Department	Lower Level Superintendents Hallway
Boyd Highway	Bathrooms
Bloomer Highway	Bathrooms

CHEMICAL SPILLS

If while working for Chippewa County you see a large chemical spill that could endanger lives or equipment consider the following response:

- Get to a safe location and call 911
- Secure the area (if safe to do so) and alert any other site personnel
- Do not attempt to clean up spills unless properly trained to do so
- Call local clean up facilities (if applicable).

If a small spill occurs or a spill involving our equipment consider the following:

- Notify the Facilities Department if Electrical Equipment is involved
- Handle the Spill according to your SPCC Plan or Safety Data Sheet
- Only clean up spills if you are trained to do so and wearing protective gear

WORKING FROM HEIGHTS

Prior to a Working from Heights task Chippewa County employees should discuss emergency rescue protocols prior to performing the task to ensure a quick and safe rescue in the event of a fall or medical issue when. The following protocol will be considered unless the department is trained to perform rescue procedures:

- Call 911 immediately to get rescue personnel to the work location
- Assist in eliminating any existing hazards at the location
- Coach hanging employee to use suspension straps on their harness (where applicable)
- Coach hanging employee to pump legs to increase blood flow and reduce suspension trauma

BOMB THREATS

In the event of a phoned bomb threat we consider the following steps:

- Be calm, courteous, and listen
- You may pretend to have difficulty hearing
- Pay attention to details while on the line

- Ask as many questions as the caller allows
- Signal (without letting caller hear) to another person in the room
- Call 911 and inform them of the threat
- Inform your supervisor and prepare for an evacuation

Consider the following information and fill out after you are at a safe location

TELEPHONE BOMB THREAT CHECKLIST					
INSTRUCTIONS: BE CALM, BE COURTEOUS. LISTEN. DO NOT INTERRUPT THE CALLER.					
YOUR NAME: _____		TIME: _____		DATE: _____	
CALLER'S IDENTITY SEX: Male _____ Female _____		Adult _____ Juvenile _____		APPROXIMATE AGE: _____	
ORIGIN OF CALL: Local _____		Long Distance _____		Telephone Booth _____	
VOICE CHARACTERISTICS		SPEECH		LANGUAGE	
____ Loud	____ Soft	____ Fast	____ Slow	____ Excellent	____ Good
____ High Pitch	____ Deep	____ Distinct	____ Distorted	____ Fair	____ Poor
____ Raspy	____ Pleasant	____ Stutter	____ Nasal	____ Foul	____ Other
____ Intoxicated	____ Other	____ Slurred	____ Other		
ACCENT		MANNER		BACKGROUND NOISES	
____ Local	____ Not Local	____ Calm	____ Angry	____ Factory	____ Trains
____ Foreign	____ Region	____ Rational	____ Irrational	____ Machines	____ Animals
____ Race		____ Coherent	____ Incoherent	____ Music	____ Quiet
		____ Deliberate	____ Emotional	____ Office	____ Voices
		____ Righteous	____ Laughing	____ Machines	____ Airplanes
				____ Street	____ Party
				____ Traffic	____ Atmosphere

ACTIVE SHOOTER

In the event an individual is noticed in the workplace to have a weapon that presents a danger 911 should immediately be called. If panic alarms are available in your work area activate them.

Each active shooter situation can vary so consider the following responses:

GET OUT – If possible, leave the area quickly.

- Identify an escape route and plan before evacuating.
- Leave regardless of whether others agree to follow.
- Help others escape, if possible.

CALL OUT – Call 911.

- Provide authorities as much information as possible.
- If you can't speak, leave the line open so authorities can hear.

HIDE OUT – Get out of the shooter's view.

- Don't trap yourself in restricted space.

- Hide behind large items.
- Silence your cell phone.

KEEP OUT – Lock and barricade doors.

- Lock the shooter out.
- Turn out the lights so the shooter can't see inside.

SPREAD OUT – Disperse the shooter's target area.

- If you're with others, don't huddle together.
- Spreading out makes it more difficult for the shooter to do a lot of damage at one time.

TAKE OUT – Consider acting against the shooter ONLY as a last resort with no other recourse

- Your action must be aggressive — intend to incapacitate the shooter.
- Throw items at the shooter and use improvised weapons.
- Yell as loudly as possible.
- Commit to your actions.

EMPLOYEE TRAINING

Training will occur upon hire of a new employee. Additional training will be provided when changes such as modifications are made to the plan or employee responsibilities change.

TRAINING RECORDS

Training records shall be maintained with the County and shall include the following information. Records shall include:

- dates of training sessions
- contents or summary of the training sessions
- names and qualifications of persons conducting the training
- names and job titles of all persons attending the training sessions

Training records shall be maintained for three years from the date on which the training occurred.

EXCAVATION & TRENCHING PROGRAM

OSHA Excavation Standard (29 CFR 1926.650-652) & Wisconsin SPS 332.38 Specific Excavations

TABLE OF CONTENTS

POLICY	2
PROGRAM ADMINISTRATOR.....	2
COMPETENT PERSONS.....	2
JOB SITE SUPERVISOR	3
EMPLOYEE RESPONSIBILITIES	3
REGISTERED PROFESSIONAL ENGINEER.....	3
UNDERGROUND UTILITIES.....	3
TRAFFIC CONTROL.....	3
PERSONAL PROTECTIVE EQUIPMENT	4
SPOIL PILE	4
SOIL CLASSIFICATION	4
PROTECTIVE SYSTEMS.....	4
TRENCH BOXES.....	5
AIR SAMPLING.....	5
WATER ACCUMULATION.....	6
SURFACE ENCUMBRANCES.....	6
FALLING LOADS	7
ADJACENT STRUCTURES.....	7
ACCESS AND EGRESS.....	7
TRAINING.....	7
CONTRACTORS.....	8
UNATTENDED TRENCHES	8
SOLITARY WORK	8
RECORDS	8
TRENCH/EXCAVATION DAILY INSPECTION GUIDE	9

POLICY

Chippewa County is committed to providing a safe work environment for all employees. The following Excavation/Trenching Program has been established to prevent incidents in accordance with OSHA standard 29 *CFR* 1926.650-652, “Excavations” and SPS 332.38.

The guidelines set forth in this program are to be adhered to by all management and employees for protection against incidents while working with Excavations and Trenches. The Excavation/Trenching Program has been established to assist Chippewa County in meeting compliance with their applicable standards, thereby protecting our employees.

PROGRAM ADMINISTRATOR

The Human Resources Division and their designees are responsible for implementation of the Excavation/Trenching Program and are the Program Administrators.

The Program Administrators will maintain, review, and update the Excavation/Trenching Program on an annual basis, or whenever necessary to include new or modified tasks and procedures. However, for the purpose of daily operations, this responsibility is delegated to the designated competent person.

COMPETENT PERSONS

The OSHA Trenching Standard requires the designation of a “competent person”. This individual can identify existing and predictable hazards in the surroundings or working conditions, which are unsanitary, hazardous or dangerous to employees. This individual is trained to identify soil classifications and protective systems and is knowledgeable and trained in the applicable OSHA and DSPS standards. This individual will also be competent to use air monitoring equipment to determine acceptable entry conditions, and know how to use ventilation to control hazardous atmospheres.

This individual is furthermore authorized to take prompt corrective measures to eliminate them.

The competent person will pre-plan all work. This individual will be on-site at least initially and thereafter at least daily to perform a visual jobsite inspection to ensure that the proper protective systems and equipment are in place. An inspection guide located at the end of this program can be used to assist in maintaining a safe excavation by the competent person.

The competent person will provide all employees on-site with a daily briefing if there are any unusual hazards or special work practices at the worksite.

While the competent person does not need to be on-site at all times, he or she will at a minimum perform a daily inspection and will re-inspect the site after any rainstorms or any other situations that arise to ensure that conditions have not changed and that proper procedures continue to be followed. If the competent person feels there is a hazardous condition he or she will be responsible for removing

employees from the trench/excavation site until the hazard has been corrected. If the competent person is not on-site, he or she must delegate authority to a jobsite supervisor.

JOBSITE SUPERVISOR

Every worksite must have a foreman/supervisor present for all trenching/excavation work. If the competent person leaves the worksite, the on-site foreman/supervisor becomes responsible for assuring that safety procedures are being followed. If safety issues arise the on-site foreman/supervisor is responsible for removing employees from the danger and immediately contacting the competent person for a re-evaluation.

EMPLOYEE RESPONSIBILITIES

Employees are required to follow all safety procedures established by the competent person. They are also responsible for making management aware of any safety concerns or near misses. Should any safety concerns arise, employees are expected to exit the site and immediately notify either the on-site supervisor or competent person. Employees will not be able to work or allow others to work when conditions are unsafe.

REGISTERED PROFESSIONAL ENGINEER

A Registered Professional Engineer is required for protective systems used when excavations are deeper than 20 ft. A Registered Professional Engineer is also required when the stability of adjoining structures such as walls or buildings may affect the excavation/trench.

UNDERGROUND UTILITIES

Before performing the dig, the competent person responsible for the trenching/excavation will contact the appropriate authorities and reference documentation to determine the location of all utilities such as sewer, telephone, fiber, gas, electric and water lines. Emergency work must be approved by the administrator(s) and is generally defined as unplanned events that require immediate attention such as a water main break. All other work is considered “non-emergency”.

All utilities in the vicinity will be clearly marked with the standard color-coding. If work is required near such utility lines, the competent person must ensure that the appropriate measures are taken to protect employees prior to the start of work.

When working around utilities, a safety zone will be established. Within this safety zone only non-mechanical means of digging will be allowed.

TRAFFIC CONTROL

When exposed to public vehicle traffic, employees are required to wear at minimum Class 2 or Class 3 High Visibility apparel following the last ANSI Z107 standards and work conditions they are in. Traffic

Control devices such as cones, barrels, and signage should be consistent with the Manual of Uniform Traffic Control Devices (MUTCD).

PERSONAL PROTECTIVE EQUIPMENT

The competent person will make the determination on required personal protective equipment. At a minimum, the following personal protective equipment should be worn:

- High Visibility Apparel
- Head Protection
- Eye Protection
- Steel-Toed Safety Shoes

The competent person as well as the supervisor on-site will be responsible for insuring that the designated personal protective equipment specified on the daily worksite checklist is worn at all times.

SPOIL PILE

Employees shall be protected from loose rock or soil that could pose a hazard by falling or rolling from an excavation face by such measures as scaling, installation of barricades or other protective measures.

Spoil piles and heavy equipment must be set at least 2 feet back from the trenching/excavation. If the site does not permit such a setback, spoils need to be temporarily hauled to another location.

SOIL CLASSIFICATION

The OSHA trenching standards require the identification of soil types in order to determine the types of protective systems needed. However, because most trenching/excavations will be conducted in Chippewa County in order to replace existing lines, equipment, or roadways, all trenching/excavation work conducted will be considered to have Type C soil that has previously been disturbed and may have water present-and is therefore the most unstable. This concludes that the most protective measures will be used for protection.

PROTECTIVE SYSTEMS

All trenches five feet or greater in depth (or at more shallow depths as decided by competent person) must have protection. For purposes of determining protective systems the deepest part of the trench will be measured.

One of the following protective systems must be used to protect employees within the trench:

- Trench Boxes (Shields)
- Sloping or Benching
- Shoring Systems

Sloping/Benching- can only be used in limited circumstances and will not routinely be used in our Department. All Sloping or benching systems should meet the requirements of Appendix B of OSHA Standards 1926 Subpart P. If the configurations allowed in Appendix B are not followed, then a Registered Professional Engineer must design the sloping or benching system. Plans for any protective system designed by a Registered Professional Engineer will remain on site during construction.

Shoring-Timber or Aluminum Hydraulic-will generally not be used by our Department. All aluminum hydraulic shoring will meet the requirements of Appendix A and D of OSHA Standards 1926 Subpart P or be used in accordance with manufacturer's instructions. All timber shoring will meet the requirements of Appendix A and C of OSHA Standards 1926 Subpart P or be used in accordance with manufacturer's instructions. If the appendixes or manufacturer's instructions are not followed, then shoring systems must be designed by a Registered Professional Engineer. Plans for any protective system designed by a Registered Professional Engineer will remain on site during construction.

TRENCH BOXES

The trench boxes must extend to a level no greater than 2 feet off the bottom of the trench (as long as there is no loss of soil from behind or below the bottom of the support system) and must extend 18 inches above the vertical wall of the trench. Sloping can be used in conjunction with the trench shield, however where the top of the shield is below the excavation grade, it must extend a minimum of 18 inches above the vertical part of the wall (see Figure B-1.3 in Appendix B of the OSHA Standard). The excavated space between the face and the outside of the trench box will be as small as possible to prevent movement of the box.

- The competent person on-site daily prior to work will inspect these trench box systems.
- All trench boxes must be installed and used in accordance with manufacturer's specific instructions and limitations using the manufacturer's tabulated data.
- No employee will be allowed in the trench box during installation, removal or relocation.
- Removal of the trench box will be done in conjunction with back filling.

AIR SAMPLING

Whenever trenching/excavations deeper than 4 feet occur and there is reason to believe that a hazardous atmosphere may exist, then air sampling must be done prior to entry. The competent person will be responsible for determining the potential for hazardous atmospheres. Vapors, liquids and gases may travel through soil from sources such as nearby gas lines, underground chemical/gas/oil storage tanks or sewer lines. Hazardous atmospheres may also exist in soil that is nearby or in current or prior landfill areas.

Air monitoring will be done by the competent person who will record this data on the Confined Space Permit. After initial monitoring, air monitoring will be repeated at the frequency specified by the competent person. The competent person may delegate responsibility for periodic testing to an on-site supervisor or employee only if that individual is trained in the use, maintenance, calibration, storage and limitations of the gas meter.

Employees will not be allowed to work in any space with less than 19.5% oxygen, more than 10% of the Lower Explosive Limit (LEL) or in areas where the level of contaminant exceed toxic limits set on the confined space entry meter. If these levels are exceeded, the trench will not be entered until the area has been mechanically ventilated through the use of an explosion proof-blower or through natural ventilation. After ventilating the area, the atmosphere in the trench will be retested with the gas monitor to ensure that levels are acceptable prior to entry.

If levels continue to exceed acceptable limits, the work will stop until the source of the hazardous atmosphere has been determined and the competent person determines what course of action is needed. Such actions may include the determination and elimination of the source of the hazardous atmosphere and/or the use of self-contained breathing apparatus by employees who are trained to use such devices.

WATER ACCUMULATION

Employees will not work in excavations in which there is accumulated water or in which water is accumulating unless adequate control measures are taken. These may include temporary shut off of water lines, water removal to control the level of accumulating water, diversion ditches, dikes, or other means to provide adequate drainage. The competent person must monitor any water removal equipment and operations. In addition, all open excavations must be re-inspected after any rainfall or other extreme weather conditions by the competent person PRIOR to re-entry by employees.

SURFACE ENCUMBRANCES

An encumbrance is anything that creates a load on the side of the open trench and could therefore cause it to cave in. This includes spoil piles, heavy equipment, vibration sources (including traffic), trees, utility poles, foundations, sidewalks, pipes or even the trench box itself. Surface encumbrances will be removed whenever possible or must be adequately supported as designed by the Registered Professional Engineer.

Superimposed Loads (crane, backhoe or other such equipment working close to excavation edges) also create additional load and will require extra shoring or other bracing to assure that the soil does not collapse. Vehicle barricades may need to be used to prevent heavy equipment from approaching too close to the work area. If mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of the excavation, and the operator does not have a clear view of the edge of the excavation, a warning system such as barricades, hand or mechanical signals, or stop logs must be used. If possible, the grade should be away from the excavation.

The competent person will determine the safe distance for the placement of heavy equipment and the vehicle safety zone. As a minimum, a safety zone of 1½ times the depth of the trench will be established unless the protective system used is rated for the loads imposed.

FALLING LOADS

No employees will be allowed to walk or work underneath loads handled by lifting or digging equipment. Employees must stand away from any vehicle being loaded or unloaded to avoid being struck by spillage or falling materials. Operators of vehicles being loaded or unloaded must remain in the cabs.

ADJACENT STRUCTURES

Sidewalks, pavement, buildings, walls or other structures will never be undermined unless a support system or another method of protection is provided to prevent the collapse of such structures. A registered professional engineer must approve such a support system or must approve the work in order to ensure that any undermining will not pose a hazard to employees.

ACCESS AND EGRESS

Ladders, stairs or walkable ramps must be located in all trenches/excavations more than four feet deep. Ladders must be placed so that no more than 25 feet of unobstructed lateral travel is required for egress. The competent person will make the determination on the number and placement of ladders needed on the site. All ladders must extend at least 3 feet above the trench opening.

TRAINING

Before being allowed to work at any trenching/excavation-site, all employees must be formally trained on the hazards of such work and measures that must be taken to prevent these hazards.

In addition, all employees will initially be trained in our Department's specific policies and procedures for trenching and excavation work.

The Department will provide refresher training as the need arises. Retraining will also take place whenever there is a change in equipment, whenever there is a change in the Department's procedures and policies, and whenever there is an incident/near miss that indicates that there is a breakdown in the procedures.

In addition, whenever the competent person or on-site supervisor finds that a hazardous condition exists at the worksite or that an individual or group of employees is not following procedures, immediate onsite reminder or retraining will be done. If the competent person or on-site supervisor finds that this is an ongoing problem or that the employee(s) are routinely not following the required procedures, then disciplinary action may be taken in accordance with County policy.

CONTRACTORS

Outside contractors will be expected to follow OSHA standards for trenching and excavation work. Any employee who observes a contractor who is not following these standards should report the condition to the on-site supervisor or competent person immediately.

UNATTENDED TRENCHES

A standard railing as specified in 29 CFR 1926.502 (b) or other approved guard or barricade shall be provided at or near the edge of an excavation as soon as possible, except where the installation of the safeguard will interfere with the excavation or other work.

All excavations to which persons may be exposed at night shall be provided with yellow warning lights placed at unbarricaded points and along the exposed side where the excavation adjoins a public thoroughfare or sidewalk.

SOLITARY WORK

No person may work in any trench, shaft, tunnel, caisson or appurtenance over 4 feet in depth without another person being present at the surface.

RECORDS

Tab Data for any protective system used should be kept with the system itself. A copy can also be placed in a hard copy file with the safety files.

All necessary records will be maintained by the program administrator.

