MWS Solutions Inc.
EMPLOYEE HEALTH, SAFETY & ENVIRONMENT POLICIES

2026

MWS Site Safety Inspection

MWS Hire On Form

# TAB 1-HEALTH & SAFETY POLICY

The management of MWS Solutions Inc. ("MWS") is committed to the Health and Safety of its employees, and the protection of the Environment in all aspects of our operation. Our number one commitment is to provide a safe, healthy work environment for all employees. All supervisors and workers must be dedicated to fulfilling this objective and reducing risk, hazards and injury.

MWS, as an employer, is ultimately responsible for worker health and safety. We are dedicated to our leadership role and accept our responsibility to strive toward the elimination of workplace injury and illness and continual improvement.

As an officer of MWS, I give you my personal promise that every reasonable precaution will be taken for the protection of workers.

Management will ensure all employees follow the law, our policies and procedures, and work safely in the performance of their tasks and receive training on their specific work functions to ensure Health, Safety and Environmental competence.

Supervisors will be held accountable to ensure that safe and healthy work conditions are maintained for the safety of workers under their supervision. Supervisors are responsible for ensuring that machinery and equipment are safe and that workers work in compliance with established safe work practices and procedures.

Workers are responsible for conducting their activities in a manner to protect their own Health and Safety and that of others by working in compliance with the Occupational Health and Safety Act and applicable Regulations and with safe work practices and procedures established by this company, its clients, subcontractors and general contractors.

Commitment to Health, Safety & the Environmental practices and striving for continual improvement is an integral part of this organization, from the officers to the workers.

This policy statement must be reviewed annually, dated, signed by the highest level of management at the workplace and posted in a conspicuous location.

It was reviewed February 2, 2026, by the Joint Health & Safety Committee. No revisions were made.

January 1, 2026

Jason McKellar, President

# TAB2-ENVIRONMENTAL POLICY STATEMENT

The Management of MWS Solutions Inc. ("MWS") is committed to incorporating sound environmental practices into its construction activities. It pledges to adhere to the following principles in the conduct of its activities and operations.

- Substitution of chemicals or processes with less hazardous ones to minimize exposure to the environment.
- Reducing the discharge of emissions of toxic or hazardous substances or other contaminants with the goal of working towards the ultimate elimination of such discharges and emissions.
- Educate workers in order that they understand and share in the responsibility for monitoring and protecting the environment.
- Strive to meet or exceed environmental regulations requirements to its operation and that of customer and neighborhoods.
- Inspect and audit project activities to ensure adherence to all legislative and client standards and regulations and good environmental practices.

January 1, 2026

Jason McKellar, President

# TAB 3-ALCOHOL, PRESCRIPTION DRUGS, AND MEDICAL MARIJUANA POLICY

## POLICY

MWS Solutions Inc. is committed to maintaining a safe work environment for all employees and those in the public who may be affected, while ensuring that all employees are treated fairly and with respect. Everyone who works for and with our Company is expected to understand the risks of alcohol, prescription drug, and medical marijuana use to workplace safety, and to be able to identify and respond to those risks in compliance with this policy. Employees are expected to comply directly with this policy and any supporting Company programs. Contractors who conduct work on behalf of our Company are expected to develop and enforce comparable policies and programs to manage alcohol, prescription drugs and medical marijuana risks among their employees.

This policy statement must be reviewed annually, dated, signed by the highest level of management at the workplace and posted in a conspicuous location.

## PRESCRIPTION DRUGS, MEDICAL MARIJUANA AND ALCOHOL USE

MWS Solutions Inc. has adopted a ZERO tolerance policy towards the use of street drugs, alcohol, and the issue of prescription drugs/medical marijuana and other substances.

It has long been recognized that the use of illegal drugs, alcohol, medications, medical marijuana and other substances can significantly impair a person's ability to work in a safe manner.

For this reason, workers believed to be under the influence of drugs/alcohol will be asked to stop working immediately and may be required to leave the site immediately. MWS will arrange transportation to get you home safely.

Employees who are taking prescribed medication/medical marijuana which could impair their ability to work safely are required to notify the health & safety manager and their supervisor of the prescription contents prior to resuming work so accommodation can be made.

This policy is designed to ensure your continued safety and the safety of your fellow workers. Although this may seem intrusive to some, it is our moral and legislated responsibility to ensure your safety. We take this responsibility seriously, and look forward to your cooperation in this matter

Personnel affected by alcohol/prescription drugs and medical marijuana on a construction site are much more likely to cause injuries to themselves or others, and damage to equipment or the environment. For this reason, a policy must be in place to ensure that safety remains the No.1 concern in the workplace.

No person under the influence of, or carrying, alcoholic beverages is to enter, or knowingly be permitted to enter, the work site. Alcohol (unless contained in sealed (unopened) packaging, and secured in vehicle for transfer to home or official company-sanctioned event
No person under the influence of, or carrying, an illicit drug is to enter, or knowingly be permitted to enter, the work site.
The use of alcohol and other drugs (not prescribed by a physician} on a job or during work hours will result in disciplinary action.
Medical Prescribed Marijuana accommodations will be same as any other prescribed drug

For a policy to work, all parties must accept and fulfill their appropriate responsibilities. The following roles and responsibilities are typical of what can be expected from the various parties involved.

THE CONSTRUCTOR:

The constructor has the overall responsibility for the construction site and must therefore set the standard to be followed.
This standard does not only apply to the constructor's employees, but also to subcontractors and their employees.

SUBCONTRACTORS:

The successful bidder must include the above noted policy on alcohol, prescription drugs and medical marijuana in their health and safety policy and program in reference to employees entering or on the worksite. The successful bidder will also convey this information to employees when they first enter the site and shall apply this requirement to all employees equally and continuously throughout their operations on the project.

WORK RULES:

2.1. All employees will be informed regarding this policy at the time of employment and additionally it will be discussed periodically at "tailgate" safety meetings.

2.2. An employee who has a substance problem is encouraged to seek immediate assistance. The MWS Solutions Inc. Health and Safety Manager will provide the employee with the name and address of local agencies or facilities that are equipped to provide the rehabilitation assistance needed by the employee. Your union will also be able to assist you with a referral.

January 1, 2026

Jason McKellar, President

# TAB 4-WORKPLACE VIOLENCE AND HARASSMENT POLICY AND PREVENTION PROGRAM

## ORGANIZATIONAL COMMITMENT

MWS Solutions Inc. ("The Business") is committed to providing a working environment that is safe, secure, and free from threats, intimidation, harassment, and violence.

We maintain a zero-tolerance approach to any form of physical, sexual, emotional, verbal, or psychological abuse, nor any form of neglect, violence, or harassment.

As such, the Business will not tolerate this behaviour in any shape or form and will take all reasonable and practical measures to protect workers.

This policy applies to all the Business's workers, including full-time, temporary and contract staff, as well as to any volunteers, students, interns, and apprentices. This also includes any threats, harassment/violence, or abuse from clients towards workers, and all such incidents must be reported and will be dealt with in the same manner as internal incidents. This policy applies to every level of our organization and to every aspect of the workplace environment, including events that occur outside of the physical workplace, such as during business trips and staff events, and where applicable, to digital work environments. It is unacceptable for workers or contractors working on the Business's behalf to engage in harassing and violent behaviour in the workplace or when interacting with clients, suppliers, service providers, potential clients, or anyone with whom they have professional dealings with.

Managers, supervisors, volunteers, and workers are expected to adhere to this policy and to ensure that measures and procedures are followed by all and have been provided with the necessary training, instruction, and information necessary to protect themselves against workplace harassment and violence.

Every worker is responsible for taking measures to prevent workplace violence and harassment and must promptly report any of these acts, experienced or observed, that threaten, or are perceived to threaten, a safe working environment to their immediate manager, supervisor, the Human Resources or the third party, designated by the company. Workers will not be penalized or disciplined for reporting an incident or for participating in an investigation involving workplace harassment and/or violence. To get further assistance, a worker can speak to their immediate supervisor or contact the Health & Safety Representative or the JHSC, as the case may be (if applicable).

The management will investigate all reported incidents and complaints of workplace violence/harassment in a fair and timely manner, while respecting the privacy of all the investigating and all concerned parties.

January 1, 2026

Jason McKellar, President

This policy statement must be reviewed annually, dated, signed by the highest level of management at the workplace and posted in a conspicuous location.

POLICY STATEMENT

The Business is committed to providing a working environment that is safe, secure, and free from threats, intimidation, harassment, and violence. We maintain a zero-tolerance approach to workplace harassment and violence. As such, the Business will not tolerate these acts and will take all reasonable and practical measures to prevent workplace violence and harassment.

This Workplace Violence and Harassment Prevention Program supplements the Business's Policy and outlines the responsibilities associated with this program. Further to consultation with the Health and Safety Representative (HSR) or the Joint Health and Safety Committee (JHSC), as the case may be (if applicable), the program will be reviewed annually and revised as often as necessary.

ROLES AND RESPONSIBILITIES

BUSINESS OWNERS/EMPLOYERS/MANAGEMENT RESPONSIBILITIES

- Ensure all measures and procedures outlined in the workplace harassment and violence policy and its supporting program are followed by workers and that workers have the information they need to protect themselves against such acts.
- Promote a violence and harassment free workplace by enforcing this policy and its supporting program.
- Develop workplace arrangements that minimize workplace harassment and violence.
- Instruct and inform all workers as appropriate on the contents of this policy and its supporting program.
- Conduct an annual assessment of the risk of harassment and violence in the workplace or as often as necessary.
- Address and resolve incidents involving workers.
- Take measures in certain circumstances to protect workers from domestic violence occurring in the workplace.
- Ensure that the Workplace Violence and Harassment Policy is posted in a conspicuous place in the workplace.
- Investigate any incidents and complaints of workplace violence/harassment in a manner that is appropriate in the circumstances.
- Review this workplace violence/harassment policy and its supporting program annually or if there is an incident of violence/ harassment or if requested by the joint health and safety committee or the health and safety representative; and
- Designate a third party to whom the worker(s) can report incidents where the alleged offender is the business owner, director, manager, or a supervisor.
-

Managers and supervisors have the additional duty to act immediately if they observe or are presented with allegations of a potentially dangerous situation, including domestic violence. Managers and supervisors are responsible for addressing potential problems immediately and before they become serious.

Management must have an objective third party investigate if allegations of harassment and violence name the owner or manager, as no one who reports to the accused person can perform an investigation into their conduct. Refer to the **Reporting Contact Form** for the name(s) and contact information of the Business's third-party Designate.

EMPLOYEE RESPONSIBILITIES

- Be aware of and adhere to this policy and its supporting program.
- Treat individuals at the workplace with respect and dignity.
- Be an attentive participant in all training related to workplace violence and harassment.
- Refrain from engaging in any violent or threatening behaviour at the workplace.
- Report any incidents of workplace harassment and violence, experienced, or observed, as soon as possible to a manager, supervisor, or Human Resources or a third-party designate.
- Embrace a harassment/violence-free workplace.
- Cooperate in the investigation and resolution of matters involving workplace harassment and violence.
- Workers have the additional duty to notify management if a restraining order is in effect, or if a potentially violent non-work-related situation, such as domestic violence, exists and could result in violence or harassment in the workplace.

**Examples of workplace violence**

- Examples of workplace violence include, but are not limited to:
- Expressions of intent to inflict harm.
- Threatening activity, such as waving a fist.
- Using, or attempting to use, physical force against another person.
- Shoving, pushing, hitting.
- Verbal abuse

## Examples of Prohibited Harassment

**Examples of the type of harassment behaviour prohibited by this policy include, but are not limited to:**

- Bullying.
- Demeaning and/or belittling comments.
- Offensive nicknames, remarks, jokes, or innuendos.
- Obscene remarks or gestures.
- Display or circulation of offensive pictures, graffiti, or materials, whether in print form or via e-mail or other electronic means.
- Singling out an individual for humiliating or demeaning teasing or jokes.
- Malicious gossip and/or personally ridiculing an individual.
- Unjustifiable interference with another's work or work sabotage.
- Refusing to work or cooperate with others or interference with or vandalizing personal property.
- Creating a poisoned work environment through comments or conduct (including comments or conduct that are condoned or allowed to continue when brought to the attention of management). The comments or conduct may not be directed at a specific individual, and may be from any individual, regardless of position or status.

**Examples of prohibited sexual harassment**

- Any form of sexual harassment, including touching, petting, pinching, kissing, unwelcome sexual flirtations, advances, requests, or invitations and leering or other suggestive gestures.
- Rough or vulgar humour or language related to sexuality, sexual orientation, or gender.
- Invading personal space.
- Demanding hugs, dates, or sexual favours.
- Asking questions, talking, or writing about sexual activities.
- Leering or inappropriate staring.
- Jokes with sexual overtones.
- Unnecessary physical contact.
- Threatening to penalize or otherwise punish a worker if they refuse a sexual advance.
- The display of visual sexual material that is offensive, or which one ought to know, is offensive.
- Sexual and physical assault.

Sexual harassment that has taken place at the workplace against a worker or workers is a prominent form of workplace harassment and will be treated as such.

EXAMPLES OF WHAT IS NOT WORKPLACE HARASSMENT

Reasonable action or conduct by a manager, supervisor or worker that is part of their normal work function will not normally be considered harassing. This is the case even if there are sometimes unpleasant consequences for a worker. Examples include:

- Changes in work assignments.
- Scheduling.
- Job assessments and evaluations.
- Workplace inspections.
- The implementation and enforcement of dress codes
- Counselling or disciplinary action.
- Physical contact necessary for the performance of the work using accepted industry standards.
- Conduct which all parties agree is inoffensive or welcome.
- Disagreements in the workplace that are not based on one of the prohibited grounds.

Differences of opinion or minor disagreements between co-workers will not generally be considered workplace harassment.

**Domestic/Interpersonal Violence**

Provincial regulation and legislation require employers to take every precaution reasonable in the circumstances to protect a worker from domestic violence that may occur in the workplace and expose co-workers to the risk of injury.

The Business recognizes that a worker experiencing domestic abuse may be reluctant to disclose the problem to their supervisor or manager for personal or safety reasons. The Business encourages disclosure in order to ensure the safety of the worker and everyone else in the workplace.

Although the Business respects a worker's desire for privacy and confidentiality, a worker is responsible to disclose situations which may threaten the safety of the worker or anyone else at the workplace to management. Examples of such situations may include threats made from an intimate partner or a previous partner, any restraining orders that list the physical workplace as a protected area workplace or any

restraining orders that require a person to always remain a certain distance away from the workplace during the workday. Disclosure of such threats will ensure appropriate safety precautions can be developed to safeguard the worker and their co-workers in the workplace.

**Training**

**Workplace Harassment and Violence Related Training**

All workers will be provided with appropriate instruction and information on the contents of the Workplace Harassment and Violence Policy and Program, so that they know:

- How to report incident(s) of workplace harassment and violence to the employer.
- How to report incident(s) of workplace harassment and violence where the business owner, the employer, manager, or supervisor is alleged to have committed acts against the worker.
- How the Business will investigate and deal with incidents or complaints of workplace harassment and violence.
- How the results of an investigation and any corrective actions will be provided to the concerned parties; and
- That information about an incident or complaint of workplace violence will be kept confidential.

Document the provided training by using the Training on the Content of the Violence and Harassment Policy and Program Form.

REPORTING WORKPLACE HARASSMENT AND VIOLENCE

REPORTING PROCEDURES FOR WORKERS

**Who to Report Workplace Harassment/Violence to?**

Anyone who believes that they are the victim of workplace harassment and violence should immediately report the incident to management verbally or in writing by using the **Workplace Violence and Harassment Reporting Form**. When reporting verbally, the reporting contact, along with the worker who is making the complaint will fill out the complaint form.