TRENCH/EXCAVATION DAILY INSPECTION GUIDE

Project:			
Weather:		Date:	
Trench Depth:			
Soil Type		Width:	
Length:			
Protective System:			
YES	NO	N/A	
EXCAVATION			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excavation & Protective Systems inspected by Competent Person, Daily, before start of work
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Competent Person has authority to remove workers from excavation immediately
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Surface encumbrances supported or removed
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Employees protected from loose rock or soil
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Hard hats worn by all employees
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Spoils, materials, and equipment set back a minimum of 2' from the edge of excavation
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Barriers provide at all remote excavations, wells, pits, shafts, etc.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Walkways & bridges over excavations 6' or more in depth equipped with guardrails
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Warning vests, or other high visibility PPE worn by all employees exposed to traffic
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Employees prohibited from working on faces of sloped or benched excavations above others
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Warning systems established and used when mobile equipment is operating near edge of excavation
UTILITIES			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Utility companies contracted and/or utilities located
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Exact location of utilities marked when near excavation
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Underground installations protected, supported, or removed when excavation is open
WET CONDITIONS			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Precautions taken to protect employees from accumulating water
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Water removal equipment monitored by Competent Person
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Surface water controlled or diverted
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inspections made after each rainstorm
HAZARDOUS ATMOSPHERE			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Atmosphere tested when there is possibility of oxygen deficiency or buildup of hazardous gas
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Oxygen content is between 19.5% and 21%
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ventilation provided to prevent flammable gas buildup to 20% of lower explosive limit of the gas
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Testing conducted to ensure that atmosphere remains safe
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Emergency Response Equipment readily available where a hazardous atmosphere could or does exist
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Employees training in the use of Personal Protective & Emergency Response Equipment
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Safety harness and life line individually attended when employees enter deep confined excavation
Signature of Competent Person:			Date:

Fall Protection Program

OSHA Walking Working Surfaces Standard, Subpart D (29 CFR 1910.21 – 30)

TABLE OF CONTENTS

DEFINITIONS.....	1
POLICY	4
RESPONSIBILITIES.....	4
WALKING WORKING SURFACE	5
FALL PROTECTION SYSTEMS.....	7
PERSONAL FALL ARREST EQUIPMENT	8
RESCUE AFTER A FALL	9
INCIDENT INVESTIGATION	10
INFORMATION AND TRAINING.....	10
PROGRAM EVALUATION.....	11
RECORD KEEPING.....	11
INSPECTION FORMS	12

DEFINITIONS

Anchor: A secure point of attachment for lifelines, lanyards or deceleration devices.

Body belt (safety belt): A strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline, or deceleration device.

Body harness: Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Connector: A device which is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabiner, or it may be an integral component of part of the system (such as a buckle or dee-ring sewn into a body belt or body harness, or a snap-hook spliced or sewn to a lanyard or self-retracting lanyard).

Designated area: A space which has a perimeter barrier erected to warn employees when they approach an unprotected side or edge, and serves also to designate an area where work may be performed without additional fall protection.

Fall restraint system: A fall protection system that prevents the user from reaching a fall hazard and/or entering into free fall. Typically, the worker is restrained by a fixed-length lanyard and a body harness or body belt, where the lanyard prevents the worker from reaching the leading edge. The system is comprised of either a body belt or body harness, along with an anchorage, connectors and other necessary equipment.

Floor opening: An opening measuring 12 inches or more in its least dimension, in any floor, platform, pavement, or yard through which persons may fall; such as a hatchway, stair or ladder opening, pit, or large manhole. Floor openings occupied by elevators, dumb waiters, conveyors, machinery, or containers are excluded from this subpart.

Free fall: The act of falling before a personal fall arrest system begins to apply force to arrest the fall

Free fall distance: The vertical displacement of the fall arrest attachment point on the employee's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance, and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.

Guardrail system: A barrier erected to prevent employees from falling to lower levels.

Handrail: A single bar or pipe supported on brackets from a wall or partition, as on a stairway or ramp, to furnish persons with a handhold in case of tripping.

Lanyard: A flexible line of rope, wire rope, or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.

Lifeline: A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Lower levels: Those areas or surfaces to which an employee can fall. Such areas or surfaces include, but are not limited to, ground levels, floors, platforms, ramps, runways, excavations, pits, tanks, material, water, equipment, structures, or portions thereof.

Mid-rail: A rail approximately midway between the guardrail and platform, used when required, and secured to the uprights erected along the exposed sides and ends of platforms.

Personal fall arrest system: A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

Platform: A working space for persons, elevated above the surrounding floor or ground; such as a balcony or platform for the operation of machinery and equipment. Platforms may also be an extended step or landing breaking a continuous run of stairs.

Positioning device system: A body belt or body harness system rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Riser: The upright member of a step situated at the back of a lower tread and near the leading edge of the next higher tread.

Runway: A passageway for persons elevated above the surrounding floor or ground level, such as a foot walk along shafting or a walkway between buildings.

Snap-hook: A connector comprised of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object. When used in personal fall arrest systems or positioning device systems, snap-hooks must be of the locking type with a self-closing, self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection.

Stairs/stairway: A series of steps leading from one level or floor to another, or leading to platforms, pits, boiler rooms, crossovers, or around machinery, tanks, and other equipment that are used more or less continuously or routinely by employees, or only occasionally by specific individuals. A series of steps and landings having three or more risers constitutes stairs or stairway.

Stair railing: A vertical barrier erected along exposed sides of a stairway to prevent falls of persons.

Standard railing: A vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or runway to prevent falls of persons.

Toe-board: A low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.

Unprotected sides and edges: Any side or edge (except at entrances to points of access) of a walking/working surface, e.g., floor, roof, ramp, or runway where there is no wall or guardrail system at least 42 inches (1.0 m) high.

Wall opening: An opening at least 30 inches high and 18 inches wide, in any wall or partition, through which persons may fall; such as a yard-arm doorway or chute opening.

Walking/working surface: Any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, formwork and concrete reinforcing steel but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties.

POLICY

Chippewa County is committed to providing a safe work environment for all employees. The following Fall Protection Program has been established to prevent fall related injuries in accordance with the Occupational Safety and Health Administration's (OSHA's) Walking-Working Surfaces Standard - 29 CFR 1910.21.

The purpose of this program is to establish the minimum requirements and responsibilities for employees when on walking-working surfaces, including elevated work platforms, and rooftops. This program is designed to protect all employees engaged in work activities that expose them to falls when working four (4) feet or more above a lower level.

This program applies to all Chippewa County employees who perform any duties that expose them to slips, trips, or falls through unguarded floors and wall openings, floor holes, and falls from elevated work platforms and roofs.

The Human Resources Division and/or their designees will be known as the Program Administrators.

RESPONSIBILITIES

PROGRAM ADMINISTRATOR(S)

Program Administrator is responsible for:

- Development, implementation, and administration of the Walking/Working Surfaces – Fall Protection Program;
- Coordinating workplace risk assessments to determine the need for fall protection and assess the condition of walking/working surfaces;
- Ensure the fall protection training is conducted for all affected employees;
- Reviewing, updating, and evaluating the overall effectiveness of the Walking/ Working Surfaces – Fall Protection Program;
- Provide support to departments of affected employees to interpret requirements and establish safe practices.
- Ensuring employees can recognize potential fall hazards based on this program;
- Assisting departments in awareness of each fall hazard that their employees may face;

- Assisting departments with fall protection training, including when a new employee is assigned, and when there is reason to suspect a previously trained employee does not have the understanding required to safely work from elevated surfaces;
- Ensuring employees attend all required training;
- Periodically evaluating the effectiveness of the program as it applies to the work that their affected employees perform and providing the Program Administrator with their conclusions, compliance challenges, and recommendations;
- Contacting an expert for technical support when questions arise regarding compliance and safe procedures;
- Ensuring that proper safety equipment is supplied to their affected employees where needed, such as fall arrest systems, guardrail systems, toe boards, stanchions and supports for designated areas, etc.;
- Ensuring that all workplaces are safe to conduct the work that their affected employees are expected to perform;
- Notifying the departments if contractors are observed working in an unsafe manner.

EMPLOYEES

All employees are responsible for complying with the rules set forth by this program.

They are responsible for:

- Notifying their supervisor when questions arise surrounding safe procedures, the need for fall prevention equipment, and difficulties complying with these requirements;
- Reporting all accidents and near miss incidents;
- Inspecting all personal fall arrest systems for signs of damage and deterioration prior to each use.
- Attending all required Walking/Working Surfaces – Fall Protection Training as scheduled.

CONTRACTORS

Contractors working on campus are required to comply with 29 CFR 1926.501 and all other applicable OSHA workplace safety regulations. The Contractor's safety programs shall be available for review upon request by the Program Administrator.

WALKING WORKING SURFACE

GENERAL REQUIREMENTS

- All walking/working surfaces shall be kept clean, dry (where possible), and orderly;
- Every floor, workplace, and passageway shall be kept free from protruding nails, splinters, holes, or loose boards;
- Walking and working surfaces must have the strength and integrity to support employees;

- Covers and/or guardrails shall be provided to protect personnel from the hazards of open pits, tanks, vats, ditches, etc.
- The floor or roof of a building shall not be overloaded with materials and/or equipment over the approved load limits. Elevated storage and other platforms shall be marked with the load bearing weight;
- All permanent aisles and passageways shall be clearly marked, have adequate space for passage of both moving equipment and employees, have safe clearances at all turns, doors, and passageways, and shall not be obstructed by physical barriers or stored materials.

FLOOR OPENINGS, WALL OPENINGS, AND HOLES

- Every floor opening or platform shall be guarded by a standard railing;
- Toe boards must be installed around floor and wall openings and where the potential exists for tools and other materials to fall on personnel working below;
- All floor and wall openings, including manholes, trapdoors, pits, ladder way floor openings, and chute openings, must be safely covered or blocked from access;
- When an opening is not covered, or blocked from access, a person must be assigned for constant attendance to the opening until the cover is replaced;
- Covers must be sound, solid, not easily opened, and cannot project more than one (1) inch above the floor or surface level. All hinges, handles, bolts, or other parts must set flush with the floor or cover surface;
- Barricades that are designed to prevent someone from falling into the opening must be visually noticeable and cannot have additional openings that create additional fall hazards;
- Floor surfaces surrounding the opening shall be free of clutter and slippery material.

FIXED INDUSTRIAL STAIRS

- Standard stair railings and handrails shall be provided on stairs with four (4) or more risers;
- Standard railings, including top rails, mid-rails, and toe-boards shall be provided on the open sides of all exposed stairways and stair platforms;
- Handrails shall be provided on at least one side of closed stairways, preferably on the right-side descending;
- Fixed stairways must be designed and constructed to carry a load of five (5) times the normal live load anticipated at any one time and be able to safely carry a moving concentrated load of 1000 pounds;
- Fixed stairways shall have a minimum width of twenty-two (22) inches;
- Fixed stairs shall be installed at angles to the horizontal of between thirty (30) and fifty (50) degrees;
- Stairway platforms shall not be less than the width of a stairway and must be a minimum of thirty (30) inches in length measured in the direction of travel.
- Adequate headroom of seven (7) ft. must be maintained above stair tread;
- Stairs shall be free of clutter, and treads must be reasonably slip resistant.

FALL PROTECTION SYSTEMS

Employees performing work from walking/working surfaces that are four (4) ft. or higher above a lower level must be protected from falls by passive fall protection systems, i.e., guardrails or parapet walls when feasible. When the use of a guardrail system is infeasible, alternative fall protection, i.e., designated areas or personal fall protection equipment will be used. This includes maintenance work on exhaust equipment, Heating Ventilation and Air Conditioning (HVAC) systems, plumbing, etc., as well as inspections and assessments of work conducted on rooftops.

GUARDRAIL SYSTEMS

- The top edge height of top rails must be 39 - 42 inches above the walking/working level;
- Mid-rails must be installed at a height midway between the top edge of the guardrail system and the walking/working level;
- Guardrail systems must be capable of withstanding - without failure - a force of at least 200 pounds;
- Guardrail systems must be surfaced to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing;
- Guardrail systems used on ramps and runways must be erected along each unprotected side or edge;
- Toe-boards must be four (4) inches in height from its top edge to the level of the walking/ working surface;
- Toe-boards must be securely fastened in place and with not more than 1/4 - inch clearance above the walking/ working surface level.
- Where material is piled to such height that a standard toe-board does not provide protection, paneling from floor to intermediate rail or to top rail must be provided.

DESIGNATED AREAS

- The work must be of a temporary nature, such as maintenance of rooftop equipment;
- Designated areas must only be established on surfaces that have a slope from the horizontal of 10 degrees or less;
- Designated areas must consist of an area surrounded by a rope, wire, or chain and supporting stanchions;
- After being erected with the line attached, stanchions must be capable of resisting - without tipping over - a force of at least 16 pounds applied horizontally against the stanchion;
- The line must have a minimum breaking or tensile strength of 500 pounds;
- The line must be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over;
- The line must be installed in such a manner that its lowest point is no less than 34 inches nor more than 39 inches from the work surface;

- The line forming the designated area must be clearly visible from any unobstructed location within the designated area up to 25 feet away;
- The stanchions must be erected as close to the work area as is permitted by the task;
- The perimeter of the designated area must be erected no less than six (6) feet from the unprotected side or edge; and
- Access to the designated area shall be by a clear path formed by two lines attached to stanchions.

PERSONAL FALL ARREST EQUIPMENT

Personal fall arrest systems are designed to stop a fall once it has begun. The system includes an anchorage, full body harness, lanyard, locking snap-hooks, lifeline and connector, and may include a descent control device. Body belts are not acceptable as part of a personal fall arrest system; however, the use of body belts in positioning device systems is acceptable. The manufacturer's procedures for the equipment must be followed. In addition, personal fall arrest equipment must comply with the following:

- Harnesses must be attached in the center of the back near shoulder level, or above the wearer's head;
- Personal fall arrest systems must limit the maximum arresting force on an employee to 1,800 pounds;
- Systems must bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and
- Systems must have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of six feet, or the free fall distance permitted by the system, whichever is less.
- Systems must be rigged in such a way that an employee can neither free fall more than six feet, nor contact any lower level.

EQUIPMENT ANCHORAGE, TIE-OFF, AND USE

Anchoring the fall arrest system is critical. The selection of the anchoring point should be made carefully. When the employee is uncertain about the anchoring point he or she is expected to consult with a supervisor or Program Administrator. Equipment anchorage, tie-off, and use must meet the following conditions:

- Anchoring points must be permanent fixed objects;
- Anchors, to which personal fall arrest equipment is attached, must be capable of supporting at least 5,000 pounds for each attached employee;
- When tying off, the employee must tie off at such a location where there are no obstacles in the potential path of a fall;
- The employee must follow the anchoring tie off and equipment tie off procedures that are specified by the fall arrest system manufacturer **PRIOR** to getting into a position where he or she could fall.

EQUIPMENT CARE AND INSPECTION

- Follow the manufacturer's instructions and training protocols for equipment maintenance, cleaning and storage.
- Personal fall arrest systems must be inspected prior to each use for mildew, wear, damage and other deterioration.
- Immediately remove any defective fall arrest system components.
- Inspection intervals are designated by manufacturer's recommendations or documented, at minimum, annually.

RESCUE AFTER A FALL

Prompt rescue must be provided in the event of a fall or employees must be able to rescue themselves.

When personal fall arrest equipment will be used, employees must develop a rescue plan before work begins. Prior to working from heights tasks employees will discuss applicable rescue protocols for that working from heights task.

Note: ANSI Z359-2007 Fall Protection Code recommends that contact be made with a worker within six minutes after a fall.

Rescue plans should be determined following the fall protection rescue hierarchy:

- a. Self-rescue;
- b. Assisted rescue;
- c. Professional rescue.

If possible, employees should work in teams of two or more, when personal fall arrest systems are used to ensure prompt rescue in the event of a fall.

Note: When an employee uses a fall arrest system alone, alternative methods must be implemented that will provide an equivalent response, as listed above. Alternative methods may include (but are not limited to) notifying an on-site supervisor or other competent person of the type of work being performed, referencing the work location, and providing a review of the rescue plan.

Should a fall occur:

- The person needing rescue can delay suspension trauma by flexing or pumping the leg muscles or using safety step devices to provide leg support and enhance blood circulation until rescue is provided.
- The rescuer can provide emotional support during self-rescue and use a ladder or man-lift to provide assisted rescue.

- If the employee was injured during the fall, contact local emergency services by dialing 911 and do not attempt to move or rescue the employee.
- Any employee involved in a fall must be seen by a health care provider and complete an incident report.

INCIDENT INVESTIGATION

All accidents that result in injury to workers, regardless of their nature, are investigated and reported. It is an integral part of any safety program that documentation takes place as soon as possible so that the cause and means of prevention can be identified to prevent a reoccurrence.

In the event that an employee falls or there is some other related, serious incident (e.g. a near miss) occurs, this plan will be reviewed to determine if additional practices, procedures or training need to be implemented to prevent similar types of falls or incidents from occurring.

INFORMATION AND TRAINING

The Program Administrators and/or departments are responsible for ensuring that Walking Working Surfaces – Fall Protection training is provided to their employees exposed to falls when working four (4) feet or more above a lower level. Training will be provided upon initial assignment to a location that requires an employee to work from elevated surfaces and as necessary to meet compliance thereafter; or whenever there is reason to suspect a previously trained employee does not have the understanding and skill required to safely work from elevated surfaces.

Training will be overseen by the Program Administrator. Training and instruction will be provided by persons knowledgeable in all aspects of fall protection.

Training will include the following:

- Instruction on using personal fall arrest equipment to include:
 - methods of use;
 - limitations of the equipment;
 - inspection and storage requirements;
 - proper anchoring and tie-off techniques, including determination of elongation and deceleration distance.
- The requirements of 29 CFR 1910.21 Walking-Working Surfaces;

The Program Administrator will maintain documentation of attendance which will include the employee's name, department, and date of training.

PROGRAM EVALUATION

The written Walking/Working Surfaces – Fall Protection Program shall be re- evaluated annually and revised as necessary.

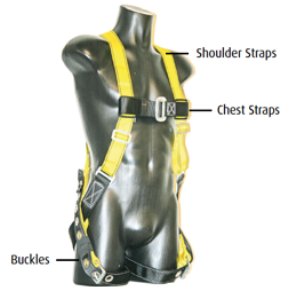
RECORD KEEPING

Training records are retained by the department and Program Administrator.

INSPECTION FORMS

INSPECTION FORM – FULL BODY HARNESS

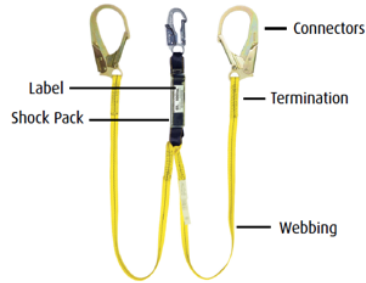
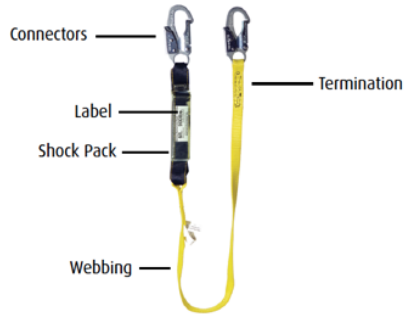
USER		MODEL		SERIAL #		DATE MANUFACTURED	
------	--	-------	--	----------	--	-------------------	--



				PASS FAIL	
HARDWARE					NOTES <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div>
Back D-Ring					
Waist D-Ring					
Sternum D-Ring					
Shoulder Adjustment					
Chest & Back Buckle Hardware					
Chest Carabiner					
Leg Straps					
WEBBING					
Shoulder Straps					
Chest & Back Straps					
Waist Straps					
Leg Straps					
Cuts					
Burns					
Holes					
Deterioration					
Paint Damage					
STITCHING					
Shoulder Straps					
Chest & Back Straps					
Waist Straps					
Leg Straps					
LABELS/TAGS					
Shoulder Straps					
Chest & Back Straps					
Waist Straps					

INSPECTION FORM – LANYARD

USER		MODEL		SERIAL #		DATE MANUFACTURED	
------	--	-------	--	----------	--	-------------------	--



HARDWARE

Function of Connector Locking Gate		
Body of Hook or Rivets		
Corrosion		
Pitting		
Nicks		

PASS
FAIL

NOTES

WEBBING

Broken, Missing, or Loose Stitching		
Termination (stitch or splice of swage)		
Webbing Length		
Cuts		
Burns		
Holes		
Deterioration		
Paint Damage		

STITCHING

Integrity of Shock Pack Cover		
Signs of Deployment		
Signs of Damage		

LABELS/TAGS

Legible Label		
Appropriate ANSI/CSA/OSHA Markings		
Date of First Use		

HAZARD COMMUNICATION PROGRAM

Hazard Communication (29 CFR 1910.1200)

TABLE OF CONTENTS

POLICY	1
IDENTIFICATION OF HAZARDS	2
IDENTIFYING CONTAINERS OF HAZARDOUS CHEMICALS	2
KEEPING SAFETY DATA SHEETS	2
TRAINING EMPLOYEES ABOUT CHEMICAL HAZARDS	3
INFORMING EMPLOYEES WHO DO SPECIAL TASKS	3
INFORMING OTHER EMPLOYEES/CONTRACTORS	4
LIST OF HAZARDOUS CHEMICALS	4
CHEMICALS IN UNLABELED PIPES	4
SAFETY DATA SHEETS	5
HCS PICTOGRAMS AND HAZARDS	6

POLICY

To ensure that information about the dangers of all hazardous chemicals used by Chippewa County is known by all affected workers, the following hazard communication program has been implemented. Under this program, workers will be informed of the requirements of the OSHA Hazard Communication Standard as revised by GHS (HazCom 2012), the operations where exposure to hazardous chemicals may occur, and how workers can access this program, as well as labels and SDSs.