Where it is alleged that a worker's immediate manager or a supervisor is the alleged offender, or if the worker is uncomfortable addressing the issue with their immediate supervisor or manager, the complaint should be made to another manager, supervisor or to the Human Resources department.

In the absence of a Human Resources department or another manager or supervisor to report the incident to, the worker should report the incident to the third party that has been designated by the Business. Refer to the **Reporting Contact Form** for the name(s) and contact information of the Business's third-party designate.

Similarly, anyone who has good reason to believe that harassment and/or violence is occurring or has occurred should immediately report the matter to management by using the **Workplace Violence and Harassment Reporting Form**.

All incidents or complaints of workplace harassment/violence shall be kept confidential except to the extent necessary to protect workers, to investigate the complaint or incident, to take corrective action or otherwise as required by law.

If an emergency exists and the situation is one of immediate danger, then it should be immediately reported to the police by dialing "9-1-1" as soon as it is safe to do so. A person in a situation of immediate danger must, at the same time, take whatever steps are necessary to ensure their own safety and to protect themselves against harm or injury. Once a worker is safe, they can then report the matter to management.

All reported incidents or allegations of workplace harassment/violence will be taken seriously and investigated in accordance with the investigation protocols set out in this Policy.

**What to include in the Report?**

A report of workplace violence and harassment must include the following details about the incident:

- Name and contact information of the worker(s) who has allegedly experienced workplace harassment or violence or threatening behaviour.
- Names, contact information and position of the alleged offenders.
- Names and contact information of potential witnesses or anyone who may be able to provide relevant information about the alleged incident.
- A detailed summary of what happened with date(s), frequency, location(s) of the alleged incident(s); and any supporting documents such as texts, emails, photos, and letters relevant to the complaint.

**No Reprisal**

No retaliation or reprisals will be undertaken or tolerated against any worker who, in good faith, complains of, reports, or participates in any investigation into allegations of workplace harassment and violence.

WORKPLACE HARASSMENT/VIOLENCE INVESTIGATION

Upon receiving a complaint(s) or allegation(s) of workplace violence/harassment, the Business shall conduct a prompt, thorough and confidential investigation into the allegation(s) or complaint(s).

The Business will conduct an investigation if it indirectly becomes aware of an incident of workplace harassment/violence that is not formally reported, such as when a worker, supervisor or manager witnesses an incident of workplace harassment/violence or learns about it from a third party.

The Business may also, at its discretion, or where required by law, utilize the services of outside legal counsel, or such other external expertise as the Business may deem necessary in the circumstances.

Ultimately, it is the aim of the Business to conduct investigations that are impartial and appropriate in the circumstances.

The investigation shall be completed in a timely manner and generally **within 90 days or less** unless there are extenuating circumstances (e.g., illness, complex investigation) warranting a longer investigation.

A complaint or allegation of workplace harassment/violence cannot be investigated by the individual who is the alleged offender, or by the individual who is alleged to have engaged in violent or violent behaviour.

Furthermore, under no circumstances will a complaint or allegation of workplace harassment/violence be investigated by an individual who is under the direct control of the alleged offender.

The Business will take all reasonable steps to ensure that conflicts of interest are avoided.

**Investigation Process**

The investigation process will be fair and provide an opportunity for all concerned parties to respond to reports of allegations of workplace violence/harassment.

The investigation procedure is as follows:

1. **Interview the complainant(s):** The investigator(s) shall interview the complainant(s) and reporting person(s) concerning the facts underlying their allegation(s).

2. **Interview the respondent(s)**: The investigator(s) will interview the worker(s) accused of committing the acts. The worker(s) will be asked for their response to the allegation(s) being made and for their side of the story.

3. **Interview witness(es) and other individual(s):** The investigator(s) will then interview any other workers or other individuals who may have witnessed the incident(s) of the alleged actions, or who may otherwise be able to provide information relevant to the investigation.

4. **Record:** The investigation will be documented, and the record will consist of, among other things, detailed notes of all interviews with workers and witnesses and all other information relevant to the investigation.

5. **Report:** The results of the investigation will be reported, in writing, to management. The results will include an assessment of the validity of the complaint(s). The report will set out findings of fact and conclude about whether workplace harassment/violence had occurred or not.

Furthermore, the applicable investigation protocol may be altered if it is determined that it is necessary to do so, such as where there is a reasonable and imminent threat to a worker's safety.

**Employee Cooperation**

If it is necessary for the purposes of completing, carrying out or protecting the integrity of an investigation, or if it is necessary to maintain a work environment that is safe, secure, and free from threats, intimidation, harassment and violence, the Business may require a worker to remain out of the workplace (with pay) while an investigation is being conducted.

The participation and cooperation of all workers is critical to the development and implementation of the workplace harassment and violence prevention policy and program. The refusal or failure of any worker to cooperate with an investigation is a serious form of misconduct for which a worker may be disciplined up to and including immediate dismissal for cause.

**External Investigator**

If the incident or complaint involves the owner, senior executives or if an unbiased and fair investigation cannot be guaranteed by the Business, an external person qualified to conduct a workplace violence and harassment investigation who has knowledge of the relevant workplace violence and harassment laws may be retained to conduct the investigation.

**Results of the Investigation**

Within a reasonable amount of time (10 days as best practice) of the investigation being completed, the worker who allegedly experienced the workplace violence/harassment and the alleged offender, if they are a worker of the Business, will be informed in writing of the results of the investigation and any corrective action taken or that will be taken by the Business to address workplace violence and harassment.

If the investigation corroborates the complaint(s), to the satisfaction of the Business, then the Business will, among other things, take appropriate disciplinary action against the offending worker(s) and take any other actions or measures it deems necessary to properly address the incident(s) and prevent future incidences of workplace harassment/violence from occurring. The nature and extent of any disciplinary or remedial action shall be determined by the Business in its sole discretion and may include the immediate dismissal of the offending worker(s) with or without cause.

Where an investigation results in disciplinary action, the complainant(s) and the respondent(s) will be informed in writing. If the investigation does not corroborate the complaint(s), then the complainant(s) and the respondent(s) will be also advised in writing and the matter will be closed.

The amount of information provided about the corrective action will depend on the circumstances but must, at a minimum, indicate what steps the Business has taken, or will take, to prevent similar incidents of workplace harassment/violence, if workplace harassment/violence is found to have occurred.

RECORD KEEPING

The Business will ensure that, as part of the investigation, whether conducted by the Business itself or by a designated third party, copies of the following documents shall be kept on record:

- Details of the complaint and/or the incident.
- A detailed record of the investigation including all relevant documents and notes.
- A copy of the Workplace Violence and Harassment Reporting Form (if one has been completed).
- A summary of the results of the investigation that was provided to the worker who allegedly experienced the workplace violence/harassment and the alleged offender, if a worker of the employer; and
- A copy of any corrective action taken to address the complaint or incident of workplace violence/harassment.

All records of the investigation must be kept confidential and on file for a minimum of one year. The investigation documents should not be disclosed unless necessary to investigate an incident or complaint of workplace violence/harassment, take corrective action or otherwise as required by law.

**Reporting to the Police**
All situations or any other behaviour that requires police intervention or follow-up, such as a situation of immediate or serious danger will be reported to the police.

**Intervention**
If a worker is considered to be at risk of harassment in the workplace, a plan will be developed to minimize the risk and respond to any potential emergency situation.

Should the Business become aware of an actual or potential incident of workplace harassment, every reasonable precaution will be taken in the circumstances to protect the affected worker.

**Corrective Action and Discipline**
If the Business determines that a worker has engaged in workplace harassment/violence, appropriate corrective action will be taken, up to and including immediate dismissal for cause.

When a violent incident occurs, the Business will evaluate the safety protocols in place to ensure their effectiveness. Management, in consultation with the HSR or the JHSC, as the case may be (if applicable), will review the incident, outline what corrective or remedial

actions are necessary to prevent or minimize the potential and impact of repeat occurrences, identify new or previously undefined risks, and reassess using the **Workplace Violence/Harassment Risk Assessment Form**, review employee training and education programs and determine if they are adequate or if additional training should be provided.

In addition, the Business may require that a worker participate in an awareness management program or other forms of counselling, either voluntarily or as a condition of continued employment.
If this behaviour is that of a non-employee, then the Business will take appropriate action in an effort to ensure that such behaviour is not repeated, and if necessary, take measures to prevent the person from returning to the workplace.

However, not every complaint will warrant corrective action. Rather, corrective action will be determined on a case-by-case basis.

INCIDENT MANAGEMENT

In the event of a significant incident of workplace harassment/violence, the Business will immediately assess the situation and arrange for the following interventions as appropriate:

- Facilitation of medical attention.
- If necessary, report the matter to the police.
- Individual debriefing; and
- If necessary, and if possible, arrange for the provision of counselling services to affected workers.

The Business will investigate the incident(s), and if necessary, the Business will conduct a review of its workplace(s) and reassess the risk of workplace violence/harassment having regard for the circumstances that gave rise to the incident(s) in question.

The results of any assessment will be reported to the HSR or JHSC, as the case may be (if applicable).

**Hazard Assessments, Review, and Inspections**

The Business shall conduct regular reviews of the Workplace Violence and Harassment Policy and at a minimum, review its prevention plan annually or more often if there is an incident of violence/harassment or if the joint health and safety committee or the health and safety representative request a review of the prevention plans.

The Business shall also conduct regular assessments of its workplace(s) to identify, eliminate or if elimination is not reasonably practicable, to control those hazards related to workplace violence and harassment. Moreover, the Business will make any amendments to this policy and any other applicable policies, programs, and procedures, as may be necessary based on the results of its assessments and reviews. The Business will utilize the **Workplace Violence/Harassment Risk Assessment Form** for conducting its assessments. The Business will also ensure that appropriate corrective action is taken to reduce identified risks.

The results of any assessment will be reported to the HSR or JHSC, as the case may be (if applicable).

If there is no HSR or JHSC in place, then workers will be directly advised of any assessment. If the assessment is in writing, then workers will be provided with a copy on request or told how they might obtain a copy.

**Confidentiality**

The Business recognizes the difficulty of coming forward with a complaint of workplace violence/harassment and a complainant's interest in keeping the matter confidential. To protect the interests of a complainant, a respondent, or any other person who may be involved in incidents of workplace harassment and/or violence, including witnesses, and to protect the integrity of the investigation process, confidentiality will be maintained throughout any investigation. Information relating to the complaint will be disclosed only to the extent necessary to carry out this workplace harassment and violence program, or where disclosure is required by law.

All individuals involved in a workplace investigation are expected to keep the substance of the investigation strictly confidential. Unless otherwise set out in this policy, all records of complaints, including records of meetings, interviews, results of investigations and other relevant material, will be maintained in a confidential file and will be disclosed only to the extent necessary to carry out these procedures or where disclosure is required by law.

DEFINITIONS

For the purposes of this Policy, the following terms are defined:

**Complainant** - refers to the person who is making a complaint under this Policy.

**Domestic Violence** - is a pattern of behaviour used by one person to gain power and control over another person with whom they have, or have had, an intimate relationship with. This pattern of behaviour may include, but is not limited to, physical violence, sexual, emotional, and psychological intimidation, verbal abuse, stalking, and using electronic devices to harass and control.

**Emotional Abuse –** a chronic attack on an individual's self-esteem. It can take the form of name calling, threatening, ridiculing, berating, intimidating, isolating, hazing, habitual scapegoat, blaming.

**Harassment** - engaging in a course of vexatious comments or conduct that is known or ought reasonably to be known to be unwelcome. Does not include a reasonable action taken by an employer or supervisor relating to the management and direction of workers or the workplace.

**Neglect –** any behaviour that leads to a failure to provide services which are necessary such as withdrawing basic necessities as forms of punishment, failing to assess and respond to changes in health status and refusing or withdrawing physical or emotional support.

**Physical Abuse –** the use of intentional force that can result in physical harm or injury to an individual. It can take the form of slapping, hitting, punching, shaking, pulling, throwing, kicking, biting, choking, strangling or the abusive use of restraints.

**Psychological Abuse –** communication of an abusive nature, sarcasm, exploitive behaviour, intimidation, manipulation, and insensitivity to race, sexual preference or family dynamics.

**Respondent** - refers to the person against whom a complaint has been filed.

**Reporting Contact** - the person to whom a worker can report any incidents of workplace violence, experienced, or observed.

**Sexual Abuse –** any unwanted touching, fondling, observations for sexual gratification, any penetration or attempted penetration with a penis, digital or object of the vagina or anus, verbal or written propositions or innuendos, exhibitionism, or exploitation for profit including pornography.

**Sexual Harassment** - engaging in a course of vexatious comments or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome, or making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

**Sexual Violence** - any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened, or attempted against a person without the person's consent and includes sexual assault, sexual harassment, stalking, indecent exposure, voyeurism, and sexual exploitation.

**Third Party Designate** - An individual or an organization designated by the Business to whom the worker(s) can report incidents or allegations of workplace violence committed by the employer (e.g., the business owner, senior executives, directors, managers, or supervisors).

**Verbal Abuse –** humiliating remarks, name calling, swearing at, taunting, teasing, continual put downs.

**Workplace Violence** - the exercise of physical force by a person against a worker, in a workplace, that causes or could cause physical injury to the worker, an attempt to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker, a statement or behaviour that it is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury to the worker.

# TAB 5-HEALTH AND SAFETY RESPONSIBILITIES

## OBJECTIVES

MWS is committed to providing and maintaining a safe and healthy working environment as indicated by acceptable industry practices and compliance with legislative requirements. MWS will strive to eliminate any immediate and foreseeable hazards which may result in fires, security losses, damage to property and personal injuries and illness. There is not a job so urgent that we cannot take the time to perform our work safely. Unsafe practices will not be tolerated.

## SENIOR MANAGEMENT RESPONSIBILITIES

Senior Management shall:

- Ensure that equipment, materials, and protective devices are provided and maintained in good condition.
- Annually review MWS's written health and safety policy.
- Provide the necessary resources to implement, support, and enforce MWS's health and safety policy and program within the company.
- Review all accident reports at least quarterly.
- Promote the exchange of health and safety information with outside groups. Review site training plans for health and safety and ensure adequate measures are available.
- Review the site health and safety program with all MWS's supervisors and all subcontractors to MWS Solutions Inc., identifying their responsibilities and emphasizing co-operation among all parties.
- Provide compensation and time necessary to MWS employees who are selected as a health and safety representative or as a safety committee member.
- Provide first aid facilities

## SUPERVISORS/FOREPERSONS RESPONSIBILITIES

AllSupervisors shall:

- Ensure that workers use or wear the equipment, protective devices or clothing that MWS requires to be used or worn.
- Ensure that workers work in the manner and with the protective devices, measures and procedures required by the Occupational Health and Safety Act and applicable Regulations.
- Provide orientation for new crew members Conduct monthly safety talks.
- Inspect safety equipment weekly.
- Inspect tools and equipment at least weekly and ensure that they are properly maintained.
- Review safety aspects of each task with crew. Conduct accident investigations.
- Report safety problems to MWS's senior management and Health & Safety Coordinator.
- Ensure housekeeping is done at least daily.
- Review SDS with crew before using hazardous materials.
- Review minutes of safety meetings, Ministry of Labour orders, and safety directives with crew.

## WORKERS RESPONSIBILITIES

All Workers shall:

- Work safely in accordance with MWS's health and safety policy and program, and with the project or client's health and safety program (including the Occupational Health and Safety Act and Regulations).
- Use or wear the equipment, protective devices or clothing that MWS requires to be used or worn.
- Report hazards or unsafe conditions to their supervisor after taking appropriate immediate action.
- Report all accidents, injuries, and near-misses to their supervisor.
- Clean up their own work area at least daily.
- Inspect personal protective equipment before use and report defects or damage to their supervisor.
- Offer suggestions to improve Health and Safety in the workplace

SUBCONTRACTOR'S RESPONSIBILITIES

All Subcontractors to MWS shall:

- Work safely in accordance with MWS's health and safety policy and program, and the project or client's health and safety program (including the Occupational Health and Safety Act and applicable Regulations).
- Ensure that all their employees comply with the site health and safety policy and program.
- Provide training to their employees in the requirements of the site safety policy and program.
- Ensure that their employees are properly licensed, qualified as required by contract, or trained for their duties.
- Monitor site conditions daily and record all injuries, accidents, or near-misses.
- Notify MWS's supervisor immediately of any lost-time injuries or medical aid cases occurring on the project.
- Conduct clean-up of work areas daily (if waste and debris create a hazard and are not cleaned up in a reasonable time, they will be cleaned up by MWS at the expense of the subcontractor).
- Conduct regular weekly toolbox talks in addition to specific hazard training when required.
- Provide compensation and time necessary to employees who are selected as a health and safety representative or a safety committee member.

# TAB 6-FIRST AID & MEDICAL AID PROCEDURES

First aid is the skilled application of accepted principles in an accident situation or in the case of sudden illness, using facilities and materials readily available.

## FIRST AID IS TREATMENT

is given to:

1. Sustain life,
2. Prevent the injured employee's condition from worsening,
3. Promote recovery.

DUE TO THE IMPORTANCE PLACED ON FIRST AID, THE FOLLOWING SHALL APPLY:

**The worker shall:**

1. Promptly obtain first aid
2. Notify their supervisor and the MWS office immediately of any injury.

**First Aid Requirements are as follows:**

1. An employee who is in the possession of and has displayed a valid First Aid Certificate shall be the only person to render first aid. (All qualified first aiders at MWS are listed on the board in the first aid room).
2. First aid equipment with provisions shall be obtained and maintained in accordance with the Workers' Compensation regulations.
3. Anyone seriously injured shall not be moved except for the purpose of saving life or relieving human suffering.
4. Qualified first aid attendants rendering first aid are fully authorized to direct any person to call a doctor or ambulance.
5. All injuries, no matter how slight, must be reported and treated.
6. All first aid treatments must be recorded in the INJURY TREATMENT RECORD in the First Aid Room or on site (Foreman).

## MEDICAL AID AND LOST TIME INJURIES

**For injuries requiring medical treatment and lost time from work the following procedures should be followed:**

- Provide immediate first aid treatment and arrange for the transportation of the injured employee to a medical facility. If a taxi is required, call the local taxi company. **DO NOT DRIVE THE EMPLOYEE YOURSELF**.
- If necessary, have the injured person escorted to a medical facility. Have the injured person sign the INJURY TREATMENT FORM.
- The supervisor must investigate the accident and report it in writing. Management will follow up with their investigation and/or Senior Management may elect to follow-up with a professional investigation. The initial investigation should be completed within twenty-four hours.
- Follow-up attention on the injured person's progress, the WSIB-claim status and to rapid- re-employment (modified duties) will be performed by a MWS staff member.

## NEAR MISS INCIDENTS WITH INJURY OR PROPERTY DAMAGE POTENTIAL

**For Near Miss Incidents with injury or property damage potential, the following contacts must be notified:**

- **Jason McKellar**, President, MWS
- **Kim Broda**, Health & Safety Coordinator, MWS
- The client or customer directly involved.

**A Near Miss Report must be completed within 24 hours and submitted to the MWS Office.**

## CRITICAL / FATAL INJURIES

When an accident occurs and results in the critical injury or death of a worker, the following contacts must be notified immediately:

- Jason McKellar – President, MWS (519) 886-2475 or (519) 590-0697
- **Kim Broda - H&S Coordinator** (519) 886-2475 or (519) 496-1949

DEFINING A CRITICAL INJURY UNDER THE *OCCUPATIONAL HEALTH AND SAFETY ACT*

**Regulation 834: Critical Injury**

For the purposes of the Act and the Regulations and MWS Solutions Inc., "critically injured" means an injury of a serious nature that,

a. places life in jeopardy
b. produces unconsciousness
c. results in substantial loss of blood
d. involves the fracture of a leg or arm but not a finger or toe
e. involves the amputation of a leg, arm, hand or foot but not a finger or toe
f. consists of burns to a major portion of the body
g. causes the loss of sight in an eye

CLARIFICATION ON THE DEFINITION OF CRITICAL INJURY (REGULATION 834)

**The Ministry of Labour issued a notice of clarification on the definition of Regulation 834 (January 2017) as follows:**

**Clause 1(d)** of Regulation 834 stipulates that an injury of a serious nature is a "critical injury" if it **involves the fracture of a leg or arm but not a finger or toe.** The Ministry of Labour interprets this provision as including the fracture of a wrist, hand, ankle or foot – i.e. any such fracture would constitute a critical injury if it is of a serious nature. While the fracture of a single finger or single toe does not constitute a critical injury, the ministry takes the position that **the fracture of more than one finger or more than one toe does constitute a critical injury** if it is an injury of a serious nature.

**Clause 1(e)** of Regulation 834 stipulates that an injury of a serious nature is a "critical injury" if it involves **the amputation of a leg, arm, hand or foot but not a finger or toe**. While the amputation of a single finger or single toe does not constitute a critical injury, the ministry takes the position that **the amputation of more than one finger or more than one toe does constitute a critical injury** if it is an injury of a serious nature.

A critical injury must be reported under s. 51 of the *Occupational Health and Safety Act* if there is a connection between the hazard that gave rise to the injury and worker health and safety.

This notice is intended to provide clarity around the application of clauses (d) and (e) of the critical injury definition. The legal definition of a critical injury set out in Regulation 834 has not changed.

**Note: Any time an injured worker has to be taken by outside emergency services (ambulance), MWS Solutions Inc., will assume the injury to be critical in nature**.

IN THE EVENT OF A CRITICAL EMERGENCY:

**DO NOT DISTURB, ALTER OR REMOVE ANYTHING FROM THE SCENE OF THE INCIDENT UNTIL GIVEN PERMISSION TO DO SO EXCEPT FOR SAVING A LIFE OR RELEIVING HUMAN SUFFERING.**

- **Assess** the situation calmly and take command.
- **Protect** the accident scene from further hazards, such as fire, live wires, traffic, operating machinery, etc.
- **Provide first aid** to the injured employee, if any is required, as soon as possible and keep the injured employee warm.
- **Arrange for immediate medical** help; call the ambulance and police.
- **Call Jason McKellar and/or Kim Broda so they can contact the Ministry of Labour immediately,** notify the injured person(s) emergency contact and if necessary, the employer directly involved.
- **Notify** the Certified JHSC Worker Rep. or Safety Committee Member.
- Have someone meet and direct the ambulance to the accident scene.
- **For follow-up** purposes, find out which **hospital** the injured will be taken to and have someone there.
- **Isolate the accident scene** with barricade, rope, caution tape, etc. and post a guard to make sure nothing is tampered with until the authorities arrive on the scene and all investigations are completed. Take pictures of the scene with a camera.
- **No person shall interfere with, disturb, destroy, alter,** or carry away any wreckage, article at the scene, or connected with the occurrence until permission to do so has been given by **a Ministry of Labour inspector, EXCEPT for the purposes of:**
  - Saving life or relieving human suffering
  - Maintaining an essential public service or a public transportation system
  - Preventing unnecessary damage to equipment or other property
- **Cooperate fully** with all emergency response crews and Ministry of Labour personnel.

**NOTE:** Once the injured employee(s) have been effectively looked after and the Authorities have been informed, **the Supervisor shall begin their own investigation** and obtain witness statements without disturbing the accident scene and the Ministry of Labour's own investigation.

MANAGEMENT RESPONSIBILITIES FOR REPORTING A CRITICAL INJURY

Where a person is killed or critically injured from any cause at a workplace, the contractor if any, and the employer shall notify an inspector from the Ministry of Labour. In addition, they must notify the Safety Committee, and Health and Safety Coordinator, immediately of the occurrence by telephone, facsimile, or other direct means. The employer of the injured worker shall, within 48 hours after the occurrence, send to the Director (Ministry of Labour) a written report of the circumstances of the occurrence containing such information and particulars as the regulations may prescribe. (Section 51 (1)-0H&S Act 213-91)

- The report shall include the following:
- Name and address of the employer and contractor.
- The nature and circumstances of the occurrence and a description of the bodily injury sustained.
- A description of the equipment and/or machinery involved.
- The time and place of the occurrence.
- The name and address of all witnesses to the occurrence.
- The name and address of the person who was killed or critically injured.
- The name and address of the physician or surgeon, if any, by whom the person was, or is being attended to for the injury.
- The steps taken to prevent a recurrence.

# ACCIDENT / INCIDENT INVESTIGATION

POLICY STATEMENT

MWS Solutions Inc. requires all employees to immediately report to their supervisor all accidents and incidents that result in injury or property damage, and all near misses with the potential for serious injury or property damage. Supervisors will report the accident promptly to safety/management to ensure timely submission to WSIB. Each incident will be analyzed to determine causes and contributing factors and the analysis will be used to reduce or eliminate the risk of further incidents.

DEFINITIONS

- An **Accident** is defined as an unplanned event that causes harm to people or damage to property. Accidents are categorized as one of the following:
- **Lost Time Injury** (LTI) refers to any injury that prevents a worker from coming to work on the day following the day of the injury.
- **Medical Aid** refers to any injury not severe enough to warrant more than the day of injury off, but where medical treatment by a doctor is given.
- **First Aid** refers only to injuries that can be treated on the job without any days lost.
- An **Incident** is defined as property damage but with no injury to workers.
- A **Near Miss** is a situation in which no injury or damage occurred but might have
- if conditions had been slightly different.
- **Occupational Illness** is defined as a condition resulting from a worker's exposure to chemical, biological or physical agents in the workplace to the extent that the health of the worker is impaired.
- **Critical Injury** is defined as an injury of a serious nature that:
  a. Places life in jeopardy.
  b. Produces unconsciousness.
  c. Results in substantial loss of blood;
  d. Involves the fracture of a leg or am, but not a finger or toe;
  e. Involves the amputation of a leg, arm, hand or foot but not a finger or toe;
  f. Consists of bums to a major portion of the body; or
  g. Causes the loss of sight to an eye.

ROLE OF SUPERVISOR IN AN ACCIDENT INVESTIGATION

**The Supervisor and the Health and Safety Coordinator must investigate all accidents and incidents that involve workers.** This includes completing the Accident Investigation Report, taking statements from witnesses and collecting any other pertinent information and ensuring the injured worker has received the necessary medical assistance.

**The supervisor is responsible for ensuring** that all accident reports are transmitted to the Health and Safety Department as described below. **If a worker sustaining First Aid later seeks medical aid,** the supervisor must advise the Health and Safety Department and **have the treating practitioner complete a Functional Abilities Form**.

**If we are not the Constructor**, report the accident to the Constructor through their Safety Coordinator or Project Manager.

The MWS Health & Safety Coordinator will contact the injured worker as frequently as the injury deems, or at least once a week.

PROCEDURE

1. The employee reports a work-related accident
2. Administer first aid as required
3. Arrange transportation for injured employee to medical treatment if required
4. Ensure Return to Work package accompanies worker
5. Eliminate the hazard if possible or guard the accident scene if worker is critically injured
6. Investigate the cause of the accident and report findings in the Accident/Incident Report form. Ensure all
7. areas of the form are completed.
8. Send copy of the form to Health and Safety Department
9. Report all accidents/incidents as follows:
    - Lost Time Injuries
    - Medical Aid
    - First Aid
    - Incidents and Near Misses

ACCIDENT / INCIDENT REPORT FORM

Report #

| Injured Worker's Last Name | First Name | Occupation |
|---|---|---|
| | | |
| Location where injury/accident occurred | | First Aid Provider |
| | | |
| Hospital or Clinic Attended for Medical Aid | | Treating Physician's Name |
| | | |
| Nature of Injury | | Project Location of Accident/Injury |
| | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Person who transported employee | | | | | | | | |
| Will this be a lost time injury? | No | Yes ❑ | | Is injury work-related? | No ❑ | Yes ❑ | | |
| Were any subcontractors involved? | No | Yes ❑ | | Was the MOL called[1]? | No ❑ | Yes ❑ | | |
| Injury Details | | | | | | | | |
| Date and Hour of Injury | | | | Date and Hour Reported to Employer | | | | |
| Day | Month | Year | Time | Day | Month | Year | Time | |
| | | | ❑ a.m. ❑ p.m. | | | | | ❑ a.m. ❑ p.m. |
| Date and Hour Last Worked | | | | Normal Working Hours | | | | |
| Day | Month | Year | Time | From Monday | | To Friday | | |
| | | | ❑ a.m. ❑ p.m. | | ❑ a.m. ❑ p.m. | | | ❑ a.m. ❑ p.m. |
| Who was the injury reported to? | | | | | | | | |
| What caused the injury? Describe the injury, the body part involved and specify left or right side (use back of sheet if necessary). | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Describe the worker's activities at the time of the injury. Include details of equipment or materials used (use back of sheet if necessary). | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Did anyone else witness the accident or know more about the injury? No | | | | | | | | |

Print Name Signature Date

Reasons to call the MOL: fatality, critical injuries (defined as an injury of a serious nature that: places life in jeopardy, produces unconsciousness, results in substantial loss of blood, involves the fracture of a leg or arm, involves the amputation of a leg, arm, hand or foot, consists of burns to a major portion of the body, causes the loss of sight in an eye), fire, explosion or hazardous material release, lost time injuries or accident requiring medical treatment, occupational illnesses,

any worker who has had their fall arrested, any 'prescribed incident', or property damage >$500

## INCIDENT AND INJURY REPORTING EMPLOYEE RESPONSIBILITIES

MWS Incorporation is committed to a safe workplace for all employees. We recognize that even in the safest environments accidents may occur. In the event that an employee sustains a work-related injury we are committed to providing suitable work whenever possible. Recent changes to workers' compensation law in Ontario have created new responsibilities for everyone. To ensure each employee is aware of his or her responsibilities and obligations we are providing you with a summary of these changes.

### WORK SAFE

It is your responsibility and the responsibility of every employee of MWS Incorporated to conduct themselves and perform their duties with the greatest care to avoid injury to themselves or their co-workers and to comply with established and posted safety rules.

### REPORT

All injuries or accidents must be reported to your supervisor immediately, no matter how minor, and the Safety Department. If you suffer an injury during your shift, you must immediately report it to your supervisor. The Company must submit (within 48 hours) a written report to the Workplace Safety and Insurance Board. We gather the information for the W.S.I.B. through an Incident Investigation report. Your supervisor will complete this report either before you see your doctor or, if necessary, immediately after you seek medical attention.

All accidents are to be reported in person if possible. If you are absent for a shift due to an injury, you must speak directly to your supervisor or to the MWS office.

### PROVIDE

If you are seeking medical attention for a work-related problem, you must inform your supervisor accordingly. Your supervisor will provide you with a WSIB Functional Ability Form (FAF) and a letter indicating we have modified duties available. The FAF must be completed and returned to either your supervisor or the MWS office following treatment. The FAF is to be returned in person.

If you are unable to temporarily participate in an early and safe return to work program, a regular meeting will be scheduled to provide updates on your condition and recovery. You are responsible for ensuring the company is provided with updated medical information.

We ask for your co-operation in reporting injuries promptly as well as any safety hazards you may find.

### CAUTION

You must have medical authorization to be absent from work to qualify for WSIB benefits. You must inform the WSIB of any change in your circumstances that may affect your entitlement to benefits, such as a change in your medical condition, your return-to-work status, or your income level.