This program applies to any chemical which is known to be present in the workplace in such a manner that workers may be exposed under normal conditions of use or in a foreseeable emergency. All work areas that involve potential exposure to chemicals are part of the hazard communication program. Copies of the hazard communication program are available at on the employee portal in the safety manual for review by any interested worker.

IDENTIFICATION OF HAZARDS

A list that identifies all hazardous chemicals with a potential for employee exposure at this workplace is located in the MSDS online program for Chippewa County. Detailed information about the physical, health, and other hazards of each chemical is included in a Safety Data Sheet (SDS); the product identifier for each chemical on the list matches and can be easily cross-referenced with the product identifier on its label and on its Safety Data Sheet.

IDENTIFYING CONTAINERS OF HAZARDOUS CHEMICALS

The labeling system to be used by the Chippewa County will follow the requirements in the 2012 revision of the OSHA Hazard Communication Standard to be consistent with the United Nations Globally Harmonized System (GHS) of Classification of Labeling of Chemicals. The label on the chemical is intended to convey information about the hazards posed by the chemical through standardized label elements, including symbols, signal words and hazard statements.

All hazardous chemical containers used at this workplace will have:

- The original manufacturer's label that includes a product identifier, an appropriate signal word, hazard statement(s), pictogram(s), precautionary statement(s) and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party
- A label with the appropriate label elements just described
- Workplace labeling that includes the product identifier and words, pictures, symbols, or combination that provides at least general information regarding the hazards of the chemicals.

Chippewa County will ensure that all containers are appropriately labeled. No container will be released for use until this information is verified. Workplace labels must be legible and in English.

Small quantities intended for immediate use may be placed in a container without a label, provided that the individual keeps it in their possession always and the product is used up during the work shift or properly disposed of at the end of the work day. However, the container at minimum should be marked with its contents.

SAFETY DATA SHEETS *(previously known as Material Safety Data Sheets)*

The manufacturer or importer of a chemical is required by OSHA to develop a Safety Data Sheet (SDS) that contains specific, detailed information about the chemical's hazard using a specified format. The distributor or supplier of the chemical is required to provide this SDS to the purchaser.

SDS's are readily available to all employees during their work shifts. Employees can review SDS for all hazardous chemicals used at this workplace.

The SDS's are updated and managed by applicable County Departments the fall under the Hazard Communication Standard. If a SDS is not immediately available for a hazardous chemical, employees can obtain the required information by communicating with their supervisor or other staff in the office.

TRAINING EMPLOYEES ABOUT CHEMICAL HAZARDS

Before they start their jobs or are exposed to new hazardous chemicals, employees must attend a hazard communication training that covers the following topics:

- An overview of the requirements in OSHA's Hazard Communication Standard.
- Hazardous chemicals present in their workplace.
- Any operations in their work area where hazardous chemicals are used.
- The location of the written hazard communication plan and where it may be reviewed.
- How to understand and use the information on labels and in Safety Data Sheets.
- Physical and health hazards of the chemicals in their work areas.
- Methods used to detect the presence or release of hazardous chemicals in the work area.
- Steps we have taken to prevent or reduce exposure to these chemicals.
- How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personal protective equipment.
- An explanation of any special labeling present in the workplace including what pictograms are, signal words, hazard statements, and precautionary statements.
- Emergency procedures to follow if an employee is exposed to these chemicals.
- Location of Safety Data Sheets

The applicable Department Heads or their designees are responsible to ensure that employees receive this training. After attending the training, employees will sign a form verifying that they understand the above topics and how the topics are related to our hazard communication plan.

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

INFORMING EMPLOYEES WHO DO SPECIAL TASKS

Before employees perform special (non-routine) tasks that may expose them to hazardous chemicals, their supervisors will inform them about the chemicals' hazards. Their supervisors also will inform them about how to control exposure and what to do in an emergency. The employer will evaluate the hazards of these tasks and provide appropriate controls including Personal Protective Equipment all additional training as required.

INFORMING OTHER EMPLOYEES/CONTRACTORS

It is the responsibility of the Department Head or his/her designee to provide other employers and contractors with information about hazardous chemicals that their workers may be exposed to on this work site, and suggested precautions for workers. It is the responsibility of the Department Head or his/her designee to obtain information about hazardous chemicals used by other employers to which our workers may be exposed.

Other employers and contractors will be provided with SDSs for hazardous chemicals generated by this company's operations in the following manner in pre-job meeting as necessary based on the job task.

In addition to providing a copy of an SDS to other employers, other employers will be informed of necessary precautionary measures to protect workers exposed to operations performed by this company.

Also, other employers will be informed of the hazard labels used by the company. If alternative workplace labeling systems are used, the other employers will be provided with information to understand the labels used for hazardous chemicals to which their workers may have exposure.

LIST OF HAZARDOUS CHEMICALS

A list of all known hazardous chemicals in the workplace is located in MSDS online. This list includes the name of each chemical, and the work area(s) in which each of the chemicals is used. Further information on each chemical may be obtained from the SDSs, located in the MSDS online program for the County.

To ensure that any new chemical is added in a timely manner, the following procedures shall be followed:

- When new chemicals are received, the employee shall go into the MSDS online program on the County Intranet to check for certainty that the chemical Safety Data Sheet is not already there.
 - If the chemical is not in the inventory submit it using the MSDS Online Program
 - If it is, verify the Safety Data Sheet is current to the product and Safety Data Sheet provided with the chemical.

CHEMICALS IN UNLABELED PIPES










Work activities may be performed by workers in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the worker shall be informed by the supervisor or their designee about the identity and hazards of the chemicals in the pipe, as well as required precautionary measures required to be followed.

SAFETY DATA SHEET FORMAT

Changes to MSDS/SDS format effective June 1, 2015 - Chemical manufacturers or importers shall ensure that MSDS/SDSs for their products include the following Sections in order:

Section 1, Identification;
Section 2, Hazard(s) identification;
Section 3, Composition/information on ingredients;
Section 4, First-aid measures;
Section 5, Fire-fighting measures;
Section 6, Accidental release measures;
Section 7, Handling and storage;
Section 8, Exposure controls/personal protection;
Section 9, Physical and chemical properties;
Section 10, Stability and reactivity;
Section 11, Toxicological information.
Section 12, Ecological information;
Section 13, Disposal considerations;
Section 14, Transport information;
Section 15, Regulatory information; and
Section 16, Other information, including date of preparation or last revision.

HCS PICTOGRAMS AND HAZARDS

<p style="text-align: center;">Health Hazard</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity 	<p style="text-align: center;">Flame</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides 	<p style="text-align: center;">Exclamation Mark</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer (Non-Mandatory)
<p style="text-align: center;">Gas Cylinder</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Gases Under Pressure 	<p style="text-align: center;">Corrosion</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Skin Corrosion/Burns ▪ Eye Damage ▪ Corrosive to Metals 	<p style="text-align: center;">Exploding Bomb</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Explosives ▪ Self-Reactives ▪ Organic Peroxides
<p style="text-align: center;">Flame Over Circle</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Oxidizers 	<p style="text-align: center;">Environment</p> <p style="text-align: center;">(Non-Mandatory)</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Aquatic Toxicity 	<p style="text-align: center;">Skull and Crossbones</p> <p style="text-align: center;"></p> <ul style="list-style-type: none"> ▪ Acute Toxicity (fatal or toxic)

HAZARDOUS ENERGY CONTROL PROGRAM

(CFR 29 1910.147. HAZARDOUS ENERGY CONTROL)

TABLE OF CONTENTS

DEFINITIONS	2
POLICY	3
RESPONSIBILITIES	3
OBJECTIVE.....	4
EXCLUSIONS.....	4
PROTECTIVE MATERIALS AND HARDWARE	4
PROCEDURES	5
Electrical.....	5
Hydraulic/Pneumatic	6
Fluids and Gases	6
Mechanical Energy.....	6
Release from Lockout/Tag-out	6
Group Lockout/Tag-out	7
Removal of Locks/Tags	7
Shift or Personnel Changes.....	7
Outside Personnel/Contractors	8
TRAINING & COMMUNICATION.....	8
INSPECTIONS.....	8
RECORD KEEPING	9
AUTHORIZED PERSON(S) LIST	10
LOCKOUT/TAG-OUT INSPECTION FORM.....	11

DEFINITIONS

Affected employee: An employee whose job requires him or her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tag-out, or whose job requires him or her to work in an area in which such servicing or maintenance is being performed.

Authorized employee: A person who locks or implements a tag-out system procedure on machines or equipment to perform the servicing or maintenance on that machine or equipment. An authorized employee and an affected employee may be the same person when the affected employee's duties also include performing maintenance or service on a machine or equipment, which must be locked, or a tag-out system implemented.

"Capable of being locked out": An energy-isolating device will be considered to be capable of being locked out if either it is 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 to be capable of being locked out if lockout can be achieved without the need to dismantle, rebuild, or replace the energy-isolating device or permanently alter its energy control capability.

Energized: 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, including, but not limited to, the following: a manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors and, in addition, no pole can be operated independently; a slide gate; a slip blind; a line valve; a block; and any similar device used to block or isolate energy. The term does not include a push button, selector switch, and other control circuit-type devices.

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

Hot tap: A procedure used in the repair, maintenance, and services activities, which involves welding on a piece of equipment (pipelines, vessels, or tanks) under pressure, in order to install connections or appurtenances. It is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

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

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

Normal production operations: The utilization of a machine or equipment to perform its intended production function.

Servicing and/or maintenance: Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to startup of the equipment or release of hazardous energy.

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

Tag-out: The placement of a tag-out device on an energy-isolating device, in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tag-out device is removed.

Tag-out device: A prominent warning device, such as tag and a means of attachment, which can be fastened securely to an energy-isolating device, in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tag-out device is removed.

POLICY

Chippewa County is committed to providing a safe work environment for all employees. The following Control of Hazardous Energy Program has been established to prevent accident or injury in accordance with OSHA standard 29 *CFR* 1910.147, "The Control of Hazardous Energy."

The guidelines set forth in this program are to be adhered to by all management and employees for protection while servicing and maintenance of machines and equipment in which the unexpected energization or startup of the machines or equipment, or release of energy could cause injury to employees. This program has been established to assist Chippewa County in establishing minimum performance requirements for the control of such hazardous energy.

RESPONSIBILITIES

Each department head or their designee is responsible for conducting a hazard assessment of his or her area of control to determine whether the lockout/tag-out program applies to the processes and equipment in his or her area. Departments are responsible for adopting and implementing this Control of Hazardous Energy Program (Lockout/Tag-out). Employees are responsible to observe safety practices contained in the Lockout/Tag-out program and to point out unsafe conditions to their supervisor. Authorized employees are responsible for following established lockout/tag-out procedures and affected employees are responsible for insuring they do not attempt to restart or re-energize machines or equipment which are locked out or tagged out. The Department Heads and/or their designees are responsible for monitoring the compliance of this procedure and will conduct the annual inspection and training of authorized employees.

OBJECTIVE

The objective of this procedure is to establish a means of positive control to prevent the accidental starting or activating of machinery or systems while they are being repaired, cleaned and/or serviced. This program serves to:

- Establish a safe and positive means of shutting down machinery, equipment and systems.
- Prohibit unauthorized personnel or remote-control systems from starting machinery or equipment while it is being serviced.
- Provide a secondary control system (tag-out) when it is impossible to positively lockout the machinery or equipment.
- Establish responsibility for implementing and controlling lockout/tag-out procedures. Ensure that only approved locks, standardized tags and fastening devices provided by the company will be utilized in the lockout/tag-out procedures.

EXCLUSIONS

Work on cord and plug-connected electric equipment for which exposure to the hazards of unexpected energization or startup of the equipment is controlled by the unplugging of the equipment from its single energy source and by the plug being under the exclusive control of the one and only employee performing the servicing;

Minor tool changes and adjustments, and other minor servicing activities, which take place during normal production operations, if they are routine, repetitive, and integral to the use of the equipment, provided that the work is performed using alternative measures which provide effective protection.

Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water, or petroleum products when they are performed on pressurized pipelines, provided that the supervising department demonstrates to the satisfaction, that (1) continuity of service is essential; (2) shutdown of system is impractical; and (3) documented procedures are followed, and special equipment is used which will provide proven, effective protection for employees.

Testing or positioning of machines, equipment, or components thereof following the sequence outlined in 29 CFR1910.147(f)(1).

PROTECTIVE MATERIALS AND HARDWARE

Chippewa County shall provide locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware for isolating, securing, or blocking of machines or equipment from energy sources.

Lockout devices and tag-out devices must be singularly identified and the only device(s) used for controlling energy, and shall not be used for other purposes. In addition, lockout and tag-out devices shall also be:

- Durable - Lockout and tag-out devices shall be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
- Standardized - Lockout and tag-out devices shall be standardized in at least one of the following criteria: color, shape, or size; and additionally, in the case of tag-out devices, print and format shall be standardized.
- Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools.
- Tag-out devices, including their means of attachment, shall be substantial enough to prevent inadvertent or accidental removal. Tag-out device attachment means shall be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds having the general design and basic characteristics of being at least equivalent to a one-piece, all-environment-tolerant nylon cable tie.
- Identifiable
- Lockout devices and tag-out devices shall indicate the date installed and the identity of the employee(s) applying the device(s).
- Tag-out devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: "Do Not Start", "Do Not Open", "Do Not Energize", or "Do Not Operate".

PROCEDURES

The ensuing items are to be followed to ensure both compliance with the OSHA Control of Hazardous Energy Standard and the safety of our employees. Procedures can be created by using the Lockout Tag-out Procedures form on Page 13 of this Program or other procedures created that meet 1910.147 compliance.

PREPARATION FOR LOCKOUT

Employees who are required to utilize the lockout/tag-out procedure must be knowledgeable of the different energy sources and the proper sequence of shutting off or disconnecting energy means. The four types of energy sources are:

- electrical (most common form);
- hydraulic or pneumatic;
- fluids and gases; and
- mechanical (including gravity).

More than one energy source may be utilized on some equipment and the proper procedure must be followed in order to identify energy sources and lockout/tag-out accordingly.

Electrical

1. Shut off power at machine and disconnect.
2. Disconnecting means must be locked or tagged.
3. Press start button to see that correct systems are locked out.

4. All controls must be returned to their safest position.

Points to remember:

- If a machine or piece of equipment contains capacitors, they must be drained of stored energy.
- Possible disconnecting means include the power cord, power panels (look for primary and secondary voltage), breakers, the operator's station, motor circuit, relays, limit switches, and electrical interlocks.
- Some equipment may have a motor isolating shut-off and a control isolating shut-off.
- If the electrical energy is disconnected by simply unplugging the power cord, the cord must be kept under the control of the authorized employee or the plug end of the cord must be locked out or tagged out.

Hydraulic/Pneumatic

1. Shut off all energy sources (pumps and compressors). If the pumps and compressors supply energy to more than one piece of equipment, lockout or tag-out the valve supplying energy to the piece of equipment being serviced.
2. Stored pressure from hydraulic/pneumatic lines shall be drained/bled when release of stored energy could cause injury to employees.
3. Make sure controls are returned to their safest position (off, stop, standby, inch, jog, etc.).

Fluids and Gases

1. Identify the type of fluid or gas and the necessary personal protective equipment.
2. Close valves to prevent flow, and lockout/tag-out.
3. Determine the isolating device, then close and lockout/tag-out.
4. Drain and bleed lines to zero energy state.
5. Some systems may have electrically controlled valves. If so, they must be shut off and locked/tagged out.
6. Check for zero energy state at the equipment.

Mechanical Energy

Mechanical energy includes gravity activation, energy stored in springs, etc.

1. Block out or use die ram safety chain.
2. Lockout or tag-out safety device.
3. Shut off, lockout or tag-out electrical system.
4. Check for zero energy state.
5. Return controls to safest position.

Release from Lockout/Tag-out

1. Inspection: Make certain the work is completed and inventory the tools and equipment that were used.
2. Clean-up: Remove all towels, rags, work-aids, etc.
3. Replace guards: Replace all guards possible. Sometimes a particular guard may have to be left off until the start sequence is over due to possible adjustments. However, all other guards should be put back into place.
4. Check controls: All controls should be in their safest position.
5. The work area shall be checked to ensure that all employees have been safely positioned or removed and notified that the lockout/tag-out devices are being removed.
6. Remove locks/tags. Remove only your lock or tag.

Group Lockout/Tag-out

In the preceding steps, if more than one individual is required to lockout or tag-out equipment, each shall place his/her own personal lockout device or tag-out device on the energy-isolating device(s). When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout or tag-out device (hasp) may be used. If lockout is used a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet.

Removal of Locks/Tags

Each location must develop written emergency procedures that comply with 1910.147(e)(3) to be utilized at that location. Emergency procedures for removing lockout/tag-out should include the following:

1. Verification by employer that the authorized employee who applied the device is not in the facility.
2. Make reasonable efforts to advise the employee that his/her device has been removed. (This can be done when he or she returns to the facility).
3. Ensure that the authorized employee has this knowledge before he or she resumes work at the facility.

Shift or Personnel Changes

Each applicable department must develop written procedures based on specific needs and capabilities. Each procedure must specify how the continuity of lockout or tag-out protection will be ensured at all times. See 1910.147(e)(4).

Outside Personnel/Contractors

Outside personnel/contractors shall be advised that the County has and enforces the use of lockout/tag-out procedures. They will be informed of the use of locks and tags and notified about the prohibition of attempts to restart or re-energize machines or equipment that are locked out or tagged out.

The County will obtain information from the outside personnel/contractor about their lockout/tag-out procedures and advise affected employees of this information.

TRAINING & COMMUNICATION

Each authorized employee who will be utilizing the lockout/tag-out procedure will be trained in the recognition of applicable hazardous energy sources, type and magnitude of energy available in the work place, and the methods and means necessary for energy isolation and control.