## INJURED WORKER REHABILITATION PROGRAM (MODIFIED DUTIES)

It is the policy of MWS Solution Inc. to assist all employees involved in industrial accidents to avoid financial loss by providing modified duties while unable to do their pre- injury job.

Depending on each individual case, the Company, wherever possible will work with the employee's physician and the employee to provide an adequate work schedule or modified job requirement to assist in rehabilitating the injured worker back to full job duties.

The Company will also work with the Workplace Safety and Insurance Board in adjusting hours of work and job duties, again to help rehabilitate an injured employee.

A sample of a Functional Ability form, offer letter to the doctor and a letter to the employee can be found in the form section of this document. The forms can also be obtained from your supervisor or the MWS office.

LETTER TO GIVE DOCTOR REGARDING FAF FORM AND RETURN TO WORK

**MWS Solutions Inc.**
131 Shoemaker Street, Kitchener, Ontario N2E 3B5
Tel. 519-886-2475 www.mws.ca

Dear Doctor,

We are committed to assisting our Employees in their recovery from work related injuries by providing the opportunity to participate in our Early and Safe Return to Work program.

Our program is tailored to the capabilities of the individual and your cooperation and assistance in completing the enclosed Functional Abilities Form for Timely Return to Work will help us to ensure they are placed in appropriate work.

We would appreciate it if you would complete the Functional Abilities Form for Timely Return to Work and provide the completed form to our Associate in order that they may return it to my attention today.

If you have any questions regarding our program, I would be pleased to answer them. Thank you for your l ecovery of our Associate.

Yours truly,

Jason McKellar, President

FIRST AID POSTER

# FIRST AID POSTER

| Company | | Worker | |
|---|---|---|---|
| **SHALL** | | **SHALL** | |
| 1. | **Make sure that First Aid is given immediately**, in accordance with the Regulations | 1. | **Promptly obtain First Aid** from a Certified accordance with the Regulations First Aider |
| 2. | **Record the First Aid treatment** or advice given to the worker. | 2. | **Notify the supervisor immediately** of any injury requiring health care and obtain from the employer an illness/injury treatment memorandum (Form 156) to take to the physician or hospital to have completed. |
| 3. | **Complete an Injury/Illness Report** if appropriate, and if health care is needed | 3. | **Choose a doctor** or other qualified practitioner with the understanding that a **change of doctor cannot be made** without permission of the Board. |
| 4. | **Provide immediate transportation to a hospital**, a doctor's office or the workers' home if necessary. | 4. | **Complete and return all report forms received from the Board.** Health care includes medical, surgical, osteopaths, chiropractors, hospital and skilled nursing care; and the provision and maintenance of artificial appliances, due to the injury. |
| 5. | **Submit to the Board**, within three days of learning of an accident, **a Form 7** and any other information that may be required. | 5. | **In an emergency, a doctor or hospital staff member may notify the Board of a worker's injury**. |
| 6. | **Pay full wages and benefits for** the day or shift on which the injury occurred. | | |

## NEAR MISS REPORT

Report Number: N M Y R - ☐ ☐ ☐ ☐

| | | | | |
|---|---|---|---|---|
| PROJECT NAME: | | PROJECT NUMBER | CLIENT: | Page of |
| COMPANY: | | CONTRACT NUMBER: | SENIOR CONTRACTOR/TRADE SUPERINTENDENT REPRESENTATIVE: | |
| TRADEPERSON(S) INVOLVED: | | TRADE & CLASS: | | BRASS NO.: EXPERIENCE: |
| AREA/UNIT INCIDENT OCCURRED: | | | DATE (YY **/MM/** DD) & TIME (Hrs.) INCIDENT OCCURRED: | |
| SEVERITY (S): | 4 ☐ CATASTROPHIC | 3 ☐ CRITICAL | 2 ☐ MARGINAL | 1 ☐ NEGLIGIBLE |
| PROBABILITY (P): | 4 ☐ PROBABLE | 3 ☐ REASONABLY | 2 ☐ REMOTE | 1 ☐ EXTREMELY REMOTE |
| FREQUENCY (F): | 4 ☐ DAILY | 3 ☐ WEEKLY | 2 ☐ MONTHLY | 1 ☐ ANNUALLY |
| LOSS POTENTIAL: | CLASS 3 ☐ MINOR (TOTAL SPF 3 TO 6) CLASS 2 ☐ SERIOUS (TOTAL SPF 7 | | | TO 9) CLASS 1 ☐ MAJOR (TOTAL SPF 10 TO 12) |
| DESCRIPTION OF INCIDENT: | | | | |
| PRIMARY CAUSE:<br>Substandard Actions:<br>Substandard Conditions: | | | | |
| CONTRIBUTING FACTORS (include main & subcategories): Personal Factors:<br>Job Factors: | | | | |
| WAS THERE AN INFRACTION OF A JOB RULE, PRACTICE OR PROCEDURE? IF YES, DESCRIBE. | | | | |
| IF THERE WAS AN INFRACTION, WAS THE WORKER/CONTRACTOR MADE AWARE OF THE REQUIREMENTS? IS THERE DOCUMENTATION OF REVIEW? | | | | |
| ATTACHMENTS (Witness Statements, Photographs, Sketches, Training Records, etc.) | | | | |
| ACTIONS TO PREVENT A RECURRENCE: | | | | |
| ACTION BY: | | COMPANY/POSITION: | | DUE DATE: ACTION COMPLETE: |
| INCIDENT REPORTED BY: | | COMPANY/POSITION: | | DATE (YY **/MM/** DD) |
| INVESTIGATED BY: | | COMPANY/POSITION: | | DATE (YY / **MM/** DD) |
| DOES THE INCIDENT CRITERIA MEET STATUTORY OR CORPORATE REPORTING REQUIREMENTS? Yes☐ No☐ | | | | |
| SUPERINTENDENT REVIEW - PRINT NAME | | SIGNATURE: | | DATE (YY **/MM/** DD) |
| PROJECT MANAGER REVIEW - PRINT NAME | | SIGNATURE: | | DATE (YY **/MM/** DD) |

EMPLOYEE MODIFIED DUTIES OFFER LETTER

**MWS Solutions Inc.**
131 Shoemaker Street, Kitchener, Ontario N2E 3B5
Tel. 519-886-2475 www.mws.ca

Dear Employee:

We are sorry to hear you have reported a workplace injury. MWS Solutions Inc. has an early and Safe Return to work program, which offers temporary modified duties accommodating your restrictions while you are recovering.

Please be advised that we are currently able to offer you modified duties work performing the following duties:

☐

☐

☐

In the meantime, once you have returned your FAF Form, filled out by your physician, we will sit down and outline a more complete program surrounding your restrictions.

_____ _____
Injured Worker Signature Date

_____
Injured Worker Employee Number

_____ _____
Supervisor Date

EARLY AND SAFE RETURN TO WORK PLAN

| Worker's Name: | Supervisor's Name: | Pre-injury Job Title: | |
|---|---|---|---|
| Objective:<br>To return Worker to their pre-injury hours and/or pre-injury duties | | Plan start date:<br>I I<br>mm/dd/yy | Plan end date:<br>I I<br>mm/dd/yy |

Check one: ☐ Modified Work ☐ Alternate/Suitable Work

| DATES | HOURS/ DAY | JOB TITLE AND DUTIES | ACCOMMODATION / RESTRICTIONS |
|---|---|---|---|
| Week 1:<br>-<br>mm/dd/yy - mm/dd/yy | # days@<br>#_____hours/day | •<br>•<br>• | •<br>•<br>• |
| Week 2:<br>-<br>mm/dd/yy - mm/dd/yy | # days@<br>#_____hours/day | •<br>•<br>• | •<br>•<br>• |
| Week 3:<br>-<br>mm/dd/yy - mm/dd/yy | # days@<br>#_____hours/day | •<br>•<br>• | •<br>•<br>• |
| Week 4:<br>-<br>mm/dd/yy- mm/dd/yy | # days@<br>#_____hours/day | •<br>•<br>• | •<br>•<br>• |
| Week 5:<br>-<br>mm/dd/yy - mm/dd/yy | # days@<br>#_____hours/day | •<br>•<br>• | •<br>•<br>• |
| Week 6:<br>-<br>mm/dd/yy - mm/dd/yy | # days@<br>#_____hours/day | •<br>•<br>• | •<br>•<br>• |

**Additional comments:**

I understand and accept this offer of modified/alternative work for the stated period of time. I believe the early and safe return to work plan is consistent with my functional abilities. I agree to notify the Manager/Safety Dept. immediately in the event that I experience problems or if I believe the modified duties are unsafe. I also agree not to exceed the restrictions as noted.

Worker's Signature: ____ Date: ___/_____/ _____

Manager/Supervisor Name: _____Date: ___/ _____/_____

Manager/Supervisor Signature

EARLY & SAFE RETURN TO WORK PLAN – PAGE 2

**Employee Name:**

**Employee Comments**

| Day | Employee's Remarks | Employee's Initials & Date |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

**Supervisor Comments**

| Week | Supervisor's Remarks | Supervisor's Initials & Date |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |

| | | |
|---|---|---|
| 6 | | |

WITNESS INCIDENT REPORT FORM

Witness Name and Position:

_____

When did the accident occur?

_____

Who was involved with the accident?

_____

What events occurred before the accident?

_____

_____

What events occurred during the accident?

_____

_____

What events occurred after the accident?

_____

_____

Where was the location of the accident?

_____

What were possible causes of the accident?

_____

_____

What suggestions do you have for preventing similar incidents?

_____

_____

Additional comments: _

_____

Witness Signature: Interviewer Signature:

WORKERS INCIDENT REPORT FORM

Name and Position:

When did the incident occur?

Who was involved with the incident?

What events occurred before the incident?

What events occurred during the incident?

What events occurred after the incident?

Where was the location of the incident?

What were possible causes of the incident?____

What suggestions do you have for preventing similar incidents?

Additional comments:

Signature: Interviewer Signature:

WORKPLACE INJURY CHECKLIST

Employee Name: _____

Date of injury: _____

The following is a checklist to ensure each employee receives all necessary information and completes all required documents when a workplace injury claim is made.

**Initial** beside each to verify completed**:**

1. **Advised Manager** of the incident immediately by phone or email.

2. **Completed the Accident Reporting Form** (TO BE COMPLETED WITHIN 24 HRS OF THE REPORTED ACCIDENT)

3. **Had the employee sign** the offer of temporary light duties.

4. **Provided** the Doctor's letter, Functional Abilities Form (FAF) and employee responsibility sheet to the employee as well as taxi chits if applicable.

5. **Advised the employee** to return the Functional Abilities Form (FAF) immediately following their medical visit. The employee must forward the completed "Functional Abilities Form" to their employer supervisor.

# TAB 7-EMERGENCY PLAN

**Introduction**

MWS understands that emergency procedures/situation identification is necessary as they relate to the Collapse of a Structure, Toxic Spill, Explosion, Fire, Natural Gas leak, Power Failure, Rail or Road Accidents and Severe Weather. MWS Incorporated further acknowledges that a timely response to these situations is vital in order to minimize and/or eliminate injuries, fatalities and general chaos in an emergency situation. As a result, the management, supervisors, subcontractors, and employees of MWS must adhere to proper procedures and responsibilities described in this section.

This Emergency Plan is intended to deal with the following specific emergencies:

1. Structural Collapse Explosion
2. Fire
3. Natural Gas Leak
4. Power Failure
5. Rail or Road Accidents
6. Severe Weather

The prime function of this Emergency Evacuation Plan is to maximize employee safety, to minimize emergency response time, and to protect company products and assets to the fullest.

All procedures within this plan should be considered as guidelines, as each and every emergency will take on its own individual characteristics, and sound judgement and common sense must be used while administering the procedures.

It Is imperative that each and every employee be aware of the necessary procedures to be followed during an emergency. It is the responsibility of the individual supervisors to ensure that all employees are familiar with the necessary actions to be taken during any specific emergency situation.

EMERGENCY EVACUATION PROCEDURES

STRUCTURAL

MWS personnel and sub-contractors must recognize the possibility of structural damage and/or building fatigue due to aging of the particular structure or environmental conditions.

In the case of structural collapse call 911 immediately and provide on-site first aid (Current Certification) assistance as required. If possible, assist with rescue. Ensure there is no danger present, prior to rescue attempt. If there is concern or hazards are present leave the rescue up to the emergency crew.

EXPLOSION/FIRE

MWS personnel and sub-contractors must understand and observe locations where possible emergency situations may occur such as mechanical rooms, electrical rooms, boiler rooms and laboratories. These specific areas may be sources of fire and explosion due to the possible presence of ignitable and combustible materials.

**Explosion**

In the case of an explosion, immediately evacuate the building and call 911.
Provide on-site first aid (Current Certification) assistance as required.

**Fire**

In the case of a fire, immediately evacuate the building and call 911.
Provide on-site first aid (Current Certification) assistance as required.

EVACUATION GUIDELINES

**Employees are responsible to:**

1. Know where the alarm pull stations (if available) and exits are located.
2. Call 911 immediately whenever assistance is needed.
3. Know the correct building address:
4. Crouch low to the floor if smoke enters the room.
5. Listen for instructions or information given by authorized personnel.

**All Employees:**

1. Stay calm.
2. Follow supervisor/ Manager Instructions.
3. When evacuating, move orderly - do not run - to your primary or secondary exit, or the exit specified by your supervisor/ Manager.
4. Remain with your crew.
5. Do not stop anywhere. (example: Locker room)
6. Make your way to the designated meeting area for head count verification. Go directly to your designated area, keeping well clear of the building and out of fire vehicle traffic routes.
7. Await further instructions. No employee may re-enter the building or leave the designated meeting area until the all clear has been given.

NATURAL GAS LEAK WITHIN PREMISES:

Natural Gas odour can easily be detected due to its distinct odour, flavoured by a chemical called Ethyl Mercaptan. Natural gas will evaporate with sufficient ventilation and is extremely flammable.

At the slightest suspicion of a gas odour notify a Supervisor/Manager.

Supervisor/Manager will assess the situation.

If the cause of the smell cannot be immediately identified, the supervisor is to start evacuation procedures.

The Supervisor/Manager will take appropriate action concerning the leak.

- In Ontario, call *ENBRIDGE Gas* at, 1-866-763-5427, 24 hours a day, or call 911.
- **For MWS Office** (131 Shoemaker St.), always call 911.

CAUTION:
- **Do not** pull the alarm.
- **Do not** turn off the equipment, hit switches or use a phone.
- **Do not** smoke inside the building or outside the building. Do not touch the light switches.
- Open all doors and windows for ventilation.

POWER FAILURE:

Power Failures may occur from time to time. It is important that everyone remains calm and waits for instructions from the Plant Manager or designate.

In the event of a power failure, the emergency lighting system is activated, and the lights ensure a clear way to the exits.

Supervisor/ Manager:

1. Ensure that you are in control of the personnel in your area.
2. Obtain a portable flashlight.
3. Contact Local Hydro to establish the cause of the power failure and an estimate of the down time.
4. Keep personnel updated on the status of all information and decisions.
5. Make all necessary decisions relating to:
6. Location of employees.
7. Evacuation of employees.

RAIL OR ROAD ACCIDENTS:

A rail or road accident could occur in the immediate area resulting in a spill of unknown substances or an explosion could occur making it necessary to evacuate the premises.

The most likely spills are chlorine and propane. Propane is highly flammable. Chlorine is a greenish-yellow gas, causes irritating sensation to the skin and could be fatal if inhaled. Both will cause dizziness and suffocation. Both run close to the ground and spread rapidly.

Supervisor/ Manager Responsibilities:

1. Upon detecting that a rail accident has occurred it must be determined if an emergency exists to our employees due to a spill.

2. If a hazard exists due to a spill of a toxic substance turn off all ventilation units, air conditioning, etc.

3. Close everything tightly to ensure there is no or little chance of off gassing into the plant and shut off all sources of ignition. Do not touch light switches. Do not smoke.