Each affected employee (all employees other than authorized employees utilizing the lockout/tag-out procedure) shall be instructed in the purpose and use of the lockout/tag-out procedure, and the prohibition of attempts to restart or re-energize machines or equipment that are locked out or tagged out.

Training will be documented using (Authorized Personnel) or (Affected Personnel). The documentation will be retained along with the County's Safety Records.

INSPECTIONS

Routine Inspections

The Department Head and/or Designee shall continually monitor employee performance with regard to compliance with this program and shall correct any deviations or inadequacies observed.

Periodic Inspections

At least annually, supervising departments shall conduct a periodic inspection. This periodic inspection shall include:

- A separate review of each written energy control procedure. This will ensure that the procedures are adequate to provide the necessary protection and to identify what changes, if any, are needed.
- Observing the implementation of an energy control procedure(s).

An authorized employee other than the one's utilizing the energy control procedure being inspected shall perform the periodic inspection.

The employee performing the periodic inspection does not have to observe every authorized employee implementing the energy control procedure on the machine or equipment on which he or she is authorized to perform servicing and maintenance.

The inspector participating in the review needs to:

- Observe a representative number of such employees while they are implementing the procedure and
- Talk with all other authorized employees even though they may not be implementing the energy control procedure.

This review may be completed in one or more meetings in which all authorized employees (as well as affected employees when tag-out is used) will be in attendance to review the specific energy control procedures.

Where lockout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure being inspected.

Where tag-out is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized and affected employee, of that employee's responsibilities under the energy control procedures being inspected.

The Department shall verify in writing that the periodic inspections have been performed. The verification shall identify the machine or equipment on which the energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection. The inspection verification shall be maintained on file.

RECORD KEEPING

The applicable department will maintain all Lockout/Tag-out records. These records must include:

- Certification that employee training has been accomplished and is being kept up- to-date. The certification shall contain, as a minimum, each employee's name and dates of training and a training summary.
- Specific written lockout/tag-out procedures for equipment/machines covered by the program.
- Completed Periodic Inspection of Energy Control Procedures forms for this equipment/machinery conducted annually.
- Any completed Exchange of Lockout/Tag-out forms.
- A list of Authorized Employees (may be kept using page 10 of this program)

AUTHORIZED PERSON(S) LIST	

LOCKOUT/TAG-OUT INSPECTION FORM

I certify that _____ *(Name)* was inspected on this date utilizing lockout/tag-out procedures. The inspection was performed while working on _____ *(Equipment)*.

AUTHORIZED EMPLOYEE SIGNATURE

DATE

INSPECTOR'S SIGNATURE

DATE

LOCKOUT-TAGOUT PROCEDURE

OSHA CFR 1910.147

EQUIPMENT NAME:	DEVELOPED BY:
LOCATION:	DATE DEVELOPED:

YEAR								
REVIEWED BY:								

	NUMBER OF ISOLATION POINTS TO BE LOCKED AND TAGGED	ADDITIONAL INFORMATION

AUTHORIZED EMPLOYEE
<p>EMPLOYEES AUTHORIZED TO PERFORM LOCKOUT SHALL BE CERTAIN AS TO WHICH SWITCH, VALVE, OR OTHER ENERGY ISOLATING DEVICES APPLY TO THE EQUIPMENT BEING LOCKED OUT. MORE THAN ONE ENERGY SOURCE (ELECTRICAL, MECHANICAL, OR OTHERS) MAY BE INVOLVED. ANY QUESTIONABLE IDENTIFICATION OF SOURCES SHALL BE CLEARED BY THE EMPLOYEES WITH THEIR SUPERVISORS. BEFORE LOCKOUT COMMENCES, JOB AUTHORIZATION SHOULD BE OBTAINED.</p>

POINTS OF ISOLATION	POINTS OF ISOLATION	POINTS OF ISOLATION

1	NOTIFY ALL AFFECTED EMPLOYEES THAT A LOCKOUT IS REQUIRED AND THE REASON THEREFOR.
2	IF THE EQUIPMENT IS OPERATING, SHUT IT DOWN BY THE NORMAL STOPPING PROCEDURE (SUCH AS: DEPRESS STOP BUTTON, OPEN TOGGLE SWITCH).
3	OPERATE THE SWITCH, VALVE, OR OTHER ENERGY ISOLATING DEVICES SO THAT THE ENERGY SOURCE(S) (ELECTRICAL, MECHANICAL, HYDRAULIC, OTHER) IS DISCONNECTED OR ISOLATED FROM THE EQUIPMENT.
4	LOCKOUT ENERGY ISOLATING DEVICES WITH AN ASSIGNED INDIVIDUAL LOCK.
5	STORED ENERGY, SUCH AS THAT IN CAPACITORS, SPRINGS, ELEVATED MACHINE MEMBERS, ROTATING FLY WHEELS, HYDRAULIC SYSTEMS, AND AIR, GAS, STEAM OR WATER PRESSURE, MUST ALSO BE DISSIPATED OR RESTRAINED BY METHODS SUCH AS GROUNDING, REPOSITIONING, BLOCKING, BLEEDING DOWN.
6	<p>AFTER ENSURING THAT NO PERSONNEL ARE EXPOSED AND AS A CHECK ON HAVING DISCONNECTED THE ENERGY SOURCES, OPERATE THE PUSH BUTTON OR OTHER NORMAL OPERATING CONTROLS TO MAKE CERTAIN THE EQUIPMENT WILL NOT OPERATE.</p> <p style="text-align: center;">CAUTION: RETURN OPERATING CONTROLS TO NEUTRAL POSITION AFTER THE TEST.</p>
7	THE EQUIPMENT IS NOW LOCKED OUT.

LOCKOUT-TAGOUT PROCEDURE

OSHA CFR 1910.147

ALWAYS PERFORM A MACHINE SHUTDOWN BEFORE LOCKING OUT DISCONNECT

SOURCE	DEVICE	LOCATION	METHOD	VERIFICATION
EXAMPLE: ELECTRICAL 480 VOLT	PADLOCK	ISOLATION POINT LOCATED ON ELECTRICAL MAIN	MOVE THE MAIN SWITCH TO OFF POSITION	ATTEMPT RESTART AT OPERATOR CONTROL

RESTORING EQUIPMENT TO SERVICE

1	WHEN THE JOB IS COMPLETE AND EQUIPMENT IS READY FOR TESTING OR NORMAL SERVICE, CHECK THE EQUIPMENT AREA TO SEE THAT NO ONE IS EXPOSED.
2	WHEN EQUIPMENT IS CLEAR, REMOVE ALL LOCKS. THE ENERGY ISOLATING DEVICES MAY BE OPERATED TO RESTORE ENERGY TO EQUIPMENT.

OPENING A GUARD DOES NOT CONSTITUTE A LOCKOUT

ANY MACHINE MODIFICATIONS MUST BE DISPLAYED IN THE PROCEDURE

HEARING CONSERVATION PROGRAM

Occupational Noise Exposure (29 CFR 1910.95)

TABLE OF CONTENTS

DEFINITIONS	1
POLICY	2
RESPONSIBILITIES	3
NOISE EXPOSURE MONITORING	3
AUDIOMETRIC TESTING	4
STANDARD THRESHOLD SHIFTS	5
NOISE CONTROL METHODS.....	5
TRAINING.....	6
RECORDKEEPING	7
RECOGNIZED NOISE EXPOSURE FORM	8
STANDARD THRESHOLD SHIFT LETTER	9

DEFINITIONS

Action level: An 8-hour time-weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of fifty percent.

Attenuate: To reduce the intensity.

Audiogram: A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency.

Audiologist: A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech-Language-Hearing Association or licensed by a state board of examiners.

Baseline audiogram: The audiogram against which future audiograms are compared.

Decibel (dB): Unit of measurement of sound level.

Hertz (Hz): Unit of measurement of frequency, numerically equal to cycles per second.

Medical pathology: A disorder or disease. For purposes of this regulation, a condition or disease affecting the ear, which should be treated by a physician specialist.

Noise dose: The ratio, expressed as a percentage, of (1) the time integral, over a stated time or event, of the 0.6 power of the measured SLOW exponential time-averaged, squared A-weighted sound pressure and (2) the product of the criterion duration (8 hours) and the 0.6 power of the squared sound pressure corresponding to the criterion sound level (90 dB).

Noise Induced Hearing Loss: A cumulative, permanent loss of hearing in the inner ear, which develops over a period of long noise exposure. Noise induced hearing loss usually affects both ears equally.

Otolaryngologist: A physician specializing in diagnosis and treatment of disorders of the ear, nose and throat.

Standard Threshold Shift: A change relative to a baseline of 10 dB or more in the average hearing level at 2000, 3000, and 4000 hertz in either ear.

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

POLICY

Chippewa County is committed to providing a safe work environment for all employees. Following the Hearing Conservation Program will provide protection against noise induced hearing loss to affected employees in accordance with OSHA standard 29 *CFR* 1910.95, "Occupational Noise Exposure."

The guidelines set forth in this program are to be adhered to by all management and employees for protection against occupational noise. The Hearing Conservation Program has been established to assist Chippewa County in meeting compliance with the standard, thereby protecting our employees.

This procedure is designed to protect employees who perform work in areas where noise levels may exceed 85 decibels A-weighted scale (dBA) over an 8 hour time-weighted average (TWA) in the completion of their job duties.

Employees who are exposed to noise levels exceeding 85 dBA on an 8-hour time-weighted average (TWA) shall be included in the Hearing Conservation Program.

If employees are exposed over 90 dBA averaged over an eight-hour period, the following aspects of the Hearing Conservation Program also apply:

- The department shall assess whether noise exposures can be reduced below 90 dBA TWA using engineering or administrative controls.
- Hearing protection is mandatory if noise levels can't be reduced below 90 dBA.

The Program includes:

- Responsibilities
- Noise Monitoring
- Noise Control Methods
- Audiometric Testing
- Standard Threshold Shifts
- Hearing Conservation Training
- Recordkeeping
- Additional Forms

RESPONSIBILITIES

The Human Resource's Division will be known as the Program Administrators. Their job is to ensure that:

- Areas and/or job tasks have been evaluated
- Affected employees adhere to standards under this program
- Affected employees are provided with and using hearing protection devices
- Affected employees participate in audiograms
- Affected employees are participating in Hearing Conservation Training

NOISE EXPOSURE MONITORING

Noise exposure evaluations should be conducted by qualified persons to determine noise levels for work tasks that are performed by Chippewa County employees. An assessment or evaluation of each exposure should be made to determine the most effective prevention and control strategies. The following criteria and methods should be considered:

- When information indicates that any employee's exposure may equal or exceed an 8-hour TWA of 85 dBA, operations in that area should be evaluated with noise level measurements and/or dosimetry.
- The sampling strategy must be designed to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors.
- Where circumstances such as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area noise monitoring generally inappropriate, the analyst must use representative personal dosimetry.

- All continuous, intermittent, and impulsive sound levels from 80 dBA to 130 dBA must be integrated into the noise measurements.
- Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.
- Monitoring must be repeated whenever a change in equipment or controls increases noise to the extent that additional employees may be exposed at or above the action level as well as if attenuation provided by the hearing protectors being used is no longer adequate.

There is an assessment form on Page 8 or alternative assessments meeting OSHA's 1910.95 can be substituted as necessary.

AUDIOMETRIC TESTING

Audiograms (hearing tests) should be performed to remain compliant for the following events:

- Upon hire of an affected employee an audiogram should be administered within 6 months of an employee's first exposure at or above the action level
- At annual intervals for as long as the employee is exposed to noise levels at or above the action level
- At the time of reassignment out of the area where employees are exposed to noise levels at or above the action level
- See Standard Threshold Shift section for additional audiograms showing hearing loss

Where mobile test vans are used to meet the audiometric testing obligation, the employer shall obtain a valid baseline audiogram within 1 year of an employee's first exposure at or above the action level.

Where baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees shall wear hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

Audiometric tests must be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council for Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining, and checking calibration and proper functioning of the audiometer being used. A technician who operates microprocessor audiometers does not need to be certified. A technician must be responsible to an audiologist, otolaryngologist, or physician.

STANDARD THRESHOLD SHIFTS

A Standard Threshold Shift, or STS, is a change in hearing threshold, relative to the baseline audiogram for that employee, of an average of 10 decibels (dB) or more at 2000, 3000, and 4000 hertz (Hz) in one or both ears.

If an audiogram indicates a Standard Threshold Shift (hearing loss determined by an audiologist or technician) Chippewa County may have the employee have another audiogram performed within 30 days of the last audiogram performed. This can assist in ruling out any factors that may have made the testing inaccurate during the time of testing.

If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift the employee shall be informed within 21 days of the determination in writing. If the audiologist doesn't provide letters to employees, Chippewa County will be sending employees the documentation using the Standard Threshold Shift Letter provided on Page 9.

Chippewa County shall ensure that the following steps are taken when a standard threshold shift occurs unless a physician determines it's not work related or aggravated by occupational noise:

- Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them
- Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary
- The employee shall be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the employer suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors
- The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected
- Follow OSHA's Recordkeeping Requirements (29 CFR 1904) for recording work related injury

NOISE CONTROL METHODS

Chippewa County will perform every attempt to take the following actions to reduce noise in the workplace. Where it is not feasible, Hearing Protection will be required as a last resort to protect employees. The following are actions that may be considered when noise levels are above the action level:

- Engineering Controls to eliminate or reduce noise:
 - Modify or Replace equipment to eliminate or reduce noise
 - Maintain and lubricate equipment
 - Place barriers between noise source and employee
 - Enclose or isolate noise source
- Administrative Controls to eliminate or reduce noise:

- Limit number of employees in areas of noise levels above the action level
- Limit amount of time spent in areas or tasks of noise levels above the action level (rotate employees)
- Control noise through operating distance (for every doubling of distance between the source of noise and work the noise level can decrease by 6 dBA)
- Hearing Protection to reduce noise levels is the last line of defense. The City shall ensure that:
 - Selection of Hearing protectors is based on CFR 1910.95 Appendix B.
 - Make Hearing Protectors available to all exposed at or above action level to employees at no cost to employee
 - Employees are wearing hearing protectors as required
 - Any exposed employee that has not had a baseline audiogram at 85 dBA 8 hour TWA is wearing hearing protectors
 - Employees that have had a Standard Threshold Shift are wearing hearing protectors at 85dBA 8 hour TWA
 - Employees are given the opportunity to select from a variety of suitable hearing protectors
 - Ensure training on care and use of protectors is provided
 - Supervise that the correct use of all hearing protectors is followed
 - Hearing protectors attenuate employee exposure at least to an 8-hour time weighted average of 90 decibels

The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. Chippewa County shall provide more effective hearing protectors where necessary.

TRAINING

All affected employees who might be exposed to noise levels exceeding 85dBA on an eight-hour TWA basis must be provided education and training. The training is required for all affected employees on an annual basis. It shall cover at minimum the following requirements:

- The effects of noise on hearing;
- The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and
- The purpose of audiometric testing and an explanation of the test procedures

Additional training also required when:

- Changes in the workplace that render previous education inadequate
- Changes in regulations or entity introduces new information that must be presented
- Cases where a Standard Threshold Shift is determined to be work related

RECORDKEEPING

Chippewa County will maintain the following documents to remain compliant with the OSHA Standard 1910.95:

- Noise Surveys/Assessments need to be retained for a minimum of 2 years or until the next survey or monitoring is completed.
- Audiometric Testing Records need to be retained for a minimum of duration of employment plus 30 years
 - This record shall include: Name and job classification of the employee; Date of the audiogram; The examiner's name; Date of the last acoustic or exhaustive calibration of the audiometer; and Employee's most recent noise exposure assessment.
 - The employer shall maintain accurate records of the measurements of background sound pressure levels in audiometric test rooms.
- Access to Records required under OSHA standard 1910.95 shall be provided upon request to:
 - Employees
 - Former employees or representatives designated by the individual employee
 - Assistant Secretary
- Training Records
 - Training Records shall be kept until the next annual training is completed however will be archived for training history thereafter.
 - Training Records should include the following information:
 - Date of Training
 - Trainer's Name and Qualifications
 - Training Material Used
 - Summary of Training

[illegible]

STANDARD THRESHOLD SHIFT LETTER

Dear _____,

Your most recent audiometric test result was compared to your baseline audiogram and indicated that your hearing has deteriorated to the point where your hearing impairment constitutes a "standard threshold shift." This is defined by the Occupational Safety and Health Administration (OSHA) as a relative hearing loss of an average of 10 decibels in either ear at the frequencies of 2000, 3000 and 4,000Hz.

Attached are your results from your most recent audiogram. We may be scheduling a retest to verify the testing was accurate. In addition, will be refitting you with hearing protectors and we will be providing you some additional training. Keep in mind you will be required to wear hearing protectors at levels that equal or exceed an 8-hour Time Weighted Average (TWA) of 85 decibels.

Please provide your signature and date verifying you have received the Standard Threshold Shift Letter and a copy of your most recent audiogram. Give a copy to your Supervisor.

Employee Print_____ Date_____

Employee Signature_____

PERSONAL PROTECTIVE EQUIPMENT PROGRAM

Personal Protective Equipment (29 CFR 1910.132)

TABLE OF CONTENTS

POLICY	1
PROGRAM ADMINISTRATOR	2
HAZARD ASSESSMENTS	2
PPE SELECTION	3
PPE CARE & MAINTENANCE	3
EMPLOYEE TRAINING	3
TRAINING RECORDS	4
PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT	5

POLICY

The Chippewa County is committed to providing a safe work environment for all employees. The following Personal Protective Equipment Program is to protect visitors and employees from occupational hazards by utilizing personal protective equipment as a last resort. Our goal is to use engineering controls as the primary method for protecting employees although when it's not reasonably or feasibly possible visitors and employees will be required to wear proper personal protective equipment following OSHA standard 29 CFR 1910.132, "Personal Protective Equipment."

The guidelines set forth in this program are to be adhered to by all management and employees for protection against occupational hazards. The Personal Protective Equipment Program has been established to assist the Chippewa County in meeting compliance with the standard, thereby protecting our employees and their visitors.

The Program Includes:

- Identification of Program Administrators
- Hazard Assessments
- PPE Section
- PPE Care & Maintenance
- Employee Training
- Training Records

PROGRAM ADMINISTRATOR

The Division of Human Resources is responsible for implementation of the Personal Protective Equipment Program. The Human Resources Division (also known as the Program Administrators) and/or their designees will maintain, review, and update the Personal Protective Equipment Program on an annual basis, or whenever necessary to include new or modified tasks and procedures.

The administrator(s) will ensure that:

- Appropriate Hazard Assessments have been conducted
- Appropriate PPE is assigned
- Affected employees are trained as necessary
- Appropriate Personal Protective Equipment is selected and purchased
- Written Program, Documents, and Trainings are maintained

HAZARD ASSESSMENTS

Applicable job tasks will be assessed to determine injury risks to the Head, Eyes, Ears, Face, Trunk, Arms, Hands, Feet, and Lung Hazards such as:

- Impact hazards which include but are not limited to flying chips, objects, particles, collisions, or other motion hazards.
- Penetration hazards which include but are not limited to falling/dropping objects, or objects that cut or pierce
- Compression hazards which include but are not limited to rollover or pinching hazards
- Chemical Hazards which include but are not limited to splashing, burns, or fumes
- Temperature Extremes which include but are not limited to sparks, splashes from hot material, and burns from high or low temperatures

- Dust or Particle Hazards which include but are not limited to harmful quantities of airborne contaminants
- Radiation or Light Hazards which include but are not limited to emission of harmful energy
- Biological Hazards which include but are not limited to Bloodborne Pathogens
- Noise Hazards which include tasks with damaging decibel levels

A Personal Protective Equipment Hazard Assessment will serve as a Certification that the hazard assessment has been performed. They will be updated whenever conditions or procedures change. In some cases, assessments may not be completed until jobs are scheduled.

The Certified Hazard Assessment can be used to meet requirements. Other personal protective equipment hazard assessments that meet OSHA 1910.132 can be substituted to meet requirements as well.

Job Safety Analysis or Job Hazard Analysis can substitute for Certified Personal Protective Equipment Assessments if they determine personal protective equipment needs.

PPE SELECTION

The Administrator(s) will make certain the personal protective equipment provides appropriate protection for the task identified including meeting requirements set forth under CFR 1910.132.

To be effective, selected PPE must fit properly to the person. Employees must demonstrate proper fit prior to use to prevent injury and/or improper use.

Where employees are allowed to provide their own protective equipment, their supervisors shall be responsible to assure its adequacy, including proper maintenance and sanitation of such equipment. The equipment must meet standards of this program.

PPE CARE & MAINTENANCE

Employees will conduct inspections, cleaning, and maintenance of their personal protective equipment at intervals per the manufacturer's instructions and regulated standards based on that type of equipment. Damaged or defective equipment will not be used and discarded. New PPE will take its place.

EMPLOYEE TRAINING

All affected employees shall participate in a PPE training program. Training will occur before assignment to a task where personal protective equipment is necessary. The employees will be required to demonstrate they understand all the elements of the training program prior to using PPE for assignments.

The training program will include at least the following elements:

- What Personal Protective Equipment is
- Why Personal Protective Equipment is necessary
- How to properly wear Personal Protective Equipment
- The limitations and capabilities of Personal Protective Equipment
- Personal Protective Equipment care, maintenance, disposal, and life span
- Demonstrate knowledge of Personal Protective Equipment

Training will be repeated under the following conditions:

- Changes in the workplace that make previous training obsolete
- New assignment for employee or change in job assignment/equipment
- Incorrect use or failure to use equipment
- Introduction of new PPE that is different from previously used

TRAINING RECORDS

Training records shall be maintained by the program administrator(s) or their designees and shall include the following information:

- Dates of training sessions
- Contents or summary of the training sessions
- Names and qualifications of persons conducting the training
- Names and job titles of all persons attending the training sessions

Training records shall be maintained for three years from the date on which the training occurred. Training records shall be provided on request for examination and copying to employees and to employee representatives.

PERSONAL PROTECTIVE EQUIPMENT HAZARD ASSESSMENT

Employer:	Department:	Certification Date:
Conducted & Certified By: name(s), title(s)		

Job Task	Hazard Types	Affected Body Parts	PPE Required	
(Enter Job Task)	<input type="checkbox"/> -Penetration <input type="checkbox"/> -Impact <input type="checkbox"/> -Compression <input type="checkbox"/> -Chemical <input type="checkbox"/> -Temp Extreme <input type="checkbox"/> -Dust/Particles <input type="checkbox"/> -Radiation/Light <input type="checkbox"/> -Noise <input type="checkbox"/> -Biological <input type="checkbox"/> -Laceration	<input type="checkbox"/> -Head <input type="checkbox"/> -Eyes <input type="checkbox"/> -Ears <input type="checkbox"/> -Face <input type="checkbox"/> -Trunk <input type="checkbox"/> -Arms <input type="checkbox"/> -Hands <input type="checkbox"/> -Feet <div style="text-align: center;"><input type="checkbox"/>-Legs <input type="checkbox"/>-Lungs</div>	HEAD	
			EYES	
			EARS	
			FACE	
			TRUNK	
			ARMS	
			HANDS	
			FEET	
LUNGS				
(Enter Job Task)	<input type="checkbox"/> -Penetration <input type="checkbox"/> -Impact <input type="checkbox"/> -Compression <input type="checkbox"/> -Chemical <input type="checkbox"/> -Temp Extreme <input type="checkbox"/> -Dust/Particles <input type="checkbox"/> -Radiation/Light <input type="checkbox"/> -Noise <input type="checkbox"/> -Biological <input type="checkbox"/> -Laceration	<input type="checkbox"/> -Head <input type="checkbox"/> -Eyes <input type="checkbox"/> -Ears <input type="checkbox"/> -Face <input type="checkbox"/> -Trunk <input type="checkbox"/> -Arms <input type="checkbox"/> -Hands <input type="checkbox"/> -Feet <div style="text-align: center;"><input type="checkbox"/>-Legs <input type="checkbox"/>-Lungs</div>	HEAD	
			EYES	
			EARS	
			FACE	
			TRUNK	
			ARMS	
			HANDS	
			FEET	
LUNGS				
(Enter Job Task)	<input type="checkbox"/> -Penetration <input type="checkbox"/> -Impact <input type="checkbox"/> -Compression <input type="checkbox"/> -Chemical <input type="checkbox"/> -Temp Extreme <input type="checkbox"/> -Dust/Particles <input type="checkbox"/> -Radiation/Light <input type="checkbox"/> -Noise <input type="checkbox"/> -Biological <input type="checkbox"/> -Laceration	<input type="checkbox"/> -Head <input type="checkbox"/> -Eyes <input type="checkbox"/> -Ears <input type="checkbox"/> -Face <input type="checkbox"/> -Trunk <input type="checkbox"/> -Arms <input type="checkbox"/> -Hands <input type="checkbox"/> -Feet <div style="text-align: center;"><input type="checkbox"/>-Legs <input type="checkbox"/>-Lungs</div>	HEAD	
			EYES	
			EARS	
			FACE	
			TRUNK	
			ARMS	
			HANDS	
			FEET	
LUNGS				

Job Task	Hazard Types	Affected Body Parts	PPE Required	
(Enter Job Task)	<input type="checkbox"/> -Penetration <input type="checkbox"/> -Impact <input type="checkbox"/> -Compression <input type="checkbox"/> -Chemical <input type="checkbox"/> -Temp Extreme <input type="checkbox"/> -Dust/Particles <input type="checkbox"/> -Radiation/Light <input type="checkbox"/> -Noise <input type="checkbox"/> -Biological <input type="checkbox"/> -Laceration	<input type="checkbox"/> -Head <input type="checkbox"/> -Eyes <input type="checkbox"/> -Ears <input type="checkbox"/> -Face <input type="checkbox"/> -Trunk <input type="checkbox"/> -Arms <input type="checkbox"/> -Hands <input type="checkbox"/> -Feet <input type="checkbox"/> -Legs <input type="checkbox"/> -Lungs	HEAD	
			EYES	
			EARS	
			FACE	
			TRUNK	
			ARMS	
			HANDS	
			FEET	
LUNGS				
(Enter Job Task)	<input type="checkbox"/> -Penetration <input type="checkbox"/> -Impact <input type="checkbox"/> -Compression <input type="checkbox"/> -Chemical <input type="checkbox"/> -Temp Extreme <input type="checkbox"/> -Dust/Particles <input type="checkbox"/> -Radiation/Light <input type="checkbox"/> -Noise <input type="checkbox"/> -Biological <input type="checkbox"/> -Laceration	<input type="checkbox"/> -Head <input type="checkbox"/> -Eyes <input type="checkbox"/> -Ears <input type="checkbox"/> -Face <input type="checkbox"/> -Trunk <input type="checkbox"/> -Arms <input type="checkbox"/> -Hands <input type="checkbox"/> -Feet <input type="checkbox"/> -Legs <input type="checkbox"/> -Lungs	HEAD	
			EYES	
			EARS	
			FACE	
			TRUNK	
			ARMS	
			HANDS	
			FEET	
LUNGS				
(Enter Job Task)	<input type="checkbox"/> -Penetration <input type="checkbox"/> -Impact <input type="checkbox"/> -Compression <input type="checkbox"/> -Chemical <input type="checkbox"/> -Temp Extreme <input type="checkbox"/> -Dust/Particles <input type="checkbox"/> -Radiation/Light <input type="checkbox"/> -Noise <input type="checkbox"/> -Biological <input type="checkbox"/> -Laceration	<input type="checkbox"/> -Head <input type="checkbox"/> -Eyes <input type="checkbox"/> -Ears <input type="checkbox"/> -Face <input type="checkbox"/> -Trunk <input type="checkbox"/> -Arms <input type="checkbox"/> -Hands <input type="checkbox"/> -Feet <input type="checkbox"/> -Legs <input type="checkbox"/> -Lungs	HEAD	
			EYES	
			EARS	
			FACE	
			TRUNK	
			ARMS	
			HANDS	
			FEET	
LUNGS				

POWERED INDUSTRIAL TRUCK PROGRAM

OSHA Powered Industrial Truck Standard (29 CFR 1910.178)

Table of Contents

DEFINITIONS.....	1
POLICY	4
TRAINING COMPONENTS.....	4
DEPARTMENT RESPONSIBILITIES	7
LIFT TRUCK OPERATIONS	9
MAINTENANCE OF LIFT TRUCKS	12
CONTRACTOR USE OF LIFT TRUCKS	13

DEFINITIONS

Authorized Evaluator: an individual who has the knowledge, training and experience to train and evaluate Operators in proper practical use of departmental Lift Trucks in accordance with this policy and are designated by their line management to train and evaluate departmental Lift Truck Operators.

Center of Gravity: is a point on an object at which all of the object's weight can be considered to be concentrated.

Free Rigging: is the direct attachment to or placement of rigging equipment (slings, shackles, rings, etc.) onto the tines of a powered industrial truck for a below-the-tines lift.

High-tiering: placement of materials in upper tiers of storage racks.

Operator: an individual who is properly trained and authorized to use a Lift Truck

Operator Trainee: Individuals who have limited training and experience with regard to Lift Truck operation.

Lift Truck: a mobile power-propelled truck used to carry, push, pull, lift, stack or tier materials; also called powered industrial trucks or powered industrial vehicles. Lift Trucks can be ridden or controlled by a walking Operator. (This definition includes forklifts and powered pallet jacks; it does not include over the road haulage trucks and earth-moving equipment, or such equipment with fork attachments.)

Backrest: Supports the load when tipped back and adds stability.

Carriage: The part of the mast where the forks and backrest are mounted.

Counterbalance Forklifts: Designed for both indoor and outdoor use, counterbalance truck wheels as their center of gravity and can be powered by battery, propane, gasoline or diesel fuel.

Counterweight: is the weight that is a part of the truck's basic structure that is used to offset the load's weight and to maximize the vehicle's resistance to tipping over.

Fulcrum: is the truck's axis of rotation when it tips over.

Full-tapered Forks: Forks that gradually increase in thickness from the tip of the fork all the way back to the fork's heel (rear). Full-tapered forks are used to lift lighter loads.

Grade: is a surface's slope that is usually measured as the number of feet of rise or fall over a hundred-foot horizontal distance (measured as a per cent).

Half-tapered forks: Forks that gradually increase in thickness from the tip of the fork (front) to about midway back where the blade reaches its maximum thickness. Half- tapered forks are used to lift heavier loads.

Identification Plate: Contains information about the truck's design and capacity including information about the truck's engine, load capacity, serial number, weight and the truck's type designation. The identification plate may also contain additional information specific to that type of truck.

Lateral stability: is a truck's resistance to tipping over sideways.

Line of action: is an imaginary line through an object's center of gravity.

Lift Cylinders: Hydraulically operated single acting cylinders used to lift the carriage.

Load Center: The distance from the heels of the forks to the load's center of gravity.

Longitudinal stability: is the truck's resistance to overturning forward or rearward.

Mast: The mechanism on the truck that raises and lowers the load. The mast is made up of a set of tracks that house bearings and chains.

Material Handling: Any activity that involves picking up and moving materials, parts and/or finished products.

Moment: is the product of the object's weight times the distance from a fixed point. In the case of a powered industrial truck, the distance is measured from the point that the truck will tip over to the object's line of action. The distance is always measured perpendicular to the line of action.

Powered Industrial Truck: An industrial vehicle used to carry, push, pull, lift or stack material that is powered by an electric motor or an internal combustion engine. Included are vehicles that are commonly referred to as forklift trucks, rider trucks, motorized or powered hand trucks, pallet trucks and tugs. Not included is compressed air or nonflammable compressed gas-operated industrial trucks, farm vehicles or vehicles intended primarily for earth moving or over-the-road hauling.

Powered Pallet Jack: A type of powered industrial truck designed to move palletized materials. These trucks may be called *walkies*, or *walkie riders*.

Order Picker: A type of truck designed to allow the operator to ride up and down the load so that individual items can be pulled from a rack or storage shelf.

Overhead Guard: A guard over the operator's head that protects the operator from falling debris. Note: The overhead guard is not designed to withstand the full impact of falling objects.

Rated Capacity: The maximum weight that the truck is designed to lift as determined by the manufacture. To lift the maximum rated capacity, the load must be as close as possible to the drive wheels. The rated capacity of a truck can be found on the Identification Plate on the vehicle and/or in the manufacture's operator manual.

Side Stability: Refers to the truck's ability to resist tipping sideways under various loaded and unloaded conditions.

Tilt Cylinders: Hydraulically operated double acting cylinders used to tilt the backrest and forks. Tilt cylinders work in both forward and backward directions.

Track: is the distance between wheels on the vehicle's same axle.

Type designation: Refers to the truck's power source (diesel, gas, electric or liquefied propane gas) and if the truck is equipped with any additional safeguards to the exhaust, fuel and/or electrical systems. The designation will also indicate any locations where the truck may not be used such as in atmospheres containing flammable vapors or dusts.

Wheelbase: is the distance between the centerline of the vehicle's front and rear wheels.

POLICY

Chippewa County recognizes the need for an evaluation and training program for Operators of Powered Industrial Trucks (i.e., forklifts, powered pallet jacks, and other powered industrial vehicles) to ensure the safety of its personnel (employees, contractors, visitors, etc.). This program incorporates the requirements of the Occupational Safety and Health Administration's (OSHA) Powered Industrial Truck Standard (29 CFR 1910.178), and serves as the mandatory program as required by the standard.

In accordance with the OSHA standard, this program identifies specific training and skill evaluation procedures that must be followed before an employee can operate Powered Industrial Trucks (Lift Trucks). Training of Lift Truck Operators must be uniform in application. This program provides mandatory procedures for classroom instruction, practical training, on-the-job evaluation, and required documentation to achieve uniformity, provide for the safe use of Lift Trucks and to maintain regulatory compliance.

TRAINING COMPONENTS

The Lift Truck Training Program consists of four parts:

1. Classroom Instruction (required for all Lift Truck Operators & Authorized Evaluators)
 - a) Operator Module (required for all Operators and Authorized Evaluators)
2. Evaluator Module (required for all Authorized Evaluators)
3. Practical Training
 - a) Operator Practical Training (for new or transferred employees)
 - b) Operator Refresher Training (as required)
 - c) On-the-Job Evaluations (required for all Lift Truck Operators)
4. Documentation

Upon successful completion of Classroom Instruction, Practical Training and a Departmental On-the-Job Evaluation, an Operator Trainee will be eligible to receive a Lift Truck Operator Endorsement. This Operator Endorsement will authorize the individual to operate a Lift Truck within the specific entity.

CLASSROOM INSTRUCTION

Each employee who operates a Lift Truck and/or evaluates Operators (including new and current Lift Truck drivers) must receive classroom instruction through qualified trainer to establish uniformity in safety and regulatory awareness. Additionally, designated departmental evaluators must receive the Evaluator's in classroom training. Whenever a new hire or transferring employee requires Lift Truck training, the department head must ensure that the employee is registered for classroom instruction.

OPERATOR PRACTICAL TRAINING

This component includes practical skills and information that the Authorized Evaluator must convey to the Operator Trainee during practical training. Proficiency is determined by how confident and accurate the Trainee is with the exercises given, to the satisfaction of the Authorized Evaluator. Evaluators must demonstrate practical skills to the new Operator Trainee and closely supervise the Trainee as he or she begins to practice those skills either as drills or as on-the-job training.

1. A department may begin an Operator Trainee's practical training under the direction and constant supervision of an Authorized Evaluator only after the following steps have been taken:
 - a) Register the employee for Classroom Instruction.
 - b) Ensure that employee has viewed the Lift Truck safety training presentation.
2. Examples of skills that may be necessary for proficiency include, but are not limited to the following:
 - a) vehicle inspection and maintenance the Operator must perform;
 - b) controls and instrumentation: location, what they do, and how they work;
 - c) engine or motor operation;
 - d) battery charging and watering system, and fueling system procedures;
 - e) mounting and dismounting the Lift Truck;
 - f) examples of types of loads;
 - g) vehicle capacity and stability;
 - h) use in freight elevator (elevators must be rated for the truck/load weight);
 - i) stack pallets on top racks or in multiple layers;
 - j) stack pallets on floor level;
 - k) unload a truck;
 - l) fork and/or attachment adaption, operation, and limitations of their use.
 - m) any other operating instruction, warning, or precaution listed in the Operator's manual for the type of vehicle the employee is being trained to operate.
3. Examples of practical operating elements and environments that the Operator should be familiar with:
 - a) identify all site-specific obstacles/encumbrances, including overhead and wall mounted ones;
 - b) floor surfaces and/or ground conditions where the vehicle will be operated;
 - c) composition of probable loads and load stability;
 - d) load manipulation, stacking/unstacking areas;
 - e) pedestrian traffic;
 - f) narrow aisle and restricted place operation;
 - g) operating in any classified hazardous locations at your site;
 - h) operating the truck on ramps and other sloped surfaces at the work site that would affect the stability of the vehicle;
 - i) other unique or potentially hazardous environmental conditions that exist or may exist in the workplace; and
 - j) operating the vehicle in closed environments and other areas where insufficient ventilation and/or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
4. The Operator Trainee should be afforded adequate opportunity to practice their skills as necessary to become a competent Operator. The Operator Trainee must be under the constant supervision of the Authorized Evaluator during this Practical Training time. Practical Training may be carried out at

a time specifically set aside for training, or it may take place during normal routine work on the Lift Truck.

5. Operators who at the time of the introduction of this program are considered “experienced Operators” by the department’s Authorized Evaluator, do not need to receive Practical Training. However, they will need to complete Classroom Instruction. In addition, the Authorized Evaluator must perform and document an evaluation of the employee using the Evaluation for Lift Truck Operators form.
6. In the event an Operator transfers into another department where Lift Trucks are utilized, the Authorized Evaluator in that department must show the transferred employee all site-specific obstacles and encumbrances in his/her new department. Additionally, the Operator must be able to perform the skill sets listed to the satisfaction of the Evaluator within the new department to be deemed qualified in that department. This evaluation must be documented using the Evaluation for Lift Truck Operators form. A copy of this completed evaluation form must be submitted to EH&S for its records and for verification to issue an updated Lift Truck Operator Endorsement for the transferred employee.

REFRESHER TRAINING

During the course of Lift Truck operation, the supervisor or Authorized Evaluator may observe the employee performing an unsafe act, such as riding with a load too high or traveling at an unsafe speed, etc. The supervisor making the correction should point out the incorrect manner of operation of the Lift Truck or other unsafe act being conducted; tell or show the employee how to do the operation correctly; and direct the employee to conduct the operation correctly in the future.