4. Call 911.

If evacuation is necessary, procedures will be announced.

If evacuation of the area is called, do not wait for a ride to come into the area. Try to find a ride from a co-worker.

You must inform your Supervisor/Manager.

SEVERE WEATHER – TORNADO AND HURRICANE:

An announcement will signal an alert for tornadoes or hurricanes.

Survival Procedure

Shut off machines and take immediate cover at the base of machines / equipment. Take cover on the ground floor along the wall farthest from windows.

# TAB 8-LOCKOUT POLICY AND PROCEDURE

## PURPOSE

To establish a program and utilize procedures for affixing appropriate lockout devices or energy isolating devices to prevent injury to employees to ensure that a system or equipment is in a state of "zero energy" before any work is done on or in the proximity to the installations, equipment or power source.

## RESPONSIBILITY/AUTHORITY

The MWS Management Team is responsible for maintaining and training personnel in this instruction.

**Energy sources include electricity, pneumatics, hydraulics, gravity, steam, heat and chemical.** Exceptions to this requirement are covered in Sections 188, 189 of the Construction Regulations (213/91) and in Section 42 of the Industrial Regulation (851).

MWS will provide or make arrangements to provide competent and qualified personnel to identify all sources of energy that affect the work to be performed. Furthermore, MWS along with the specified personnel will take action to neutralize, redirect or stop the energy source(s) from performing its normal function before other employees begin work. In the case of electricity, the power supply to electrical installations, equipment or conductors must be disconnected.

LOCKOUT-TAGOUT PROCEDURE

MWS requires all personnel to follow the client's lock-out/tag-out procedures for all projects where workers could come into contact with energy sources. If there are no lock-out/tag-out procedures available from the client, as a minimum the following will apply:

**PREPARE FOR SHUTDOWN**

An authorized employee(s) shall have a thorough understanding of the types and magnitude of energies associated with that particular LOCKOUT/ TAGOUT Procedure. Special consideration must be given to the likelihood of multiple sources of energy. If in doubt, the Supervisor/ Manager shall be notified, and all inquiries answered prior to proceeding.

**SHUTDOWN THE EQUIPMENT**

It is imperative that an orderly shutdown be utilized in order to avoid any additional or increased hazard(s) to any employee as a result of equipment de- energization. The following steps are to be taken to ensure that an orderly shutdown of equipment, section of process piping or area is accomplished.

a. All employees affected by the LOCKOUT/ TAGOUT are to be notified.
b. Turn off the equipment in the usual manner to de-energize the load, (i.e., depressing the STOP push button, throwing the switch at the local disconnect, closing the valve(s) etc.).
c. An Authorized Employee shall shut off the main power or energy source.
d. Survey the LOCKOUT/ TAGOUT for possible multiple energy sources and take appropriate measures to achieve ZERO ENERGY STATE.

**ISOLATE EQUIPMENT**

An Authorized Employee shall assess the requirements for the controlled energy(s). All energy isolating devices that are required to control the stored energies shall be installed in such a manner as to positively isolate the equipment, piping etc. to achieve **ZERO ENERGY STATE.**

**APPLY LOCKOUT- TAGOUT DEVICES**

Attach to all identified disconnect switches, valves and other energy-isolating devices the required lock(s) and tag(s). The tag will identify: Date, Time, Worker's name, Employer's name, and reason for isolation. The tag will be used only to supplement the lock, and to identify its purpose. IT WILL NOT BE USED AS A SUBSTITUTE FOR A LOCK.

If more than one person is required to work on a piece of equipment or machine, each will attach their own lock and tag. A multi-lock hasp shall be used for this purpose.

**CONTROL OF STORED ENERGIES**

Following the application of the required LOCKOUT/ TAGOUT devices to the appropriate energy isolation device(s), all potentially hazardous stored energies shall be rendered safe.

**VERIFICATION OF ISOLATION**

The Authorized Employee shall verify that the isolation and de-energization of the equipment, piping or area has been accomplished.

**LOCKOUT / TAGOUT DEVICE REMOVAL**

Before the LOCKOUT/ TAGOUT devices are removed and energy is restored to the item of equipment, procedures shall be followed and actions taken by the Authorized Employee(s) to ensure that ALL IS SAFE i.e. personnel is safely away from equipment, guards are back in place.

**RE-COMMISSIONING**

After all tools have been removed from the machine or equipment, guards have been re-installed and employees are in the clear and all locks and tags removed, activate / operate all the energy isolating devices necessary to restore energy to the machine or equipment.

**SPECIAL CONDITIONS**

**A. LOCK REMOVAL BY THE COMPANY**

1. In the event that the Authorized Employee(s) who applied the LOCKOUT- TAGOUT device(s) is not available to remove it, the following protocol shall be strictly adhered to.
2. The LOCKOUT- TAGOUT devices can only be removed with written authority from the Manager or Supervisor.
3. The Manager or Supervisor shall demonstrate that the removal of the LOCKOUT- TAGOUT device(s) will provide equivalent safety to all workers by
4. Verifying that the Authorized Employee who installed the device(s) is not at the facility.
5. Make all reasonable efforts to contact the Authorized Employee prior to removal of the device. (One telephone call)
6. Complete Lock Removal form (Appendix D)

B. **SHIFT AND PERSONNEL CHANGES:**

In the event that a machine or a piece of equipment is LOCKED OUT/ TAGGED OUT at shift change, or another employee replaces the employee that originally performed the LOCKOUT/ TAGOUT, the supervisor shall attach a **"general lock",** and the next shift's employee or new employee must attach their own lock and tag.

**KEY POINTS**

1. **ONLY ONE KEY PER LOCK**. DUPLICATE KEYS ARE TO BE DISCARDED.
2. **ONLY ONE LOCK ON EACH ENERGY** SOURCE FOR EACH WORKER ON THE JOB. NEVER LEND YOUR LOCK OR KEY TO ANYONE.
3. PROTECT OTHERS BY BARRICADING, ROPING OFF, POSTING SIGNS ETC.
4. **NEVER STAND IN FRONT OF A DISCONNECT** WHEN SHUTTING OFF THE ENERGY SOURCE OR RESTARTING. STAND TO RIGHT OF THE DISCONNECT AND USE YOUR LEFT HANE TO PULL DISCONNECT.
5. IF IN DOUBT ABOUT ANY ASPECT OF THIS PROCEDURE, CHECK WITH YOUR SUPERVISOR.

**FAILURE TO COMPLY**

Failure to comply with these procedures may result in an injury to a fellow employee due to such negligence. Disciplinary action will be taken when non-compliance of this procedure is noted.

**Reference:** This is a legislated requirement and as such the management of this company is subject to penalty of law for non- compliance by any employee identified herein (by category) for lack of precise adherence to this policy.

**DEFINITIONS**

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

**Authorized Worker**: An employee who locks or implements a lockout system procedure on machines or equipment to perform servicing, maintenance or cleaning. An authorized employee and an affected employee may be the same person when the affected employee's duties also include performing maintenance, servicing or cleaning on a machine or equipment which must be locked out and tagged out.

**Competent Person**: An employee who, is qualified because of knowledge, training and experience to organize the work and its performance; is familiar with the Occupational Health & Safety Act and the Regulations that apply to the work and has knowledge of any potential or actual danger to health or safety in the workplace.

**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: Manually operated electrical circuit breaker, disconnect switch, a manually operated switch by which the conductors of a circuit can be disconnected from all underground supply conductors and, in addition no pole can be operated independently, a slide gate, a slip blind, a line valve, a block, and any similar device used to block or isolate energy. This 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, steam, spring, gravity, water under pressure, fluids and gases or other energy.

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

**Lockout Device**: A device that utilizes positive means such as a lock, to hold energy isolating device in the safety position and prevent the energizing of a machine or equipment.

**Service and/or Maintenance**: Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying and maintaining and/or servicing of machines or equipment. These activities include lubrication, cleaning, or un-jamming of machines and equipment and making adjustments or tool changes, where the person may be exposed to the unexpected release of energy or startup of the equipment.

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

**Stored Energy: Energy** that is available and may cause movement even after energy sources have been isolated. Stored energy may be in the form of compressed springs, elevated equipment, hydraulic oil pressure, pressurized water, steam, gas, air, rotating fly wheels, shafts, cams or stored electrical energy associated with capacitors or transformers.

**Tag-out Device**: A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with the procedure, to indicate the machine or equipment cannot be operated until it is removed.

**Zero Energy State**: A procedure to ensure that all energy is controlled and accidental start up or movement will not occur.

## LOCK REMOVAL FORM

In the event the Authorized Employee who applied the Lockout - Tagout device(s) is not available to remove it, the following protocol must be followed.

Equipment Locked Out and Location: _____

Lock Owner: _____

Removal Requested by: _____

Owner Contacted? Yes ☐ No ☐ Date: _____ Time: _____

Method of contact: _____

If the owner is located, state reason lock left on:

_____

Reason for removal:

_____

BEFORE REMOVING LOCK

INSPECT TO ENSURE THAT ALL NON-ESSENTIAL ITEMS HAVE BEEN REMOVED AND THAT THE MACHINE OR EQUIPMENT COMPONENTS ARE OPERATIONALLY INTACT AS WELL AS ALL SAFETY GUARDS ARE IN PLACE.

| | | |
|---|---|---|
| Guards off? | Yes ☐ | No ☐ |
| Drive chains off? | Yes ☐ | No ☐ |
| Loose Bolts? | Yes ☐ | No ☐ |
| Any Exposed Wiring? | Yes ☐ | No ☐ |
| Any Hazard Risk to Product? | Yes ☐ | No ☐ |
| Any Other Hazards | Yes ☐ | No ☐ |

**If the answer to <u>any</u> of the above checks is YES**, <u>do not remove</u> the lock until the hazard is rectified.

Have the Affected Employees Notified? Yes ☐ No ☐

Signed: _____ Title: _____

Forward completed form to the MWS Office.

LOCK OUT LOG

| Customer: | | | Project: | | | | | WO#: | Page: of: |
|---|---|---|---|---|---|---|---|---|---|
| Lock # | Lock Location | MWS Tradesman | MWS Foreman\Supervisor | Lock On Sign-Off | Date On D\M\Y | Lock Off Sign-Off | Date Off D\M\Y | Customer Contact Name | Customer Contact Signature |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**Comments:**

**This form is to be handed in to the front office with your timesheets when the job is complete, and all locks have been removed.**

# TAB 9-CONFINED SPACE ENTRY PROGRAM - PROCEDURE

PROCEDURE

MWS does have a Procedure for Confined Space Entry. Confined Space will not be entered at MWS facility, only entered at client's locations. MWS will adhere to client's Policy & Procedures for any Confined Space Entry.

RESPONSIBILITY

The Supervisor has the ultimate responsibility for enforcing compliance with the confined space client's entry policy, procedures, and the execution of the Confined Space Entry permit. Competent people will carry out the technical duties associated with Confined Space Entry.

REFERENCE DOCUMENTS EXHIBITS

a. Confined Space Hazard Survey
b. Confined Space Entry Permit

DEFINITIONS

In order to understand what the MWS standard requires, the following definitions are provided:

**Acceptable Entry Conditions** - the conditions that must exist in a Confined Space to allow Entry and to ensure that employees involved with a Permit Confined Space Entry can safely enter and work within the space.

**Attendant -** an individual stationed outside a Confined Space who monitors the Authorized Entrants and who performs all attendant's duties assigned in the Permit Confined Space program.

**Authorized Entrant** - an employee who is authorized by the Entry leader to enter a Confined Space.

**Blanking or Blinding** - 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 around the plate.

**Competent Person** - a person who has received classroom instruction and hands-on training involving the equipment and apparatus being utilized; and possessing significant experience in Permit Confined Space Entry procedures.

**Confined Space** - means a fully or partially enclosed space that is not primarily designed or intended for human occupancy in which, because of its construction, location, contents or work activity therein, the accumulation of a hazardous gas vapour, dust or fume or the creation of an oxygen deficient atmosphere may occur.

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

**Emergency** - any occurrence (including any failure of hazard control or monitoring equipment) or event, internal or external to the Permit Confined Space, that could endanger Authorized Entrants.

**Engulfment** - 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 asphyxiation or that can exert enough force on the body to cause death by strangulation, constriction or crushing.

**Entry**- the action by which a person passes through an opening into a Permit Confined Space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the authorized entrant's body breaks the plane of an opening into the space, e.g. sticking your head into a Permit Confined Space is considered "Entry".

**Entry Leader** - the person (such as the employer, foreman, crew chief, or team member) responsible for (1) signing the "permit" and determining if acceptable Entry conditions are present at a Permit Confined Space where Entry is planned, (2) authorizing Entry and overseeing Entry operations, and (3) terminating Entry as required by this program.

**Hazardous Atmosphere** - 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 Confined 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.

Note: This concentration may be approximated as a condition in which the dust obscures vision at 5 feet (1.5 meters) or less.

- atmospheric oxygen concentration below 19.5 percent or above 23 percent.
- Employee exposure to any substance in excess of its published maximum dose or permissible exposure limit.

Note: an atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

- any other atmospheric condition that is immediately dangerous to life or health.

Note: For air contaminants for which a dose or permissible exposure limit has not yet been determined, other sources of information such as Material Safety Data Sheets, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

**Hot Work Permit** - the employer's written authorization to perform operations capable of providing a source of ignition (for example, riveting, welding, cutting, burning, and heating). See "Welding, Cutting and Brazing [Hot Work]" Standard

**Immediately Dangerous to Life or Health (IDLH)** -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 Confined Space.

**Inerting** -the displacement of the atmosphere in a Permit Confined Space by a non-combustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

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

**Isolation** - the process by which a Permit Confined Space is removed from service and completely protected against the release of energy and material into the Permit Confined Space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout and tagout of all sources of energy; and blocking or disconnecting mechanical linkages.
**Non-Permit Confined Space** - 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** - an atmosphere containing less than 19.5 percent oxygen by volume.

**Oxygen Enriched Atmosphere** - an atmosphere containing more than 23 percent oxygen by volume.

**Confined Space Entry Permit** (permit) - the written or printed form provided by management to allow and control Entry into a Confined Space.

**Confined Space Program** - A program for controlling and protecting employees from Confined Space hazards and for regulating employee Entry into Confined Spaces.

**Rescue Service** - the personnel designated to rescue employees from Confined Spaces.

**Testing** - the process by which the potential atmospheric hazards that Authorized Entrants of a Confined Space may encounter are identified and evaluated.

REFERENCE

It is the policy of the Company and the responsibility of all persons to comply with all applicable rules and regulations.

MINIMUM REQUIREMENTS

**1. Identification and Evaluation**

1.1 Confined Space Survey

A survey shall be conducted, and written documentation maintained, to identify Confined Spaces as defined in this standard. This survey shall be conducted by a Competent Person familiar with the standard and trained in hazard identification. This survey will result in written documentation and will be kept on file by the facility.

1.2 Labeling and Posting

All openings into Confined Spaces capable of allowing human Entry shall be labeled "Danger Confined Space".

Workers unable to read the signs shall receive information regarding hazardous areas and shall be informed of any instructions printed on the signs. This may be accomplished by the use of multiple-language signs or by training of all employees to recognize the signs and understand the hazards they warn of.

1.3 Hazard Survey (Exhibit A)

A hazard survey shall be conducted for each Confined Space prior to Entry. The evaluation shall be conducted by a Competent Person and shall evaluate the potential for the following hazards:

- Oxygen deficient or enriched atmosphere
- Flammable/explosive atmosphere
- Toxic atmosphere
- Mechanical hazards
- Electrical hazards
- Chemical hazards
- Biological hazards

If potential hazards are identified, the Competent Person shall examine each hazard with respect to the following prior to approving Entry:

- Magnitude of the hazard
- Likelihood of occurrence
- Consequences of the occurrence
- Potential for changing conditions/activities
- Strategies for controlling, eliminating or isolating the hazard
- Impact on emergency response/rescue

2. **Atmospheric Hazards Only**

For those Confined Spaces where the only hazard present is atmospheric, and ventilation alone can control the hazard, only Section 5 (training) of this standard applies

The facility must demonstrate through documented monitoring data that ventilation is sufficient to control the atmospheric hazards. Continuous ventilation must be provided whenever a person is in the Confined Space.

Monitoring of the atmosphere must be conducted to ensure the atmosphere remains below hazardous levels.

**3. Confined Space Entry Permit (Exhibit B)**

3.1 MWS employees shall utilize the Confined Space Entry Permit within these guidelines. A Competent Person shall complete a thorough review of the hazards at the job site, complete and sign the permit in ink and include the following:

- Location/Building
- The space to be entered
- Description of work
- Work Order (if applicable)
- Entry authorization and expiration dates and times
- Space preparation
- Space isolation (lockout guide)
- Special Requirements (utilize the Hazard Survey)
- Ventilation (Check Inlets)
- PPE (in addition to normal requirements)
- Atmospheric Testing (continuous monitoring required), results and signature of tester
- Necessary rescue equipment and how aid will be summoned
- Signatures of
- Person who prepared the permit- Competent Employee Entrant Leader -a competent employee.
- Person authorizing the entry
- Signature when permit is transferred (recipient)
- Signature when entry is completed

- Signatures of
  - Authorized
  - Entrants
  - Attendants

3.2 The signed permit shall be posted at the point of Entry and remain there until the work is completed. Permits shall be valid for only one shift not to exceed 16 hours (same work crew). Permits need to be re-issued on the succeeding shift(s) each day.

3.3 If the work is interrupted, except for an emergency as defined above, and all the workers leave the Confined Space, it shall not be re-entered until the atmosphere is checked and verified safe for re-Entry and a new signed permit is obtained.

- Note: If an attendant maintains watch of the Confined Space, including periodically monitoring the atmosphere, re-Entry is permitted without a new permit during the same shift.

  In this case, the following must be done before each re- Entry:
  1. Establish that atmospheric test results are within acceptable limits.
  2. Verify that all precautions and other required measures are still in effect. ( Verification must be conducted by a Competent Person)
  3. Assure that only work originally approved on the permit will be conducted in the Permit Confined Space.

3.4 Completed permits must be retained on file for a minimum period of the current year plus one year, or longer as required by local regulations.

3.5 When the work within the Confined Space requires grinding, sanding, welding, etc., a separate Hot Work Permit must be attached. Refer to the Company "Hot Work" Guidelines.

3.6 At the conclusion of entry operations, the entry authorizer will terminate the entry by signing the permit on the line at "Entry Completed Signature" and hold a de-briefing session with the Attendant(s) and Entrant(s) regarding any hazards confronted or created in the confined space during entry operations. Comments should be listed on the back of the permit.

3.7 When the entry authorizer transfers the responsibility for terminating the permit to another competent employee, the second employee must sign the permit on the line at "Entry Transferred Signature".

3.8 Completed permits must be retained on file for a period of the current year plus one year.

**4. Vessel Entry**

4.1 Chemical hazards within the Confined Space should be removed or neutralized. The method of purging will vary with the type of hazard involved and the specific Confined Space. Flammable materials may not be used when cleaning a Confined Space.

4.2 Isolation

4.2.1 Isolation of a Confined Space is a process where the space is removed from service by:
- depressurizing and disconnecting supply lines, or
- Providing a blank or blind on piping leading into the Confined Space, or
- misaligning pipe(s) at connections closest to the Confined Space and capping/blinding and plugging ends, or
- Double block and bleed valves, AND.
- De-energizing and locking out all electrical and physical hazards
- Pipelines or other conveyances between the Confined Space and the point(s) of isolation shall be drained, cleaned, purged or flushed of all material.

**5. Ventilation**

5.1 A Confined Space must never be entered until it is properly ventilated. The Confined Space should be ventilated with fresh air until the atmosphere is within acceptable ranges for oxygen, flammability and toxicity. Confined Spaces should be open at both the top and bottom, if possible, to allow the heavier than air gases to be removed.

5.2 Atmosphere Testing

5.2.1 A Confined Space should never be assumed safe for entering, even for a short period of time, until proper testing proves the Confined Space to be safe. Before any Entry into a Confined Space, a Competent Person shall test for hazardous atmospheres.

5.2.2 An oxygen meter must be utilized to assure the oxygen content within the Confined Space is maintained within an acceptable range. Following the initial testing, the Confined Space should be monitored continuously to ensure that an oxygen deficiency does not occur while personnel are in the Confined Space.

5.2.3 Testing for combustible and toxic gases must be conducted based upon the hazard evaluation.

6. **Attendant**

6.1 Attendant(s) shall be stationed outside any Confined Space while persons are inside.

6.2 The attendant and entrants shall remain in two-way communication. The attendant will have Standard First Aid/CPR certification.

7. **Personal Protective Equipment**

7.1 Personal protective equipment needed by personnel entering a Confined Space shall be determined by a Competent Person during the hazard survey. Required PPE must be specified on the permit.

7.2 All personal protective equipment, (e.g., safety harnesses, life lines, hoisting equipment, SCBA, etc), must be carefully inspected prior to Entry.

7.3 Where there is a potential for electrical shock, appropriate equipment or systems shall be used (e.g., Ground Fault Circuit Interrupters, double insulated tools, low voltage systems, etc.).

**8. Standby/ Rescue**

8.1 A review must be conducted of the Confined Space prior to Entry to identify what methods and equipment are necessary for emergency removal. The equipment and procedures must be included on the Entry permit.

8.2 Appropriate retrieval methods must be in place prior to entering a Confined Space.

8.3 The plant Confined Space program must designate rescue personnel. If off-site personnel will be utilized, they must be included in rescue procedure development and participate in an annual rescue drill.

8.4 A means of summoning rescue personnel to the Confined Space must be provided that does not require the attendant to leave the opening.

9. **Sub-Contractors**

9.1 Each sub-contractor entering the site must be informed that the workplace contains Confined Spaces, and that Confined Space Entry is allowed only through compliance with a Confined Space program meeting this standard's requirements.

9.2 Each subcontractor exclusively utilizes its equivalent permit required entry procedures for work to be performed.

9.3 Each sub-contractor performing Confined Space Entry must be informed of any precautions or procedures the Company has implemented for the protection of employees in or near permit spaces where sub- contractor personnel will be working.

9.4 A Company employee must be assigned responsibility for coordinating Entry operations with the sub-contractor when both Company and sub- contractor personnel will be working in or near Confined Spaces.

9.5 A procedure for debriefing the sub-contractor at the conclusion of Entry operations shall be developed and implemented.

**10. Education. Training & Documentation**

10.1 General Training

10.2 Persons who are required to work in Confined Spaces or in support of those working in Confined Spaces shall receive training in their duties:

10.3 before the employee is first assigned duties in Confined Space Entry operations

10.4 whenever there is a change in assigned duties

10.5 whenever there is a change in Permit Confined Space operations that presents a hazard for which an employee has not been trained

10.6 whenever a supervisor has reason to believe there are inadequacies in the employee's knowledge or use of the Confined Space Procedures

10.7 at least once a year regarding retrieval and rescue.

10.8 **Entry Leaders**

10.8.1 Entry leaders shall receive training to ensure that they:

- know the potential hazards that may be encountered during any Confined Space Entry including the signs, symptoms, and consequences of exposure to the potential hazards.

- are able to identify appropriate test equipment, PPE, alarms, communication equipment, etc., for safe Entry.
- are able to confirm that appropriate notations have been made on the permit, that all tests specified have been conducted and that all procedures and equipment specified are in place.
- can verify that rescue services are available and that the means of summoning them are operable.
- know when to terminate an Entry and void the permit.
- know how to debrief Authorized Entrants, Attendants, contractors, etc. And write pertinent information on the permit and hazard survey.
- know how to handle and document terminated permits.

10.9 **Authorized Entrants**

10.9.1 Authorized Entrants shall receive training to ensure that they:

- know the potential hazards that may be encountered during Confined Space entries including signs, symptoms and consequences of exposure to the potential hazards.
- know how to use safety equipment properly.
- know how to maintain communication with the Attendant.
- know how to alert Attendant of any changes in conditions.
- know how and when to exit the Confined Space including conditions that require terminating Entry.
- are aware of all safe work practices identified on the hazard evaluation for the Confined Space

**10.10 Attendants**

10.10.1 Attendants shall receive training to ensure that they:

- know the potential hazards that may be encountered during any Confined Space Entry including signs, symptoms and consequences of exposure.
- know how to continuously maintain an accurate count of Authorized Entrants
- know to remain outside of the space until relieved by another trained attendant.
- know how to communicate with Authorized Entrants and monitor their status.
- know the conditions that would require an immediate evacuation of the Confined Space
- know how to summon rescue or other emergency services and how to perform non-Entry rescue.
- know to prevent any Entry to the Confined Space by persons not on the Entry permit (excluding rescue personnel)
- Rescue - Call 911

10.11 All Confined Space training shall be documented. Documentation shall include:

1. employee's name
2. signature of the trainer▪
3. subject of training
4. date of training

# CONFINED SPACE HAZARD ASSESSMENT

Must be completed for all confined spaces.
Required prior to every confined space entry.

Location/Bldg. | Space to be entered:

Description of confined space:

Frequency of entrance: | Duration of entrance

Type of entrance: ☐ Top ☐ Side ☐ Bottom

Assessment conducted by: | Date:

| ***POTENTIAL HAZARDS OF ENTRY*** **INDICATE CONTROL OF IDENTIFIED HAZARDS** | | | **HAZARDS ELIMINATED?** | |
|---|---|---|---|---|
| **YES** | **NO** | | **YES** | **NO** |
| ☐ | ☐ | Electrical (attach Lockout Guide) **Client to lock out all sources of energy and MWS workers are to attach their personal locks** | ☐ | ☐ |
| ☐ | ☐ | High Temp | ☐ | ☐ |
| ☐ | ☐ | Low Temp | ☐ | ☐ |
| ☐ | ☐ | High Pressure | ☐ | ☐ |
| ☐ | ☐ | Low Pressure | ☐ | ☐ |
| ☐ | ☐ | Oxygen Deficiency | ☐ | ☐ |
| ☐ | ☐ | Oxygen Enriched | ☐ | ☐ |
| ☐ | ☐ | Toxic Atmosphere | ☐ | ☐ |
| ☐ | ☐ | Engulfment | ☐ | ☐ |
| ☐ | ☐ | Flammable/Combustible Materials | ☐ | ☐ |
| ☐ | ☐ | Corrosive Materials | ☐ | ☐ |
| ☐ | ☐ | Low Light Levels | ☐ | ☐ |
| ☐ | ☐ | Slips, trips, falls | ☐ | ☐ |
| ☐ | ☐ | Mechanical Obstructions | ☐ | ☐ |
| ☐ | ☐ | Radiation | ☐ | ☐ |
| ☐ | ☐ | Drowning | ☐ | ☐ |

Potential for changing conditions:

Emergency response and rescue requirements:

Other safety considerations/comments:

**NOTE THIS FORM MUST BE UPDATED WHEN THERE ARE CHANGES IN THE PROCEDURES OR PROCESS.**

# CONFINED SPACE ENTRY PERMIT

Required prior to every confined space entry.

Location: _____ Space to be entered: _____

Description of work: _____ Work Order #: _____

Entry Authorized: *Date* _____ *Time* _____ Permit Expires: *Date* _____ *Time* _____

## PRE-ENTRY PREPARATIONS

| SPACE PREPARATION | | | |
|---|---|---|---|
| Yes | No | Actions | Comments |
| | | Empty | |
| | | Cool | |
| | | Clean: Water | |
| | | Steam | |
| | | | |
| | | Purge: Air | |
| | | Nitrogen | |
| | | | |
| | | | |

| SPACE ISOLATION (utilize MESI) | |
|---|---|
| Done | Information Used |
| | Hazard Survey utilized and attached (required) |
| | Lockout Guide utilized and attached (required) |
| | |

| VENTILATION (CHECK INLETS) | | | |
|---|---|---|---|
| Yes | No | Equipment | Comments |
| | | Forced Continuous | |
| | | Forced Intermittent | |
| | | Natural Induced | |
| | | | |

| SPECIAL REQUIREMENTS (utilize Hazard Survey) | | | |
|---|---|---|---|
| Yes | No | Type | Comments |
| | | Hot Work Permit | |
| | | Special Tools | |
| | | Low Voltage Lights | |
| | | GFCI/Temp. Wiring | |
| | | | |
| | | | |

| PPE (in addition to normal requirements) | | | |
|---|---|---|---|
| Yes | No | Equipment | Comments |
| | | Goggles/Face Mask | |
| | | Gloves | |
| | | Respiratory | |
| | | Special Clothes/Boots | |
| | | | |
| | | | |

## ATMOSPHERIC TESTING (continuous monitoring required)

| Time: | | | | | | | Time: | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical | Limits | *Results* | | | | | Chemical | Limits | *Results* | | | | |
| % O2 | (19.5% - 23%) | | | | | | H2S ppm | (10 ppm max) | | | | | |
| % LEL | (Less than 10%) | | | | | | | | | | | | |
| CO ppm | (25 ppm max) | | | | | | | | | | | | |
| Equipment Used: | | | | | | | | | | | | | |
| Calibration Date: | | | | | | | Tester Signature: | | | | | | |

## RESCUE AND EMERGENCY SERVICES

| NON-ENTRY RESCUE (utilize Hazard Survey) | | | |
|---|---|---|---|
| Yes | No | Equipment | Comments |
| | | Entrant Harness | |
| | | Entrant Lifeline | |
| | | Winch/Hoist | |
| | | Tripod | |
| | | | |
| | | | |

| ENTRY RESCUE | | | |
|---|---|---|---|
| Yes | No | Rescue Plan | |
| | | Local Emergency Services (Fire Department) | |
| | | Other (a written rescue plan must be attached) | |
| | | **RESCUE NOTIFICATION MEANS** | |
| Yes | No | Method | Comments |
| | | Cell Phone? | |
| | | Radio? | |
| | | | |

*Agreement between all signatories on the atmospheric test results & monitoring frequency for this confined space entry is established.*
*I have reviewed the permit and agree to follow safe work practices and emergency procedures required for this confined space entry.*

_____ *Permit Prepared by (signature)*

_____ *Signature of Entrant Leader*

_____ *Signature of Entrants*

_____ *Signature of Attendants*

Entry Authorized Signature: _____ Entry Transferred Signature: _____

Space Vacated: *Date* _____ *Time* _____ Entry Completed Signature: _____

# TAB 10-HOT WORK POLICY & PROCEDURE

## PURPOSE

The purpose of this program is to protect personnel and property of MWS while Hot Work is being performed.

Scope
This program establishes the minimum safety requirements for Hot Work. Hot Work includes all heat and spark producing work such as burning, cutting, welding, brazing, soldering, thawing piping, torch applied roofing, etc.

## RESPONSIBILITY

All Managers and supervisors of this facility must ensure that this Hot Work program is maintained, and all of the requirements are being met.

## REFERENCE DOCUMENTS

Exhibit A: Hot work Permit

## DEFINITIONS

The following definitions are provided for reference.
**Hot Work:** All heat and spark producing work including welding, brazing, soldering burning, cutting, grinding, metallic sawing, thawing piping, torch applied roofing, etc.
**Competent Person:** A person by experience, education and/or training who is capable of recognizing and evaluating the dangers associated with hot work, is knowledgeable on the procedures to be followed while performing hot work; and can train individuals on the procedures for performing and/or issuing permits for hot work.
**Designated Maintenance Area:** An area free from all known flammable and combustible hazards as determined by a Competent Person.