Where there are multiple on-the-spot corrections, the supervisor or Authorized Evaluator may decide to conduct more structured documented refresher training. Documented refresher training, followed by an on-the-job evaluation of the effectiveness of that training, can be conducted to ensure that the Operator has the knowledge and skills needed to operate the Lift Truck safely.

Refresher training must be provided to the Operator when:

1. The Operator has been observed to repeatedly operate the vehicle in an unsafe manner.
2. The Operator has been involved in an accident or near-miss incident.
3. The Operator has received an evaluation that reveals not operating the truck safely.
4. The Operator is assigned to drive a different type of truck.
5. A condition in the workplace changes in a manner that could affect safe operation of the truck.

Refresher Training Procedure:

Topics that may be covered by a department’s Authorized Evaluator may include, but not limited to the following information:

- Common unsafe situations encountered in the workplace;
- Unsafe operating methods observed or known to be used;
- The need for constant attentiveness to the vehicle in use;
- How changing workplace conditions can affect Lift Truck operation;

- Standard operating rules for the work site;
- Other pertinent subjects related to Lift Truck operations.

Such refresher training sessions must be documented using the form, and kept on file. After a refresher training session has been documented, the Authorized Evaluator must re-evaluate the Operator in his or her work and document it.

On-the-Job Evaluations

1. The department where the employee is assigned has the responsibility to continually evaluate the Lift Truck Operator's performance. The supervisor and/or the Authorized Evaluator must also document periodic evaluations of the Operator's performance using the Evaluation for Lift Truck Operators form. The Operator Trainee must be able to perform the skill sets listed on the form with confidence and accuracy, to the Authorized Evaluator's satisfaction, to receive an acceptable evaluation.
2. Each Authorized Evaluator who also operates Lift Trucks will engage another Authorized Evaluator in his/her department to periodically evaluate his or her performance. If he or she is the sole Authorized Evaluator *in* his or her department, he or she must use the form in as a self-evaluation tool.
3. These evaluations must be performed *at least every three years* or after any refresher training. The original evaluation form must be kept on file.
4. In the event an Operator transfers into another department where Lift Trucks are utilized, the Authorized Evaluator in that department must show the transferred employee all site-specific obstacles and encumbrances in his/her new department. Additionally, the Operator must be able to perform the skill sets listed to the satisfaction of the Authorized Evaluator within the new department to be deemed qualified in that department. This evaluation must be documented using the evaluation form.

Documentation Requirements

1. *Classroom Instruction Records*
 - To show proof of successful training, Operator Trainees must sign attendance rosters and successfully complete a written exam demonstrating their understanding of the principles taught in the classroom. These records will be kept on file with the safety training records.
2. *Evaluations for Lift Truck Operators*
 - Evaluations for Operators must be kept on file.
3. *Refresher Training*
 - Refresher Training sessions must be documented as required and must be kept on file.

DEPARTMENT RESPONSIBILITIES

Department Heads in areas that utilize Lift Trucks *will*:

1. *Identify Operators and Ensure they are Trained*

Determine which employees will be required to operate Lift Trucks in the workplace. If an employee has other duties, but sometimes operates a Lift Truck, he or she must be properly trained. Ensure that Lift Truck Operators have a valid motor vehicle driver's license and that all Operators participate in the Lift Truck Training Program as required. Additionally, ensure that those employees who are not expected to operate Lift Trucks are aware that they cannot operate them without a Lift Truck Operator's Endorsement, verifying proper training and authorization.

2. Identify Types of Lift Trucks Used

Generally, if several different Lift Trucks are used in a facility, they are usually not identical. Some managers will purposely choose different types or configurations to facilitate various operations that may take place within the facility. As a result, operating controls, vehicle handling and braking ability will differ not only between various types, but also between makes, models, and sizes of Lift Trucks. If employees will be expected to operate several different Lift Trucks, then Practical Training is required on the unique handling characteristics of each vehicle operated. Employees must be evaluated on each different Lift Truck model they operate and evaluations documented

3. Appoint Authorized Evaluator(s)

An Authorized Evaluator(s) must be appointed to perform on-the-job evaluations of Lift Truck Operators in the department to comply with the OSHA requirement to continually evaluate the Operator's performance.

4. Evaluate Employees Using Lift Trucks in Their Jobs

5. Refresher Training

When unsafe acts or other workplace conditions occur, prohibit the employee from operating the Lift Truck until Refresher Training has been successfully completed and documented.

6. Maintain Documentation

Maintain documentation, including labels, signage, training records, checklists, and other required documentation, as required by this policy.

7. Provide Safety Equipment and Facilities

Provide, maintain and ensure the proper use of the necessary personal protective equipment, fire extinguishers, hoisting equipment, safety shower/eyewash stations, flammable storage facilities, Lift Truck safety equipment, etc., as required by this policy. Facilities must be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage from trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.

LIFT TRUCK APPROVALS

1. Lift Trucks must bear a label or some other identifying mark indicating approval by a nationally recognized testing laboratory. The testing laboratory listing for each Lift Truck designates the fire safety approval for the intended use of the truck.
2. There are eleven different approval designations for Lift Trucks. OSHA 29 CFR 1910.178(b) and (c) outlines these designations and their approved uses.

LIFT TRUCK CONFIGURATION

1. Attachments almost always affect rated capacity of Lift Trucks. No modifications or additions which affect capacity and/or safe operation may be performed without the manufacturer's prior written approval.
2. When approval has been granted, the capacity, operation, and maintenance instruction plates, tags, or decals must be changed accordingly;
3. When approval has not been granted or if no response is received from the manufacturer, OSHA will accept a written approval of the modification/addition from a qualified Registered Professional Engineer. A qualified Registered Professional Engineer must perform a safety analysis and address any safety or structural issues contained in the manufacturer's negative response prior to granting approval. When approval has been granted, machine data plates must be changed accordingly.
4. On every removable attachment (excluding fork extensions), a nameplate with the following information obtained from the attachment manufacturer is required:
 - a. model number
 - b. serial number on hydraulically actuated attachments
 - c. maximum hydraulic pressure on hydraulically actuated attachments
 - d. weight capacity
5. The following instructions (or equivalent) must also be inscribed on each attachment: "Capacity of Lift Truck and attachment combination may be less than capacity shown on attachment. Consult Lift Truck nameplate."
6. Departments must ensure that Lift Trucks using attachments (including fork extensions) are marked to identify the attachment(s), show the approximate weight of the truck and attachment combination, and show the capacity of the Lift Truck with attachment(s) at maximum elevation with the load laterally centered.
7. All Lift Truck nameplates and markings must be verified as being in place on the pre-operation checklist and must be maintained in a legible condition.

LIFT TRUCK OPERATIONS

A. Pre-start Requirements. Operators **will**:

1. complete pre-operational check sheet at the start of each shift used and turn it in to their supervisor. Verify that all brakes, controls, gauges, lights, seat belts, and routine operational features are in proper working order. Report any noted defects immediately to their supervisor and correct them or the Lift Truck must be tagged-out and not used until it is repaired (Note: Pre- operational check sheets must be kept on file at the department using the Lift Truck for a minimum of one year).

2. check for leaks and perform necessary Operator inspections in accordance with manufacturer's recommendations before using the truck;
3. be aware of the load capacity for the truck and not exceed it;
4. never use the Lift Truck for purposes outside manufacturer's design specifications;
5. be cognizant of the planned route and aware of areas with inadequate headroom, lighting, obstructions, and floor surface problems;
6. wear personal protective equipment in accordance with the Workplace Hazard Assessment for their work site.

B. General Operational Requirements. Operators **will**:

1. never operate any Lift Truck until the required shift inspection has been performed and documented.
2. obey plant/site-specific speeds and traffic regulations at all times, including wearing seat belts in sit-down Lift Trucks;
3. operate loaded trucks with forks no more than 6-8 inches above the ground, with the load carried low and tilted back;
4. never raise or lower loads while moving;
5. never carry anything on the overhead guard or hang anything off the guard that might obscure visibility;
6. make use of plant/site convex mirrors when approaching blind corners/intersections;
7. yield right of way to pedestrians and emergency vehicles, and avoid pedestrian lanes;
8. drive cautiously on uneven or slippery surfaces and avoid loose materials in roadways or parking lots;
9. ensure the load is pointed uphill where the gradient is greater than 10 percent;
10. all original safety equipment, including fire extinguishers, provided by the manufacturer as original equipment must be maintained unless the manufacturer approves a change;
11. never engage in stunt driving or horseplay;
12. properly secure dock board or bridge plates, and drive over them carefully and slowly with their rated capacity never exceeded;
13. approach any elevators slowly, and then enter squarely only after the elevator car is properly leveled. Once on the elevator, the truck's controls must be neutralized, the brakes set, and the power shut off, until the desired floor is reached;
14. ensure motorized hand trucks enter elevators or other confined areas with load end forward;
15. negotiate turns, by reducing speed and turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, the hand steering wheel must be turned at a moderate, even rate;
16. never drive up to anyone standing in front of a fixed object;
17. never allow any person to stand or pass under the elevated portion of any truck, whether loaded or empty;
18. never allow unauthorized riders on Lift Trucks. Only Operators wearing seat belts may ride Lift Trucks. (Note: Lift Trucks specifically designed to operate from a standing position are exempt from the seatbelt requirement);

19. use proper fall protection equipment at all times whenever operating high-rider (aka, order-picker) Lift Trucks. never ride Lift Trucks with arms or legs placed between the uprights of the mast or outside the running lines of the truck;
20. maintain a safe distance from the edge of ramps or platforms while on any elevated dock, platform, or truck bed. Lift Trucks must not be used for opening or closing freight doors; set brakes and wheel chocks in place to prevent movement of trucks, trailers, while loading or unloading. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. The flooring of trucks and trailers will be checked for breaks and weakness before they are driven onto.
21. use an overhead guard as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but not to withstand the impact of a falling capacity load.
22. use a load backrest extension whenever necessary to minimize the possibility of the load or part of it from falling rearward.
23. use only approved Lift Trucks indoors and in hazardous locations.
24. when lifting personnel using a Lift Truck, perform the lift in accordance with ANSI/ITSDF B56.1-2009, Part II, section 4.17 Elevating Personnel.

C. Loading/unloading requirements. Operators **will**:

1. ensure load is within the Lift Truck's rated capacity;
2. place load squarely on forks until load touches carriage;
3. ensure load is stable and centered on forks, and stack or tie loose or uneven loads;
4. tilt the mast back slightly when lifting load;
5. ensure when loading/unloading onto trucks that the wheels are chocked or dock clamps in place, brakes are engaged, and dock board or bridge plate loading platform is positioned properly;
6. ensure when loading/unloading onto or from racks or stacked materials, the proper safe weight or height-to-load ratio is maintained.
7. always take notice of overhead and wall mounted obstructions when elevating loads. These include but are not limited to fire extinguishers, sprinklers, pipes, electrical conduits, switches, ceiling fans, etc.
8. never perform Free Rigging or the direct attachment to or placement of rigging equipment (slings, shackles, rings, etc.) onto the tines of a Lift Truck. This type of lift does not use an approved lifting attachment. OSHA considers Free Rigging an action that could affect the capacity and safe operation of a powered industrial truck. 29 CFR 1910.178(a)(4) requires that "Modifications and additions which affect the capacity and safe operation must not be performed by the customer or user without manufacturers prior written approval."
9. use extreme care tilting the load forward or backward, particularly when High-Tiering. An elevated load must not be tilted forward except to pick up a load, or when the load is in a deposit position over a rack or stack. When stacking or tiering, use only enough backward tilt to stabilize the load.

D. Parking requirements: Operators **will**:

1. when a Lift Truck is left unattended, fully lower the carriage/forks, set controls to neutral, shut off power, and set brakes.
 - a. A Lift Truck is unattended when the Operator is 26 feet or more away from the vehicle which remains in his/her view, or whenever the Operator leaves the vehicle and it is not in his/her view.
 - b. When the Operator is dismounted and within 25 ft. of the truck still in his/her view, the carriage/forks will be fully lowered, controls neutralized, and the brakes set to prevent movement.
 - b. select flat parking surfaces, away from traffic where the vehicle does not obstruct doors, pedestrian routes, aisles, exits, fire lanes, access to stairways, handicap ramps or parking, and fire equipment at any time.
 - c. chock the wheels of the Lift Truck if the truck is parked on an incline.
 - d. remove the keys and secure the vehicle when not in use to prevent unauthorized personnel from operating the vehicle.

E. Refueling requirements. Operators **will**:

1. refuel only in assigned, ventilated areas containing no ignition sources;
2. turn off engine and allow engine to cool for a minimum of 2 minutes prior to refueling;
3. have fire suppression and cleanup equipment available;
4. extinguish smoking materials;
5. never use open flame to check fuel level;
6. try to prevent spills, clean any spills promptly, and replace fuel cap before starting or moving vehicle.
7. Follow the vehicle manufacturer's instructions for gas or propane fueling;
8. take empty propane tanks to an authorized compressed gas container disposal/storage area.
9. use acid-resistant material-handling equipment and wear corrosion-resistant personal protective equipment during battery charging/charging;
10. remove battery cap 1/4 turn to relieve pressure, then open slowly and leave open;
11. pour acid into water, not water into acid;
12. ensure that Lift Trucks have brakes applied while changing batteries.
13. use overhead hoist or equivalent material handling equipment for handling batteries, as necessary.
14. ensure that proper facilities are used for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage from trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.

MAINTENANCE OF LIFT TRUCKS

Only trained and authorized personnel must be permitted to maintain, repair, or adjust Lift Trucks; these services must be provided in accordance with manufacturer's specifications.

CONTRACTOR USE OF LIFT TRUCKS

Contractors using Lift Trucks on The Chippewa County property must do so in accordance with the Chippewa County policies.

Operator's Daily Checklist - Internal Combustion Engine Industrial Truck - Gas/LPG/Diesel Truck				
Department:		Date:		
Powered Industrial Truck ID:		Shift:		
Model #:		Inspected By:		
Serial #:		Hour Meter:		
SAFETY AND OPERATIONAL CHECKS (PRIOR TO EACH SHIFT) Have a qualified mechanic correct all problems				
Engine Off Checks	OK	Maintenance		
Leaks – Fuel, Hydraulic Oil, Engine Oil or Radiator Coolant				
Tires – Condition and Pressure				
Forks, Top Clip Retaining Pin and Heel – Check Condition				
Load Backrest – Securely Attached				
Hydraulic Hoses, Mast Chains, Cables and Stops – Check Visually				
Overhead Guard – Attached				
Finger Guards – Attached				
Propane Tank (LP Gas Truck) – Rust Corrosion, Damage				
Safety Warnings – Attached (Refer to Parts Manual for Location)				
Battery – Check Water/Electrolyte Level and Charge				
All Engine Belts – Check Visually				
Hydraulic Fluid Level – Check Level				
Engine Oil Level – Dipstick				
Transmission Fluid Level – Dipstick				
Engine Air Cleaner – Squeeze Rubber Dirt Trap or Check the Restriction Alarm (if equipped)				
Fuel Sedimentor (Diesel)				
Radiator Coolant – Check Level				
Operator's Manual – In Container				
Nameplate – Attached and Information Matches Model, Serial Number and Attachments				
Seat Belt – Functioning Smoothly				
Hood Latch – Adjusted and Securely Fastened				
Brake Fluid – Check Level				

Engine On Checks – Unusual Noises Must Be Investigated Immediately	OK	Maintenance
Accelerator or Direction Control Pedal – Functioning Smoothly		
Service Brake – Functioning Smoothly		
Parking Brake – Functioning Smoothly		
Steering Operation – Functioning Smoothly		
Drive Control – Forward/Reverse – Functioning		
Tilt Control – Forward and Back – Functioning		
Hoist and Lowering Control – Functioning Smoothly		
Attachment Control – Operation		
Horn and Lights – Functioning		
Cab (if equipped) – Heater, Defroster, Wipers – Functioning		
Gauges: Ammeter, Engine Oil Pressure, Hour Meter, Fuel Level, Temperature, Instrument Monitors – Functioning		

Operator's Daily Checklist - Electric Industrial Truck			
Department:		Date:	
Powered Industrial Truck ID:		Shift:	
Model #:		Inspected By:	
Serial #:		Hour Meter:	
SAFETY AND OPERATIONAL CHECKS (PRIOR TO EACH SHIFT) Have a qualified mechanic correct all problems			
Motor Off Checks	OK	MAINTENANCE	
Leaks – Hydraulic Oil, Battery			
Tires – Condition and Pressure			
Forks, Top Clip Retaining Pin and Heel -- Condition			
Load Backrest Extension – Attached			
Hydraulic Hoses, Mast Chains, Cables & Stops – Check Visually			
Finger Guards – Attached			
Overhead Guard – Attached			
Safety Warnings – Attached (Refer to Parts Manual for Location)			
Battery – Water/Electrolyte Level and Charge			
Hydraulic Fluid Level – Dipstick			
Transmission Fluid Level – Dipstick			
Operator's Manual in Container			
Capacity Plate Attached – Information Matches Model, Serial Number and Attachments			
Battery Restraint System – Adjust and Fasten			
Operator Protection			
Sitdown Truck - Seat Belt – Functioning Smoothly			
Man-up Truck – Fall protection/Restraining means -			
Brake Fluid – Check level			

Motor On Checks (Unusual Noises Must Be Investigated Immediately)	OK	MAINTENANCE
Accelerator Linkage – Functioning Smoothly		
Parking Brake – Functioning Smoothly		
Service Brake – Functioning Smoothly		
Steering Operation – Functioning Smoothly		
Drive Control – Forward/Reverse – Functioning		
Tilt Control – Forward and Back – Functioning Smoothly		
Hoist and Lowering Control – Functioning Smoothly		
Attachment Control – Operation		
Horn – Functioning		
Lights & Alarms (where present) – Functioning		
Hour Meter – Functioning		
Battery Discharge Indicator – Functioning		
Instrument Monitors – Functioning		

RESPIRATORY PROTECTION PROGRAM

OSHA Respiratory Protection Standard (29 CFR 1910.134)

TABLE OF CONTENTS

POLICY	2
SCOPE.....	2
PROGRAM ADMINISTRATOR.....	2
RESPONSIBILITIES	3
SELECTION PROCEDURES	3
AIR SAMPLING TESTING	4
VOLUNTARY USE	4
EMERGENCY PROCEDURES.....	4
BREATHING AIR QUALITY	5
MEDICAL EVALUATION	5
FIT TESTING.....	6
USE, MAINTENANCE & STORAGE	7
RESPIRATOR CARTRIDGE CHANGE-OUT SCHEDULE	8
SPECIFIC RESPIRATOR USE INFORMATION	8
TRAINING.....	9
PROGRAM EVALUATION	10
RECORDKEEPING	10
HAZARD ASSESSMENT LOG	11
RECORD OF RESPIRATORY USE	12
RESPIRATORY INSPECTION CHECKLIST.....	13
RESPIRATOR FIT TESTING FORM	14
INFORMATION FOR MEDICAL EVALUATIONS	15
VOLUNTARY USE OF FILTERING FACEPIECE RESPIRATORS.....	16

POLICY

Chippewa County is committed to providing its employees with a safe and healthy work environment. The guidelines established in this program are designed to aid in reducing employee exposure to occupational air contaminants. The goal is to provide employees protection from exposure to any respiratory hazard that may be encountered while performing various work assignments for Chippewa County.