**General Requirements**

- **A.** Perform hot work whenever possible in the properly designed Hot Work area. Permits are not required for Hot Work in this area.
- B. Hot Work Permit must be completed for all Hot Work done outside the designated Hot Work area.
- **C.** When Hot Work is to be done in a confined space, a Confined Space Entry Permit must be completed along with a Hot Work Permit and all confined space requirements must also be met.

**Hot Work Permit**

- A. The location Mechanical Manager/Supervisor or designee is responsible for execution of the Hot Work permit.
- B. When changing conditions dictate the withdrawal of a Hot Work Permit, a new fully completed permit must be prepared and issued. The permit is only valid for the personnel doing the work and the period specified not to exceed 16 hours. New permits must be issued if the work exceeds the initial expiration time or date.
- C. All Hot Work permits are to be retained on location for the current year plus one more year.

## HOT WORK PROCEDURES

**The minimum general Hot Work procedure must include**:

- A. A determination that the equipment or structure to be worked on cannot be readily removed to the designated Hot Work area.
- B. Hot Work Permit issued for all hot work to be performed outside the designated Area and posted at the work site.
- C. Combustible and flammable materials within the Hot Work area should be protected against fire hazards and the operation should not pose a hazard to others in nearby areas. To help achieve this, the following controls should be used:
- D. Move combustible materials at least 35 feet from the work site. If this is not possible, protect combustible materials with metal guards or by flameproof curtains or covers (other than ordinary tarpaulins);
- E. Fire resistant curtains and /or tinted shields used to prevent fire, employee burns, and ultra-violet light exposure.
- F. A clean area. All dust producing equipment shutdown locked out and airborne dust removed.
- G. Hot work should not be conducted in the presence of explosive mixtures of flammable gases, vapors, liquids, or dusts. Air testing must be done on enclosed equipment (confined spaces) to confirm that the pipe or vessel atmosphere is not greater than 0% LEL. If this is not so, purging shall be done, and another air test completed.
- H. Ventilation of the work site, either through local or general exhaust ventilation, should be adequate for the work performed
- I. Equipment must be thoroughly inspected prior to use.
- J. Plastic tubing, compressed gas hoses, cylinders, and water hoses shall not be placed where they are exposed to sparks and slag

from a burning operation or physical damage. Gas welding hoses and electric leads should not be run through doorways or across driveways or exposed to vehicular traffic without adequate protection.

K. A Fire Watch (a person other than the operator) must be continuously present during Hot Work and for a minimum of 30 minutes following completion. This is the responsibility of the Department Manager / supervisor. The need for additional Fire Watches will be evaluated.
L. A Final Check of the area by a designated Competent Person periodically for a period of 4 hours following the completion of the job. The person conducting the Final Check also signs the permit and returns it to Maintenance. This is the responsibility of the Department Manager/ supervisor.
M. Eye and face protection including safety glasses with side shields covered by a face shield with a protective filter lens shall be worn.
N. Welding helmets with the correct shade lens used by all employees engaged in welding while a correctly shaded face shield or burning goggles is used for cutting. In burning, face shields with proper shade protection should be worn but, in those instances, where clearance is limited, burning goggles must be worn. Flame resistant gauntlet gloves shall be worn by all employees performing cutting or welding operations.
O. A protective curtain to protect employees in the immediate area from harmful ultraviolet radiation shall be used. For overhead or elevated areas, curtains should be used if practical. The area beneath the work must be cordoned off using barricade tape with a Fire Watch standing by.

**Welding and Cutting Equipment**

Oxygen, acetylene, and process welding bottles must, at all times, be stored in an upright position, secured to a stable support and not be left free standing. The valve cap must be replaced, and hand tightened when the regulators have been disconnected.

Empty welding/cutting bottles are to be marked as such and separated from full bottles. Empty bottles shall also be stored in an upright position, secured to a stable support and not be left free standing. All bottles are to be stored away from any potentially hazardous situations, such as fire or areas where they may be exposed to mechanical damage. Compressed gas bottles shall not be stored in areas which contain petroleum products.

Any leaking compressed gas bottles should be immediately moved away from the building structures and arrangements made to remove them from the work site as soon as possible.

When operating any welding or cutting equipment or utilizing any compressed gas bottles, fire extinguishers, which are properly charged, must be in the immediate work area.

Protect any flammable or other material from damage due to welding or cutting operations.

All employees are required to wear specialized personal protective equipment when working with welding or cutting equipment. They must also ensure that welding curtains are used where possible to protect other workers on the project site from welding arc flash.

HOT WORK PERMIT SAMPLES

| MWS Solutions Inc | OPEN FLAME/SMOKE OR HEAT HOT WORK PERMIT | Rev. 02 |
|---|---|---|

WITHIN 35 FT. OF WORK

- ❑ Area sweep clean & check for and remove any combustibles (dust, lint, cloth fabrics, paper or cardboard products, flammable liquids, etc.)
- ❑ Combustible floors protected with covers or metal shields
- ❑ No combustible material or flammable materials
- ❑ Combustibles and flammable liquids protected with covers, guards or metal shields.
- ❑ All wall and floor openings covered
- ❑ Covers/fire blankets suspended beneath work to collect sparks

WORK ON WALLS OR CEILING

- ❑ Construction is non-combustible and without combustible covering
- ❑ Combustibles moved away from opposite side of wall

WORK ON ENCLOSED EQUIPMENT

(tanks, containers, ducts, dust collectors, etc. )

- ❑ Equipment cleaned of all combustibles
- ❑ Containers purged of flammable vapors
- ❑ Environment tested to ensure safe levels of flammability's

FIRE WATCH

- ❑ To be provided during work and 30 mins after completion of any operation ( by fire watch )
- ❑ Supplied with extinguishing equipment as specified on risk assessment
- ❑ Trained in use of equipment and in sounding fire alarm

FINAL CHECK-UP

- ❑ To be made 30 minutes after completion of any operation unless fire watch is provided

Signed: _____
(Supervisor)

| HS-015 | Created by: Kim Broda | | | Page 2 of 2 |
|---|---|---|---|---|

| MWS Solutions Inc | OPEN FLAME/SMOKE OR HEAT HOT WORK PERMIT | Rev. 02 |
|---|---|---|

Work is not permitted unless this card is filled in and attached to the work site.

Supervisor/Authorized by:

_____

Return this permit after work is completed to supervisor for permanent office filing and review.

1. Welder must post this permit during job.
2. Fire watch must be present at all times. Trained in fire watch and use of fire extinguisher.
3. Extinguisher must be at hand as per JSA.
4. Complete Work Permit.

TO BE COMPLETED BY CONTRACTOR/SUPERVISOR

Date: _____
Time of Start: _____
Location of Job: _____
_____
Time Finish: _____
Signed: _____

CONTRACTOR/SUPERVISOR

Time: _____
(30 minutes after Completion of any operation)

Area Checked: _____
By: _____
Position: _____

Prior to approving this Work Permit, the Project Manager or Supervisory Staff shall inspect the work area and confirm precautions have been taken to prevent fire.

PRECAUTIONS

- ❑ Building Fire System
- ❑ Sprinklers and fire hoses and fire extinguishers are in working condition
- ❑ Cutting and welding equipment in good repair

| HS-015 | Created by: Kim Broda | | | Page 1 of 2 |
|---|---|---|---|---|

# Hot Work Permit

*Required for temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to burning, cutting, welding, brazing, soldering, grinding, metallic sewing, thawing piping or a torch applied to roofing. Retain h*

Permit Number: **00010**

## BEFORE INITIATING HOT WORK, CAN THIS JOB BE AVOIDED? IS THERE A SAFER WAY?

Permit Notes:
1. Person doing the Hot Work: Indicate start time & completion time and leave hard copy posted in the field for Fire Watch.
2. Fire Watch: Sign at *Hot Work Authorized* prior to work. Provide continuous inspection during work and for 30 minutes after. Sign hard copy and leave posted in the field. Notify Final Check person.
3. Final Check: Complete 4 hour inspection, sign and return the hard copy to Maintenance

Location / Building: _____ Equipment / Process / Area: _____

Description of work: _____ Work Order #: _____

Hot Work Authorized: *Date:* _____ *Time:* _____ *am/pm* Permit Expires: *Date:* _____ *Time:* _____ *am/pm*

| Yes | NA | SAFETY DISCUSSION | Comments |
|---|---|---|---|
| | | Hazardous Material in area? If yes, write in comments area. (e.g. Acid, Caustic, Lead Paint, Asbestos, Flammables) | |
| | | Atmospheric Monitoring required? Indicate readings, 0% LEL required. → | |
| | | Special PPE required? If yes, write type under comments area. | |
| | | Special precautions? If yes, write type under comments area. | |
| | | Fire Watch required for adjoining areas, above and/or below? | |
| | | Area barricaded with Caution or Hazard tape. | |
| | | Fire Alarm or Fire Pull location identified. | |
| | | Area Sprinklers, where available, are operable. | |
| | | Small water hose available, where practical. | |
| | | Fire extinguisher available at work site. | |
| | | Fire Watch is trained in use of equipment and in sounding alarm. | |

| Yes | NA | REQUIREMENTS WITHIN 35 FEET |
|---|---|---|
| | | Flammable liquids, dust, lint, oil deposits removed. |
| | | Explosive atmosphere in area eliminated. |
| | | Floor swept clean. |
| | | Combustible floors wet down, covered with damp sand or fire-resistive sheets. |
| | | Remove other combustibles, where possible. Otherwise protect with fire-resistive tarpaulins or metal shields. |
| | | All wall, floor and sewer openings tightly covered. |
| | | Fire-resistive tarpaulins suspended beneath work. |
| | | |

| Yes | NA | WORK ON WALLS OR CEILINGS |
|---|---|---|
| | | Verify that construction is noncombustible and without combustible covering or insulation. |
| | | Combustibles on other side of walls moved or protected. |

| Yes | NA | WORK ON EQUIPMENT OR PIPELINES |
|---|---|---|
| | | Enclosed equipment cleaned of all combustibles. |
| | | Containers purged of flammable liquids/vapors. |
| | | Pressurized vessels, piping and equipment removed from service, isolated and vented. |
| | | |

**IN CASE OF EMERGENCY, CALL** _____

**Explosion Proof Class I or Class II Areas Only, Area Management Signature:** _____ N/A ☐

**Hot Work Equipment and Permit have been evaluated and are approved:** _____
*Person Performing Hot Work Signature*

_____ _____ _____ _____
Print names of all persons performing Hot Work on this job

**Hot Work Authorized:** Equipment, area and setup declared safe for the work described.

Maintenance Signature: _____ Fire Watch Signature: _____

**Fire Watch Signoff:** Area on and around Hot Work was monitored continuously for 30 minutes after Hot Work was completed.

Fire Watch Signature: _____ *Date:* _____ *Time:* _____ *am/pm*

**Final Check:** Work area was periodically checked for 4 hours after Hot Work was completed.

Final Check Signature: _____ *Date:* _____ *Time:* _____ *am/pm*

**Note debriefing comments on the back of hard copy.**

# TAB 11-JOINT HEALTH & SAFETY COMMITTEE MEETING

GUIDELINES FOR THE STRUCTURE AND FUNCTION OF THE COMMITTEE

The Joint Health and Safety Committee member names are posted on the Safety Boards in the Shop

STRUCTURE OF THE COMMITTEE

1.1. The Joint Health and Safety Committee (referred to hereafter as "the Joint Committee"), shall consist of not more than eight (8) members in total, consisting of two (2) Directors representing the employer, and six (6) members representing full-time employees. Management will not always outnumber the employees: Employee members will be selected or elected to provide adequate representation from all areas of the workplace operations.

- Employee members shall be selected from the following workplace areas:
  - Tool Crib/Warehouse,
  - Fabrication Shops
  - Field/Projects: Electrical/Mechanical/Millwrights
  - Management.
- Employee members will be selected from the area they are expected to represent. Though it is expected that all members will attend every meeting, if you are unable to attend a scheduled meeting, notification to the appropriate Co-Chairperson shall be provided as far in advance as possible. All members' names and work locations shall be clearly posted at the workplace.

1.2. There shall be two (2) Co-Chairpersons; one (1) selected/elected by the employee members, and a Director appointed by the Employer. Chair duties will be equally shared by the Co-Chairpersons, and terms of office shall be reviewed every 24-month period. Meetings shall be postponed and re-scheduled in the absence of both Co-Chairs. In the absence of one Co-Chair, the other Co-Chair will automatically assume the chair duties.

1.3. The Joint Committee shall regularly meet quarterly, unless otherwise notified. Meetings may be called more frequently to address situations at the discretion of the Co-Chairs; in which case notice and reason for the meeting shall be provided to all members as soon as possible.
Employee members of the Joint Committee shall be provided no less than one (1) hour of preparation time, scheduled immediately prior to regular meetings, in order to prepare for scheduled Committee meetings.

1.4. A Co-Chairperson may, with the consent and approval of his/her counterpart, invite any additional person(s) to attend a scheduled Committee meeting, in order to provide information and comment, but invited guests shall not be allowed to participate in the regular business of the meeting.

1.5. The Joint Committee will maintain a minimum of one (l) Director, and one (1) employee member who have received Certification Training as required by the Occupational H&S Act. Where applicable, the duties and rights of "certified members" pursuant to Section 9 of *The Act* shall be undertaken by the certified members. If a "certified member" resigns from the Committee, the employer will make every effort to replace that certified member immediately.

FUNCTIONS OF THE JOINT COMMITTEE

Generally, the functions of the Joint Committee shall be:

- To identify and evaluate potential hazards; recommend corrective action of matters pertaining to health and safety in the workplace to the Executive Director, and to follow up on any recommendations made to the employer.
- To encourage and recommend H&S training programs for employees to educate them as to their rights, restrictions, responsibilities and duties pursuant to the Occupational Health and Safety Act and work-related duties.
- To address matters related to all applicable Regulations, Statutes, Designated Substances, and WHMIS as appropriate.
- To deal with any other workplace health and safety matters the Committee sees.

WORKPLACE INSPECTIONS

1.1. A schedule of workplace inspections will be agreed by the Committee that will assign employee members of the Committee to conduct health and safety inspections of their representative areas of the workplace, each month. Inspections will be scheduled so that each area of the workplace is inspected each month, so that the entire workplace is inspected monthly.

To allow appropriate time to properly respond to workplace inspection issues, inspections shall be conducted during the week immediately following a regular meeting. The employee member may be accompanied by a director, if possible, but in any case, will consult with workers during the inspection regarding health and safety issues, hazards or concerns.

In the event that a director is not able to attend a scheduled workplace inspection, the member may choose to conduct the inspection unaccompanied. The member will notify other supervisors in the area being inspected if available, throughout the course of the inspection, to discuss safety issues.

If a member identifies an imminent or immediate hazard while conducting an inspection, the member will immediately bring it to the attention of the appropriate Supervisor or Director. Elimination of the hazard will be the immediate priority.

1.2. All health and safety hazards or concerns noted during an inspection wil1 be recorded on a "Safety Inspection" form designed for that purpose and shall be signed by the members who conducted the inspection.

1.3. Completed Safety Inspection forms will be provided to the appropriate Director within two (2) days of the inspection. The Director shall respond to the Joint Committee Co-Chairs prior to the next meeting, indicating the status of each of the items noted. Copies of the Safety Inspection forms and all Directors' responses shall be provided to the Committee and the Executive Director for review and follow-up; and a copy shall be posted on the H&S Bulletin Boards.