Chippewa County is committed to controlling employee exposures through engineering controls, such as ventilation and substitution of less toxic materials. Proper work practices that reduce employee exposure are to be implemented as the first step of the process. When effective engineering controls are not feasible, or while they are being implemented or evaluated, respiratory protection may be required to achieve this goal.

In addition, certain program elements are required for voluntary use of disposable, filtering face-piece respirators. In all applicable situations, respiratory protection and the expenses associated with training and medical evaluations is provided at no cost to the employees.

SCOPE

This policy applies to all Chippewa County employees who may be required to work in hazardous atmospheres in which contaminants cannot be reduced by engineering controls and requires the use of respirators. This could include normal work processes or operations, maintenance activities, and during some non-routine or emergency operations such as a spill of a hazardous chemical. All employees working in areas that require the need for respiratory protection must be included in the company's respiratory protection program.

In addition, any employee who voluntarily wears a respirator when a respirator is not required is subject to the medical evaluation, cleaning, maintenance, and storage requirements of this program, and must be provided with certain information specified in this section of the program.

PROGRAM ADMINISTRATOR

The Program Administrator or Designee is responsible for implementation of the respiratory protection program. This individual has the authority to act on any and all matters relating to the operation and administration of this program and is referred to as the Program Administrator. This person or group is responsible for making sure monitoring or exposure assessments of the respiratory hazard have been completed, selection of respiratory protection options, standard operating procedures have been completed and that all records associated with the program are maintained. Other responsibilities also include having employees trained on proper use, selection, donning/doffing of the respiratory protection, proper storage and maintenance of respiratory protection equipment, conducting annual program evaluations, ensuring annual fit testing and have this program updated as necessary.

The Human Resources Division and their designees will be the Program Administrators.

RESPONSIBILITIES

Department heads are responsible for ensuring that the Respiratory Protection Program is implemented and followed in their particular areas and ensuring that the program requirements are understood by all employees. Additional duties of the department head or their designees include:

- Ensuring that employees under their supervision (including new hires) have received the medical evaluation, appropriate training and annual fit testing.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection program.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitor their work areas and operations to identify hazards.

Each employee has the responsibility to wear his or her respirator when and where required and in a manner in which they were trained.

Additional responsibilities of the employee include:

- Maintain and store their respirators as instructed in a clean sanitary location.
- Inform their supervisor if the respirator no longer fits well, or new medical conditions arise and request a new evaluation when this occurs.
- Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace.

SELECTION PROCEDURES

The Program Administrator will ensure respirators selected are to be used on site, based on the hazards to which workers are exposed, and in accordance with the OSHA Respiratory Protection Standard. The Program Administrator and/or their designees will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. A log of identified hazards will be maintained by the County. The hazard evaluations shall include:

- Identification and development of a list of hazardous substances used in the workplace by department or work process.
- Review of work processes to determine where potential exposures to hazardous substances may occur. This review shall be conducted by surveying the workplace, reviewing the process records, and talking with employees and supervisors.
- Exposure monitoring to quantify potential hazardous exposures.

The proper type of respirator for the specific hazard involved will be selected in accordance with the manufacturer's instructions. A list of appropriate respiratory protection will be maintained by the departments.

The departments must revise and update the hazard assessment as needed (i.e., any time work process changes may potentially affect exposure). If an employee feels that respiratory protection is needed during a particular activity, he or she is to contact his or her supervisor or the Program Administrator. The Program Administrator will evaluate the potential hazard and arrange for outside assistance as necessary. The Program Administrator will then communicate the results of that assessment to the employees. If it is determined that respiratory protection is necessary, all other elements of the respiratory protection program will be in effect for those tasks, and the respiratory program will be updated accordingly.

AIR SAMPLING TESTING

The best way to accurately determine the levels of chemicals or dust in the air is to perform air sampling. There are a variety of instruments and devices for measuring air contaminants. The methods for doing the air sampling accurately are usually fairly complicated and should not be done by a layperson.

Air sampling may be conducted in the breathing zone of employee(s) working at Chippewa County to evaluate the employee(s) exposure to air contaminants. The testing results can be logged on the attached Hazard Assessment Log or kept in a separate document. These results indicate the job tasks of employee(s) who are exposed to air contaminant(s) in excess of permissible exposure limits (PELs).

VOLUNTARY USE

The Program Administrator will provide all employees who *voluntarily* choose to wear either a filtering face-piece or elastomeric style respirator with the information contained in Voluntary Use of Filtering Face-piece Respirator Attachment at the end of this program.

Employees voluntarily choosing to wear a half-face-piece APR must also comply with the sections of this program relating to medical evaluation, respirator use, cleaning, maintenance and storage. The Program Administrator shall authorize all voluntary use of respiratory protective equipment as requested by workers on a case-by-case basis. Approval to wear a respirator will depend on specific workplace conditions and the results of the medical evaluation.

EMERGENCY PROCEDURES

In emergency situations where an atmosphere exists in which the wearer of the respirator could be overcome by a toxic or oxygen-deficient atmosphere, the following procedure should be followed. The locations in Chippewa County where the potential for dangerous atmosphere exist will be identified in a hazard assessment. The hazard assessment log may be used in the program or any other form consistent with OSHA's respiratory standard.

The following are general protocols involving emergency situations and respiratory protection

1. When the alarm sounds, employees in the affected area must immediately don their emergency escape respirator, shut down their process equipment, and exit the work area.
2. All other employees must immediately evacuate the building or area. Chippewa County's Emergency Action Plan describes these procedures (including proper evacuation routes and rally points) in greater detail.
3. Employees who must remain in a dangerous atmosphere must take the following precautions:
 - Employees must never enter a dangerous atmosphere without first obtaining the proper protective equipment and permission to enter from the Program Administrator or supervisor.
 - Employees must never enter a dangerous atmosphere without at least one additional person present. The additional person must remain in the safe atmosphere.
 - Communications (voice, visual or signal line) must be maintained between both individuals or all present.
 - Only individuals that are trained as first responders in Chippewa County may be authorized to act in such a manner following proper protocols.

BREATHING AIR QUALITY

For supplied-air respirators (i.e., SAR), only Grade D breathing air shall be used. Grade D breathing air may be provided in cylinders or by an air compressor system that has routine air quality checks, to ensure the quality of the breathing air being provided. Compressors used to supply breathing air must have suitable in-line air-purifying sorbent beds and filters and must have high heat alarms/shut-off, carbon monoxide monitor/alarm, oil filter/trap, and a water removal trap. A tag noting the date of most recent filter change must be signed by the employee who performed the change.

MEDICAL EVALUATION

Employees who are either required to wear respirators, or who choose to wear an APR voluntarily, must pass a medical exam before being permitted to wear a respirator on the job. Employees are **not** permitted to wear respirators until a physician or other licensed health care professional (PLHCP) has determined that they are medically able to do so. The only exception to this is the voluntary use of filtering face-piece style (dust mask) respirators. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use.

A PLHCP will provide the required respirator medical evaluations. The medical evaluation procedure is as follows:

- The medical evaluation will be conducted in accordance with regulations. The Program Administrator will provide a copy of this questionnaire to all employees requiring medical evaluations. Employees will be permitted to fill out the questionnaire on company time.
- To the extent feasible, Chippewa County will assist employees who are unable to read the questionnaire (by providing help in reading the questionnaire). When this is not possible, the employee will be sent directly to the PLHCP for medical evaluation.
- Follow-up medical exams will be granted to employees as deemed necessary by the PLHCP.
- The Program Administrator shall provide the medical clinic PLHCP with a copy of this program. Respiratory Protection, the list of hazardous substances by work area, and for each employee requiring evaluation: his or her work area or job title, proposed respirator type and weight, length of time required to wear respirator, expected physical work load (light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.
- Any employee required for medical reasons to wear a positive pressure air-purifying respirator will be provided with a powered air-purifying respirator.
- After an employee has received clearance and begun to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:
 - Employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
 - The medical clinic PLHCP or supervisor informs the Program Administrator that the employee needs to be reevaluated.
 - Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation.
 - A change occurs in workplace conditions that may result in an increased physiological burden on the employee.

All examinations and questionnaires are to remain confidential between the employee and the PLHCP.

FIT TESTING

Fit testing is required for employees who are required to wear any tight-fitting respirator and shall be conducted:

- Prior to the employee being allowed to use that type of respirator
- Annually
- When there are changes in the employee's physical condition that could affect respiratory fit (i.e., obvious change in body weight, facial scarring, etc.).

Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with several models and sizes of respirators so that they may find an optimal fit. Fit testing of PAPRs is to be conducted in the negative pressure mode.

Fit testing will be conducted as a qualitative (pass or fail) fit testing. The Program Administrator or Designee will evaluate on a case-by-case basis whether quantitative fit testing (QNFT) is required.

USE, MAINTENANCE & STORAGE

Employees performing jobs requiring the use of respirators will be instructed by their Department Head or their designee pertaining to their responsibilities in the respiratory protection program. They will be instructed in the need, use, limitations, and care or maintenance of their respirator. If additional information and/or training is required contact the Program Administrator or Designee.

- Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer.
- All employees shall conduct “**user seal checks**” (this is **NOT** the same as a “fit test”) **each time** that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which test works best for them).
- Employees are **not** permitted to wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or any condition that prevents them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the face to face-piece seal.

Respirators must be properly maintained to retain their original effectiveness. The maintenance program will consist of daily inspection, any necessary repairs, cleaning and proper storage. The wearer of the respirator will inspect it daily prior to use. Department heads or supervisors will periodically spot check respirators for fit, usage, proper storage and the respirator’s overall condition. The use of a defective respirator is not permitted and must be replaced or repaired.

The following checklist will be used when inspecting respirators:

- Face-piece: Examine for cracks, tears, holes, facemask distortion, cracked or loose lenses/face-shield.
- Head straps: Examine for breaks or tears and broken buckles/connectors.
- Valves: Examine for residue or dirt, cracks or tears in valve material.
- Filters/Cartridges: Examine for approval designation (i.e., proper cartridge for the hazard), gaskets, cracks or dents in housing.
- Supplied Air Systems (SAR): Confirm breathing air quality is at least Grade D, examine the condition of the supply hoses, hose connections and the settings on the regulators, valves and alarms.
- In addition, follow manufacturers recommendations for each type of respirator used

For any malfunction of an APR (i.e., such as chemical breakthrough, face-piece leakage, or improperly working valves), the respirator wearer will inform their supervisor that the respirator no longer functions as intended. The supervisor must ensure that the employee receives the needed parts to repair the respirator or is provided with a new respirator. Chemical breakthrough **is not acceptable** and cartridge-type respirators **must be changed prior to breakthrough occurring**. Please review the Respirator Cartridge Change-out Schedule section for more information.

During cleaning and maintenance, respirators that do not pass inspection will be removed from service and will be discarded or repaired. Repairs must be done with parts designed for the specific respirator in accordance with the manufacturers' recommendations. Respirators (except filtering face-piece types) will be cleaned according to the manufacturer's instructions.

The following procedure shall be used for cleaning and disinfecting all respirators:

- Disassemble respirator, removing any filters, canisters, or cartridges.
- Wash the face-piece and associated parts in mild detergent with warm water.
 - Do not use organic solvents as these will deteriorate the face-piece.
- Rinse completely in clean, warm water.
- Wipe the respirator with a disinfectant wipe to kill germs.
- Allow to air dry in a clean area or hand dry with a clean, lint-free cloth.
- Reassemble the respirator and replace any defective parts.
- Place in a clean, dry plastic bag or other air tight container.

Respirators must be stored in a location where they are protected from sunlight, dust, heat, cold, moisture and damaging chemicals. They shall be stored in a manner to prevent deformation of the face-piece and exhalation valve. APRs can be stored in re-sealable bags (i.e., a Ziploc gallon size bag). If the respirator is used by more than one employee, the respirator will be cleaned immediately after each use and properly stored for the next user.

RESPIRATOR CARTRIDGE CHANGE-OUT SCHEDULE

Employees wearing elastomeric face-piece (i.e., rubber or silicone) APRs with particulate filters shall change the cartridges on their respirators when they first begin to experience difficulty breathing (i.e., breathing resistance).

Employees wearing elastomeric face-piece (i.e., rubber or silicone) APRs **with chemical cartridges** shall change the filter cartridges **before** chemical break-through occurs. Break-through is the ability to detect/smell/sense the contaminant while the respirator is in place on the operator's face with an appropriate seal between the employee's face and the respirator's face-piece. Break-through occurs when the chemical cartridge is saturated with the contaminant. This condition allows the contaminant to pass through the cartridge along with the operator's inhaled breath to the inside of the respirator mask and eventually into the operators' lungs/body. The purpose of this change-out schedule is to remove the used chemical cartridges before break-through occurs while the operator is wearing the respirator. Employee exposure levels must be known prior to the development of a proper change-out schedule.

SPECIFIC RESPIRATOR USE INFORMATION

None Detected, Trace levels or < 20 ppm (i.e., parts per million).

If the concentrations of contaminants are none detected, trace levels or < 20 ppm then the respirator chemical cartridges must be changed weekly.

< 200 ppm.

If the concentrations of contaminants are < 200 ppm then the respirator chemical cartridges must be changed after every 8 hours of use.

At or in excess of the established limits.

If the concentrations of contaminants are near, at, or in excess of an established limit, then the chemical cartridges must be changed per the manufacturer's recommendations. These higher levels of contaminants in an operator's breathing zone will require more frequent chemical cartridge change-out to occur (i.e., less than eight hours, possibly as low as one hour maximum, dependent on contaminant, concentration, breathing rate and manufacturer of the cartridges used).

Other considerations for cartridge change-outs that can be utilized:

- If the chemical's boiling point is less than 65C (149F), regardless of low level exposures, the cartridges must be changed at shift end (after every eight hours). Chemicals with this characteristic can desorb from the charcoal overnight and cause exposure to employees donning the respirator the next day.
- If the chemical's boiling point is > 70C (158F) and the concentration is less than 200 ppm, you can expect a cartridge service life of eight hours at a normal work rate.
- Cartridge service life is inversely proportional to work rate. Heavy work efforts will speed up the service life of a chemical cartridge thus reducing its time of usage.
- Reducing concentration by a factor of ten will increase cartridge service life by a factor of five.
- Humidity above 85% will reduce cartridge service life by 50%.
- Some chemical cartridges may be available with an end-of-service life indicator on them.

Mixtures of chemicals currently cannot be utilized to determine a chemical cartridge's change-out schedule. It is recommended to utilize the most toxic component at the highest concentration for the change-out determination and provide additional protection (i.e., reduce the time in use). Use the supplying manufacturers recommended service life. Do not use another manufacturers' recommendation for a chemical cartridge's service life other than that provided by the specific manufacturer.

When chemicals with poor warning properties are present, employees should not utilize air-purifying respirators, an air supplying respirator is the respirator of choice.

TRAINING

The Program Administrator or their designees will provide training to respirator users and their department head on the contents of this Respiratory Protection Program. Employees will be trained prior to using a respirator in the workplace. Department heads will also be trained prior to using a respirator in the workplace or prior to supervising employees that must wear respirators.

The training course will cover the following topics:

- The site-specific Company Respiratory Protection Program
- OSHA's Respiratory Protection standard
- Workplace respiratory hazards encountered and their health effects
- Proper selection and use of respirators
- Limitations of respirators
- Respirator donning and user seal (fit) checks
- Fit testing
- Emergency use procedures
- Maintenance and storage
- Medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed (i.e., if they change departments and need to use a different respirator). Employees must demonstrate knowledge in that the training they received was effective (i.e., through hands-on exercises, written test). The training must be documented.

PROGRAM EVALUATION

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records.

RECORDKEEPING

A written copy of this program and the referenced OSHA standard are kept on the employee portal and available to all employees who wish to review it. Also maintained are copies of training and fit test records. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.

The Program Administrator or Designee will also maintain a copy of the PLHCP written recommendation regarding each employee's ability to wear a respirator (medical evaluation) for all employees covered under the respirator program. The completed medical questionnaire and the PLHCP documented findings are confidential and will remain at the medical clinic.

HAZARD ASSESSMENT LOG

Department	Contaminants	Exposure Level (8 hr TWA*)	PEL	Controls

* Summarized from Industrial Hygiene report provided by **Responsible Person**.

RECORD OF RESPIRATORY USE

Required Respirator Use at Chippewa County	
Type of Respirator	Department/Process

RESPIRATORY INSPECTION CHECKLIST

Type of Respirator:	Location:
Respirator Issued to:	Type of Hazard:
Face piece	<input type="checkbox"/> Cracks, tears, or holes <input type="checkbox"/> Face mask distortion <input type="checkbox"/> Cracked or loose lenses/face shield
Head straps	<input type="checkbox"/> Breaks or tears <input type="checkbox"/> Broken buckles
Valves:	<input type="checkbox"/> Residue or dirt <input type="checkbox"/> Cracks or tears in valve material
Filters/Cartridges:	<input type="checkbox"/> Approval designation <input type="checkbox"/> Gaskets <input type="checkbox"/> Cracks or dents in housing <input type="checkbox"/> Proper cartridge for hazard
Air Supply Systems	<input type="checkbox"/> Breathing air quality/grade <input type="checkbox"/> Condition of supply hoses <input type="checkbox"/> Hose connections <input type="checkbox"/> Settings on regulators and valves
Rubber/Elastomer Parts	<input type="checkbox"/> Pliability <input type="checkbox"/> Deterioration

Inspected by:	Date:
Action Taken:	

RESPIRATOR FIT TESTING FORM

Name: _____ Initials: _____

Type of qualitative/quantitative fit test used: _____

Name of test operator: _____ Initials: _____

Date: _____

Respirator Mfr./Model/Approval no. Size Pass/Fail or Fit Factor

Note: "Fit factor" is numerical result of quantitative fit test from instrument reading

1. _____ S M L P F _____

2. _____ S M L P F _____

3. _____ S M L P F _____

4. _____ S M L P F _____

Clean Shaven? Yes____ No____ (Fit-test cannot be done unless clean-shaven)

Medical Evaluation Completed? Yes____ No____

NOTES: _____

This record indicates that you have passed or failed a qualitative or quantitative fit test as shown above for the particular respirator(s) shown. Other types will not be used until fit tested.

Employee Signature: _____ Date: _____

INFORMATION FOR MEDICAL EVALUATIONS

This form may be used by the employer to give to your medical provider, information on respirator use by your employees, but it is not a required form. You can also consult directly with your medical provider and discuss the information below. You must also give the medical provider a copy of your written respiratory program and copy of the Respirators Rule

Specific Respirator Use Information

Employee Name: _____

Company name: _____

Employee job title: _____

Company Address: _____

Company contact person and phone

1. Will the employee be wearing protective clothing and/or equipment (other than the respirator) when using the respirator?

Yes/No _____ If "Yes," describe protective clothing and/or equipment:

2. Will employee be working under hot conditions (temperature exceeding 77°F)?

Yes/No _____ If "Yes", describe nature of work and duration:

3. Will employee be working under humid conditions? Yes / No _____

4. Describe any special or hazardous conditions the employee could encounter when using the respirator (for example, confined spaces, life-threatening gases).

VOLUNTARY USE OF FILTERING FACEPIECE RESPIRATORS

Review prior to voluntary use of respiratory equipment

1. FILTERING FACEPIECE RESPIRATORS AND OSHA REQUIREMENTS

Filtering Facepiece Respirators (also called dust masks) are considered true respirators according to OSHA. N95 refers to the NIOSH certification of the filter media that comprises the facepiece. N means that it is not oil resistant and 95 refers to it being 95% effective at filtering particles at the 0.3 micron level. N95 is the most common type of filtering facepiece respirator. Other NIOSH-certified filtering facepiece respirators include R95, P95, N100 and P100.

Voluntary use is defined as use for employee comfort purposes only. No hazard exists that requires use of a respirator and the use of the respirator does not produce any additional hazard. At the County, the only acceptable respirator for voluntary use is the filtering facepiece respirator. Use of any other type of respirator, for example, a ½ face elastomeric respirator with cartridges requires full compliance with the Respirator Policy.

If an employee is required to wear a filtering facepiece respirator (to protect against a respiratory hazard or as required by the employer), full compliance with the Respirator Policy is required, which includes a medical evaluation a licensed health care professional, respirator training and fit testing.

OSHA requires that all employees voluntarily wearing filtering facepiece respirators receive basic information on respirators as provided in Appendix D of their Respirator Standard, 1910.134 (which is found at the end of this document). – Review Appendix D with employee. Signature of this training form certifies receipt of Appendix D to 1910.134, as required by OSHA.

2. HOW TO USE AND WEAR A FILTERING FACEPIECE RESPIRATOR

Inspect respirators prior to use, including new units out of the box. Check for rips and tears. Make sure straps are securely attached, nose piece is attached properly, and that no obvious defects exist.

Proper use of the respirator is important. Without it, the respirator is ineffective against the workplace contaminants. Follow manufacturers' instructions for use. – Review manufacturer's instructions with employee. Have employee demonstrate proper use.

Beards and other facial hair negate the effectiveness of the respirator because they prevent an adequate seal between the respirator and the face. Skin afflictions, such as dermatitis, or scars, could affect the ability to produce a seal.

User seal checks confirm that an adequate seal with the face is achieved when the mask is applied. User seal checks should be done every time the mask is put on and every time it is re-adjusted on the face. – Review manufacturers' instructions for conducting user seal checks with employee.

3. LIMITATIONS OF PPE

Filtering facepiece respirators are only useful for protection against particulates. They are not to be used in oxygen-deficient atmospheres or atmospheres that contain hazards that are immediately dangerous to life and health (IDLH). Odors will still be noted when using the respirator because it does not filter out gases or vapors. The respirator will not provide adequate protection if a good seal with the face is not achieved.

4. CARE, MAINTENANCE, USEFUL LIFE AND DISPOSAL OF PPE

Filtering Facepiece Respirators are considered disposable PPE. They cannot be cleaned, especially when they become wet or soiled. They cannot be shared with other employees.

New respirators should be stored in a clean, dry location, protected from sunlight, chemicals, water, and physical damage.

Respirators can only be used in conjunction with a written respiratory protection program.

Appendix D to Sec. 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

Employee Name: _____ Signature: _____ Date: _____

SILICA EXPOSURE CONTROL PLAN

Respirable crystalline silica (29 CFR 1926.1153)

TABLE OF CONTENTS

DEFINITIONS	1
POLICY	2
RESPONSIBILITIES	2
CONTROLS AND EXPOSURE PREVENTION	3
ASSESSMENT	5
PERFORMANCE OPTION	6
SCHEDULED MONITORING OPTION	6
MEDICAL SURVEILLANCE	7
TRAINING	8
RECORDKEEPING	8
SITE SPECIFIC SILICA EXPOSURE CONTROL PLAN	9
SILICA EXPOSURE CONTROL PLAN	10

DEFINITIONS

Action level: concentration of airborne respirable crystalline silica of 25 µg/m³, calculated as an 8-hour TWA.

Competent person: an individual who is capable of identifying existing and foreseeable respirable crystalline silica hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them. The competent person must have the knowledge and ability necessary to fulfill the responsibilities set forth in paragraph (g) of this section.

Demonstrated Competency: an employee can demonstrate and understand the educational material provided.

Employee exposure: exposure to airborne respirable crystalline silica that would occur if the employee were not using a respirator.

High-efficiency particulate air [HEPA] filter: a filter that is at least 99.97 percent efficient in removing mono-dispersed particles of 0.3 micrometers in diameter.

Objective data: information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating employee exposure to respirable crystalline silica associated with a particular product or material or a specific process, task, or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of material, control methods, work practices, and environmental conditions in the employer's current operations.

Physician or other licensed health care professional [PLHCP]: an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular health care services required by paragraph (h) of this section.

Respirable crystalline silica: quartz, cristobalite, and/or tridymite contained in airborne particles that are determined to be respirable by a sampling device designed to meet the characteristics for respirable-particle-size-selective samplers specified in the International Organization for Standardization (ISO) 7708:1995: Air Quality – Particle Size Fraction Definitions for Health-Related Sampling.

POLICY

Chippewa County is committed to providing a safe work environment for all employees. This commitment includes ensuring every reasonable precaution is taken to protect our employees (and others) from the adverse health effects associated with exposure to silica.

The guidelines set forth in this program are to be adhered to by all management and employees for protection against exposure to silica. The Silica Program has been established to assist the Chippewa County in meeting compliance with the standard, thereby protecting our employees.

The Human Resources Division will be the Program Administrator(s) in addition to the Highway Deputy Commissioner.

RESPONSIBILITIES

The Program Administrator(s) and/or their designees shall:

- Regularly evaluate new equipment and technologies that become available or as appropriate to suppress dust or reduce amounts of silica exposure to employees
- Implement a suitable respirable silica exposure monitoring program. The purpose of the program will ensure quantifiable silica exposure data is available for all associated work activities.
- Ensuring project and/or task specific control measures are developed communicated and effectively implemented as appropriate.

- Ensuring that all employees receive the necessary education and training related to this Policy prior to performing their work tasks associated with potential silica exposure.
- Maintaining applicable records, including, but not limited to, exposure sampling, employee monitoring, inspections, training and other forms required under the entity's respiratory program.
- Annually review this policy which includes, but is not limited to, site specific tasks, exposure monitoring data, regulatory standards, and any new silica dust mitigation technologies.

MANAGERS, SUPERVISORS, AND/OR FORMAN SHALL:

- Ensure their staff with potential exposure to silica have access to this policy and proper work protocols to mitigate exposures to silica.
- Ensure that all the tools, equipment, PPE and materials (*including water*) necessary to control silica dust exposure are in good working order prior to allowing work activities.
- Ensure that all workers have received the necessary education and training. As appropriate, each supervisor must ensure that workers are available to "demonstrate competency" for identified tasks.
- Ensure that workers adhere to the project/task specific control measures within this policy.
- Coordinate work activities with the Owner/Prime Contractor as required, and/or otherwise implementing the controls necessary to protect others who could be adversely effected by projects associated with this policy.

EMPLOYEES SHALL:

- Know silica dust exposure hazards
- Use any assigned protective equipment and mitigation tools in an effective and safe manner
- Reporting unsafe acts, improperly used equipment, or any other hazards associated with this policy

CONTROLS AND EXPOSURE PREVENTION

When determining measures to reduce or eliminate worker exposure to silica dust the hierarchy of controls will be used in the following order:

- Elimination and Substitution
- Engineering
- Administrative
- Personnel Protection Equipment (PPE)

SUBSTITUTION & ELIMINATION

Whenever feasibly possible, Chippewa County will substitute products containing silica with products that do not contain (or contain a lower percentage of) crystalline silica. Chippewa County recognizes the importance of planning work in order to minimize the amount of silica dust generated. During the

planning phases of a project, Chippewa County will advocate for the use of methods that reduce the need for cutting, grinding, or drilling of concrete surfaces.

ENGINEERING CONTROLS

Engineering controls are those controls which aim to control or otherwise minimize the release of crystalline silica. The most common engineering methods include Local Exhaust Ventilation (LEV) and Wet Dust Suppression (WDS).

LEV systems are, in some circumstances, an option to control silica exposure. LEV systems are generally comprised of a shroud assembly, a hose attachment, and a vacuum system. Dust-laden air is collected within the shroud, drawn into the hose attachment, and conveyed to the vacuum, where it is filtered and discharged.

When LEV systems are used the following systems and safe work practices shall be followed:

- Vacuum attachment systems that capture and control dust at its source whenever possible.
- Dust control systems will be maintained in optimal working condition.
- Grinding wheels will be operated at the manufacturer's recommended RPM (operating in excess of this can generate significantly higher airborne dust levels).
- HEPA or good quality, multi-stage vacuum units designed to capture silica dust will be used in accordance with the manufacturer's instructions.
- Whenever possible, concrete grinding will be completed when the concrete is wet or using the wet method.

WDS Systems or Wet Methods are used to dampen or wet the surface in order to mitigate respirable dust and silica exposure. When standard retrofit attached systems are not available similar effects can also be achieved by manually wetting the surface.

When WDS systems are used the following systems and safe work practices shall be followed:

- If water is not readily available on the specific project, the project supervisor will arrange to have a water tank delivered to the site for use.
- Pneumatic or fuel (i.e. gasoline) powered equipment will generally be used instead of electrically powered equipment if water is the method of dust control, unless the electrical equipment is specifically designed to be used in such circumstances.
- Pressure and flow rate will be controlled in accordance with the tool manufacturer's specifications.
- When sawing concrete, tools that provide water directly to the blade will be used if possible.
- Wet slurry will be cleaned from work surfaces when the work is complete, if/when necessary.

Booths or Equipment Cabs can be designed to mitigate respirable dust and silica exposure. If they are used the following shall be considered:

- It is maintained as free as practicable from settled dust
- It has door seals and closing mechanisms that work properly
- It has gaskets and seals that are in good condition and working properly;

- It is under positive pressure maintained through continuous delivery of fresh air;
- It has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 µm range (e.g., MERV-16 or better)
- It has heating and cooling capabilities

ADMINISTRATION CONTROLS

Administrative controls minimize the release of silica through work procedure and work methods. Common examples of administrative controls include, but are not limited to:

- Warning Signs
- Rescheduling of work avoiding employee exposure
- Relocating unprotected workers

When administrative controls are used the following systems and safe work practices shall be followed:

- When working alongside or with contractors, suitable exposure control strategies will be discussed and determined. As needed additional protocols or systems may be implemented to control over exposures.
- Appropriate housekeeping practices, restricted work areas, hygiene practices, training and supervision procedures/standards will be determined.
- As necessary, barriers will be erected around known silica dust generating activities, and/or warning signs will be posted.
- When necessary or able, work activities will be scheduled to minimize the silica overexposures.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment shall be used as a last resort where engineering and administration controls are not feasible. Personal protective equipment and clothing can help further reduce our employee's exposure to silica dust.

When exposure limits are exceeded, fitted air purifying respirators will be selected to minimize exposure to silica dust. When working indoors or in other areas with poor ventilation, a full-face respirator may be required.

In addition to respiratory PPE, protective clothing coveralls may be used and/or required to help prevent the contamination of the worker's personnel clothing.

For additional information refer to the Chippewa County's Respiratory Program.

ASSESSMENT

A variety of methods will assist in assessing possible and actual silica exposures. These methods will include, but may not necessarily be limited to:

- Reviewing objective data/reports/testing of related tasks that perform exact or similar job tasks to Chippewa County

- Regularly consulting with the safety consultants or other entities that perform similar work.
- Perform any necessary industrial hygiene testing as suggested or required by the regulatory standards

PERFORMANCE OPTION

Chippewa County may assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to respirable crystalline silica.

SCHEDULED MONITORING OPTION

When changes in equipment or process dictate the need, or show an increase silica exposure initial monitoring can be completed. The monitoring shall be conducted to:

- Assess the 8 hour TWA of exposure of one or more personal breathing zone air samples
- Reflect exposures of each affected employee or job classification
- Ensure the highest example of exposure to respirable crystalline silica is tested
- Meet the methods of sample analysis with Appendix A 1926.1153
- Allow affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to respirable crystalline silica. They must also be provided protective equipment necessary for the observation.

SCHEDULED MONITORING ACTIONS

- If scheduled monitoring indicates that employee exposures are below the action level, the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.
- Where the most recent exposure monitoring indicates that employee exposures are at or above the action level but at or below the PEL, the employer shall repeat such monitoring within six months of the most recent monitoring.
- Where the most recent exposure monitoring indicates that employee exposures are above the PEL, the employer shall repeat such monitoring within three months of the most recent monitoring.

NON-INITIAL MONITORING

Where the most recent (non-initial) exposure monitoring indicates that employee exposures are below the action level, the employer shall repeat such monitoring within six months of the most recent monitoring until two consecutive measurements (taken seven or more days apart) are below the action level, at which time the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.

ADDITIONAL MONITORING

The employer shall reassess exposures whenever a change in the production, process, control equipment, personnel, or work practices may reasonably be expected to result in new or additional exposures at or above the action level, or when the employer has any reason to believe that new or additional exposures at or above the action level have occurred.

NOTIFICATION OF MONITORING

Within five working days after completing (or receiving) an exposure assessment, the affected employees must be notified in writing of the results of that assessment or posted results must be in a location accessible to all affected employees.

When an exposure assessment indicates exposures above PEL, the notification shall describe in the written notification any corrective action being done to reduce employee exposure below the PEL.

MEDICAL SURVEILLANCE

If a job task requires the use of a respirator for 30 or more days per year for Chippewa County due to exposure to Silica the employee shall have medical surveillance available at no cost to the employee, and at a reasonable time and place.

All medical examinations shall be performed by a PLHCP. The initial examination includes:

- An initial baseline medical exam within 30 days after initial assignment unless employee has provided a medical examination that meets the requirements of this section in the last three years
- A medical and work history, with emphasis on: past, present, and anticipated exposure to respirable crystalline silica, dust, and other agents affecting the respiratory system; any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of tuberculosis; and smoking status and history;
- A physical examination with special emphasis on the respiratory system;
- A chest X-ray in accordance with 1926.1153
- A pulmonary function test in accordance with 1926.1153
- Testing for latent tuberculosis infection
- Any other tests deemed appropriate by the PLHCP.

Periodic examinations will be conducted at least every three years or more frequently if recommended by the PLHCP. The following information should be provided to the PLHCP:

- A copy of standard 29 CFR 1926.1153
- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to respirable crystalline silica;
- The employee's former, current, and anticipated levels of occupational exposure to respirable crystalline silica;
- A description of any personal protective equipment used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and

- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of the employer.

Chippewa County shall ensure that the PLHCP explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of each medical examination performed. The written report shall contain:

- A statement indicating the results of the medical examination
- Any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to respirable crystalline silica
- Any medical conditions that require further evaluation or treatment
- Any recommended limitations on the employee's use of respirators

TRAINING

Prior to performing activities, or working on project sites where personnel could be exposed to silica dust, Chippewa County will ensure that personnel receive appropriate education and training. As necessary, personnel will be trained to a level of "demonstrated competency". The training will include, at minimum:

- The health hazards associated with exposure to respirable crystalline silica;
- Specific tasks in the workplace that could result in exposure to respirable crystalline silica;
- Specific measures the employer has implemented to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and respirators to be used;
- The contents of 1926.1153
- The identity of the competent person designated by the employer
- The purpose and a description of the medical surveillance program required under 1926.1153
- Where a readily accessible copy of this section can be found

RECORDKEEPING

AIR MONITORING DATA

Chippewa County will maintain an accurate record of all exposure measurements taken to assess employee exposure to respirable crystalline silica which will include the following:

- The date of measurement for each sample
- The task monitored
- Sample & analytical methods used
- Number, duration, and results of samples taken
- Identity of the lab that performed analysis
- Type of PPE worn
- Name and job classification of all employees represented by monitoring indicated which employees were actually monitored

OBJECTIVE DATA

All objective data relied on for this program will be maintained. The record will include:

- The crystalline silica-containing material in question;
- The source of the objective data;
- The testing protocol and results of testing;
- A description of the process, task, or activity on which the objective data were based; and
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.
- The employer shall ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020.

MEDICAL SURVEILLANCE RECORDS

All medical surveillance records will be maintained and include:

- An accurate record for each employee covered by medical surveillance under 1926.1153.
- Name and social security number;
- A copy of the PLHCPs' and specialists' written medical opinions; and
- A copy of the information provided to the PLHCPs and specialists
- The employer shall ensure that medical records are maintained and made available in accordance with 29 CFR 1910.1020.

SITE SPECIFIC SILICA EXPOSURE CONTROL PLAN

Chippewa County has an attached Silica Exposure Control Plan which identify safe work practices and control methods to maintain employee safety and reduce any potential silica exposure. The plan will start on page 10 of this program.

SILICA EXPOSURE CONTROL PLAN

<i>Department</i>	<i>Task</i>	<i>Control Methods</i>	<i>Respirator Required</i>	<i>Max Time Allowed</i>	<i>Additional Notes/ Procedures</i>
Highway	Walk-Behind Saw or Portable	Use Saw with Water Delivery System	NO	N/A	<ul style="list-style-type: none"> ✓ Clean up any major slurry before it dries ✓ Water rate must flow enough to reduce visible dust
Highway	Pneumatic Hammer Drill	Continuous Water Supply	NO	N/A	<ul style="list-style-type: none"> ✓ Water rate must flow enough to reduce visible dust
Highway	Pneumatic Powered Chipping Tools	Continuous Water Supply	NO	N/A	<ul style="list-style-type: none"> ✓ Water rate must flow enough to reduce visible dust
Highway	Crushing Machine	Enclosed booth during operations away from operations	NO	N/A	<ul style="list-style-type: none"> ✓ Periodic water applied to reduce dust at pit

<i>Department</i>	<i>Task</i>	<i>Control Methods</i>	<i>Respirator Required</i>	<i>Max Time Allowed</i>	<i>Additional Notes/ Procedures</i>
Highway	Walk Behind Router	Vacuum system attached to Router	NO	N/A	<ul style="list-style-type: none"> ✓ Vacuum shall be maintained per manufacturer's instructions ✓ Max time performing task at 1 hour 15 minutes per day ✓ If wind present route cracks to follow wind as feasible
Highway	Lance/Wand – Blow out cracks	Walk behind router must be used with Vacuum prior to this activity	NO	N/A	<ul style="list-style-type: none"> ✓ Router with vacuum shall be used prior to using compressed air lance ✓ Max time performing task at 1 hour 15 minutes per day ✓ If wind present blow cracks to follow wind
Highway	Jackhammer	Continuous Water Supply	NO	N/A	<ul style="list-style-type: none"> ✓ Water rate must flow enough to reduce visible dust
Highway	Heavy Equipment & Utility Vehicles (<i>demolishing, abrading or fracturing</i>)	Apply water and/or dust suppressants as necessary to minimize dust emissions	NO	N/A	<ul style="list-style-type: none"> ✓ Water rate must flow enough to reduce visible dust

<i>Department</i>	<i>Task</i>	<i>Control Methods</i>	<i>Respirator Required</i>	<i>Max Time Allowed</i>	<i>Additional Notes/ Procedures</i>
Highway	Asphalt Zipper	Used with Water Delivery System	NO	N/A	✓ Water rate must flow enough to reduce visible dust
Highway	Small Sandblast Cabinet	Enclosed blasting during operations	NO	N/A	