**Recommendations of the Joint Committee**

Written recommendations of the Joint Committee shall be provided to the Executive Director, who shall reply in writing to the Committee Co-Chairs within twenty-one (21) calendar days. The written responses will include an assessment of the problem, indicate who is responsible for the resolution, and provide an expected time frame for implementation of any corrective action.

Recommendations of the Joint Committee shall be conspicuously identified in the minutes or shall be written on a form developed for that purpose and will be included with the minutes of the meeting. Minutes, including recommendations and responses, shall be posted at the H&S Bulletin Boards for review by all staff.

**Accident Investigation and Accompaniment of the Ministry of Labour**

1.1. Any accident or incident that results in:
   a. Medical aid or lost time to a worker,
   b. Serious property damage, or
   c. is otherwise identified in the Accident/Injury Investigation section of the Corporate H&S Manual,

shall be jointly investigated by the appropriate Director and area employee member of the Committee wherever possible. They shall be responsible for ensuring that the reporting requirements of Sections 51 and 52 of the Act, and Sections 5 and 6 of the Regulations for Industrial Establishments, are fulfilled. "Near misses" shall be investigated as directed by the Co-Chairs, where they have mutually agreed that an investigation is warranted.

1.2. Accident/incident information shall be provided to the employee Co-Chair as soon as possible after an occurrence, and prescribed notice of accident information shall be provided in writing to both Co-Chairs within four (4) days of the occurrence. All investigations shall be documented on the appropriate "Investigation Report" forms, copies of which will be provided to the Joint Committee and appropriate Directors.

1.3. Area or Department Supervisors will be responsible for completing the workplace "Investigation Reports", which is to be provided to the H&S Coordinator for final review and submission to WSIB. The Committee shall review accident information and investigation reports at each meeting, evaluate the information and circumstances, and recommend corrective action (if any) as per Section 2.5 above.

1.4. The employee Co-Chair of the Joint Committee shall be contacted to accompany any Ministry of Labour official attending the workplace, and during the conduct of their inspections, investigations, or other duties at the workplace.

1.5. The certified employee member and appropriate area employee member of the Joint Committee shall be contacted to attend any work refusal occurrence, as well as the certified Director member of the Committee. When notified of a work refusal, they shall attend immediately and will be provided with the necessary time from their normal work duties to participate in the investigation.

1.6. The employee certified member of the Joint Committee shall be consulted concerning any proposed workplace hygiene testing and strategies to be conducted and shall be entitled to be present at the beginning of any such testing conducted.

MINUTES OF JOINT COMMITTEE MEETINGS

The Co-Chairs will designate a committee member at each meeting to take minutes and to be responsible for having the minutes completed, circulated and filed w1th1n one (1) calendar week of the meeting, or as the Committee may from time to time require. Minutes of the meeting will be reviewed and edited where necessary by the Co-Chairs and signed by both prior to posting, or any further circulation. Copies of the minutes shall be forwarded to all Committee members, Supervisors and Directors, and shall be posted at all H&S Bulletin Boards.

Minutes shall be drafted in a format that identifies "Issues", “Discussion", and "Recommendations". All recommendations of the Joint Committee shall be written and be conspicuously identified in the minutes.

Names of Joint Committee members shall not be used in the minutes, except to indicate attendance or absence at the meeting.

Agenda items will be identified by a reference number, indicating when the issue was initially tabled for discussion; and copies of minutes of all meetings shall be readily available in a proper filing system.

JOINT COMMITTEE QUORUM

Although all members are expected to attend all meetings, the Joint Comm.1ttee shall require a quorum of at least five (3) members, including at least one (I) Director, two (2) employee members, and one (1) Co-Chairperson in attendance to conduct business. If one Co-Chairperson is absent, the other Co-Chair shall automatically assume the Chair duties for that meeting. There shall not be more Directors than employee members in attendance to conduct a regularly scheduled Joint H&S Committee meeting.

PAYMENT FOR ATTENDANCE AT MEETINGS

Time spent in attendance at Joint Committee meetings including preparation time, or activities relating to the function of the Committee as prescribed by the Act or these Guidelines, will be paid for at the member's current rate of pay for performing work. Any such time spent will be considered as time at work.

JOINT COMMITTEE MEETING AGENDA

The Committee Co-Chairs shall jointly prepare a meeting Agenda, and have a copy forwarded to all Joint Committee members, at least one (l) week in advance of regularly scheduled Committee meetings.

All health and safety items that remain unresolved after discussion at a Joint Committee meeting shall be referred to a subcommittee of one (1) Director and one employee member, to investigate further and present a proposed resolution to the Joint Committee, at the next scheduled meeting.
If an issue remains unresolved after two consecutive meetings of discussion, it may be referred to the Executive Director & both Co-Chairs, for further discussion and resolution. Resolutions shall be reported to the Joint Committee in writing.

If an issue continues to remain unresolved, the Committee may refer to external alternative dispute resolution assistance, for binding resolution. Alternatively, the Committee may request the attendance of the Executive Director to discuss resolution alternatives or may recommend to the employer that external assistance be contracted to assist in the resolution of the matter.

All agenda items, whether resolved or not, will be recorded in the minutes. Unresolved items will be placed on the agenda for the next meeting or referred to and recorded pursuant to Section 6.2 above.

GENERAL CONSIDERATIONS

All workers will be instructed and consistently reminded to discuss the health and safety conce1ns and any safety hazards with their immediate supervisor before bringing it to the attention of any Joint Committee member. Committee members may accompany and assist workers in the reporting of concerns to supervision, where appropriate.

Joint Committee members will investigate health and safety complaints to ensure that only factual information is being discussed at the Committee meetings, and they will exchange information when searching for a resolution to a workplace health and safety hazard, or concern. All Joint Committee recommendations and resolutions shall be recorded in the minutes.

Medical or trade secret information will be kept confidential by all Joint Committee members.

Any amendments, deletions, or additions to these Guidelines, must have the consensus of the entire Committee, and shall be written and attached as an Appendix to these Guidelines.

Note: The Employer will review, not less than annually, the Corporate H&S Policy and Program, in consultation with the Joint Committee.

These Guidelines are hereby endorsed by all Joint Health and Safety Committee Members - Dated:

| Employee Members | Employer Members |
|---|---|
| * _____ | _____ |

*Certified members / co chairman

# APPENDIX: HEALTH & SAFETY FORMS

## ACCIDENT INVESTIGATION GUIDELINE SHEET

Use the following as a guideline when performing an accident investigation to ensure you are getting as complete a picture as possible of what happened. Have you clearly identified it?

WHO?

- Who was involved in the accident?
- What is their job?
- What were they doing at the time of the accident?
- Was he/she properly trained for the job?
- Who else witnessed the accident?
- What were they doing at the time of the accident?
- Where were they at the time of the accident?
- Who saw what happened?
- Who heard what happened?
- Who reported the accident?

WHAT?

- What equipment was involved?
- What was it being used for at the time?
- Was it being used under normal circumstances?
- What was its condition, use, maintenance, etc.?
- Was the equipment properly guarded?
- What materials were involved?
- What were they being used for?
- Was this a proper use of them?
- What known hazards do these materials have? (i.e. toxicity, radiation, etc.)
- If hazards exist were the materials being used/handled properly?
- Were proper procedures in place and do the procedures need upgrading?

WHERE?

- Where did the accident happen?
- What was the layout?
- What was the condition of the workplace/site at the time? (I.e. floor, housekeeping,
- traffic, lighting, noise, distractions, temperature etc.)
- Could weather have been a factor in the accident? ---Where did the accident happen in the flow of operations?
- Where were people (identified in the "who" above) positioned relative to the accident?

WHEN?

- When was the accident reported?
- At what time during the working shift did it occur? (i.e.: early into the shift, or late?)
- On what day/time?

HOW?

- How did the accident happen?
- Do you need to re-interview witnesses?
- Do you need to ask more questions?
- Can you use the answers to these questions to produce a detailed description?

# Injury/Illness Investigation Report

Name (Last) (First) (Middle Initial) Position and Department

Address (Apt. #) City/Town Postal Code

Telephone #: (Home) (Work) Department Supervisor Telephone #

Date of Occurrence Time of Occurrence Reported To Date and Time Reported

___/___/___ _____AM_____PM _____

Describe the Injury/Illness

Describe How the Injury/Illness Occurred

List Witnesses or Additional Persons Involved (Witness statements should be recorded on a separate page)

List any Additional Pertinent Information Concerning the Incident (i.e., Training Provided, Safety Equipment or Precautions Taken)

What Corrective Measures, if any, Have Been Taken, or Will be Taken?

Investigated By: _____ Date: _____/_____/_____ Phone # _____

Reviewed By: _____ Date: _____/_____/_____ Phone # _____

SAFE WORK CHECKLIST

Project: _____ Location: _____

Auditor: _____ _____

(Signature) (Print Name& Position)

_____ _____

Date: Time:

| # | Description of Item to be Checked | Yes | No | N/A | Corrected? |
|---|---|---|---|---|---|
| **1** | Does the Risk Assessment/ JSA correspond with the work being performed? | □ | □ | | □ |
| **2** | Are the dates, times, locations on the Risk Assessment/ JSA valid and current? | □ | □ | | □ |
| **3** | Has the Work been approved by the required Supervision? (Approved documents must be posted at job location) | □ | □ | | □ |
| **4** | Is required PPE being worn? le. Hard Hat, CSA Safety Boots, Safety Glasses, Traffic Vest, and PPE specific to the job / task? | □ | □ | | □ |
| **5** | Is *Client Specific PPE being worn? | □ | □ | □ | □ |
| **6** | Have emergency procedures, exits and phone locations been identified to all workers? | □ | □ | | □ |
| **7** | Has1he Risk Assessment/ JSA been communicated in sequence and detail to all workers? | □ | □ | | □ |
| **8** | Have all workers signed the Risk Assessment/ JSA acknowledging all hazards & safe steps? | □ | □ | | □ |
| **9** | Has the area been cordoned off with appropriate barrier tape *I* signs etc. to ensure public safety? | □ | □ | □ | □ |
| **10** | Have daily equipment inspection forms been completed? (Forklift, Manlift, Scaffold, etc.) | □ | □ | □ | □ |
| **11** | Is Elevated Work/ Overhead work required as part of this job? If Yes, | □ | □ | | |
| | a) Is the equipment identified with company name & contact number? | □ | □ | | □ |
| | b) Is the Fall Protection Equipment/ PPE certified & in good condition? (Inspection form) | □ | □ | | □ |
| | c) Have the lie-off points been identified and communicated to all workers? | □ | □ | | □ |
| | d) Are all workers trained & current in Fall Protection? | □ | □ | | □ |
| **12** | Is Lock Out required as part of this job? If Yes, | □ | □ | | |
| | a) Has the Lock Out Procedure been reviewed with all workers? | □ | □ | | □ |
| | b) Have isolation points identified in the Risk Assessment/ JSA been verified by all workers? | □ | □ | | □ |
| | c) Has Supervisor isolated all lock out locations in the "OFF" position? | □ | □ | | □ |
| | d) Have isolations been tested & verified by Supervisor? (Load AND Line Side if required) | □ | □ | | □ |
| | e) Have workers applied locks & tags (name, contact#)? | □ | □ | | □ |
| | f) Has the Jock out log been completed? | □ | □ | | □ |
| **13** | Is Hot Work required as part of this job? If Yes, | □ | □ | | |
| | a) Has valid Hot Work Permit been obtained / posted? | □ | □ | □ | □ |
| | b) Has inspection been completed on **_Fire Extinguisher(s)?_ | □ | □ | | □ |
| | c) Is there adequate fire blankets, welding screens, etc.? | □ | □ | □ | □ |
| **14** | Is Equipment Commissioning required as part of this job? If Yes, | □ | □ | | |
| | a) Is there a valid Commissioning Permit/ Procedure? | □ | □ | | □ |
| | b) Is candy-stripe tape used to cordon off area with appropriate warning sings? | □ | □ | | □ |
| | c) Is there a sign in / out sheet and designated Commissioning Zone badges? | □ | □ | | □ |
| **15** | **If special work is required (le. Rigging/Hoisting - Inspection & Capacity, Material Removal, Confined Space etc.), have procedures been developed, communicated and signed by all workers?** | □ | □ | □ | □ |

**Client Specific PPE:** To be determined and listed on Risk Assessment/ JSA,
**Fire Extinguisher(s) must be adequate type/ size:** CO2, ABC Dry Chemical, Water, Class 'D' Metals, etc.

## SITE SAFETY INSPECTION

**MWS Solutions Inc. - Site Safety Inspection**

**Job Name:** **Date:**_____

**Job Number: N/A**

| | YES | NO | N/A | Action required by who & when | Prob Number | Impact Number | Rating Letter |
|---|---|---|---|---|---|---|---|
| **Personal Protective Equipment (PPE)** | | | | | | | |
| 1) All workers wearing hard hats, safety boots, and glasses where req'd | | | | | | | |
| 2) Face shields or goggles being used where necessary | | | | | | | |
| 3) Hearing protection being used where necessary | | | | | | | |
| 4) Are dust masks or respirators being used where necessary? | | | | | | | |
| 5) Other Site Specific requirements: | | | | | | | |
| | | | | | | | |
| **Fall Protection** | | | | | | | |
| 6) Is fall protection provided to employees working 10 feet or more above a lower level, or exposed to another hazard? | | | | | | | |
| 7) Are Safety Harnesses on and tied off correctly? | | | | | | | |
| 8) Do workers have up to date fall arrest and elevated lift certification? | | | | | | | |
| 9) Extension ladders safely tied off, and 3 feet above the upper landing surface | | | | | | | |
| 10) Guard Rails/Safety Railing where necessary | | | | | | | |
| 11) Scaffolds erected complete and properly secured & tagged | | | | | | | |
| 12) Other Site Specific requirements: 6' Step ladder | | | | | | | |
| | | | | | | | |
| **General & House Keeping** | | | | | | | |
| 13) Are aisles and passageways kept clear of obstructions and free from trip hazards? | | | | | | | |
| 14) Work area and interior adequately lit & ventilated | | | | | | | |
| 15) Are waste materials disposed, materials stored safely, & SDS sheets available? | | | | | | | |
| 16) Are all cylinders safely stored and secured? | | | | | | | |
| 17) Caution tape, pylons, hoarding being used | | | | | | | |
| 18) Are all extension cords in good condition, safely routed and provided with ground-fault circuit interrupters when req'd? | | | | | | | |
| 19) Safety Signs posted as required | | | | | | | |
| 20) Are proper lockout/tagout procedures being followed? | | | | | | | |
| 21) Are work permits in place where required? | | | | | | | |
| 22) Are all openings from which there is a drop of more than 4 feet guarded properly? | | | | | | | |
| 23) Is all applicable documentation available? | | | | | | | |
| 24) Other Site Specific requirements: | | | | | | | |
| | | | | | | | |
| **Rigging & Lifting** | | | | | | | |
| 25) Are circle checks being performed at the start of every shift? | | | | | | | |
| 26) Does the operator have clear line of sight of rigged equipment or trained signalman? | | | | | | | |
| 27) Is the lifting equipment on a firm and level base? | | | | | | | |
| 28) Are the safe working loads known? | | | | | | | |
| 29) Is all rigging equipment inspected and in good condition including all slings, shackles, chains, etc.? | | | | | | | |
| 30) Are temporary barricades in place to restrict traffic in the work area? | | | | | | | |
| 31) Do forklift operators have up to date certification? | | | | | | | |
| 32) Other Site Specific requirements: | | | | | | | |
| | | | | | | | |
| **Hot work** | | | | | | | |
| 33) Are Fire Extinguishers of the right type and number present? | | | | | | | |
| 34) Are spark protection practices such as fire blankets and clearance from combustibles being used where necessary? | | | | | | | |
| 35) Is a Fire Watch present, and is Fire watch continued for 1/2" after hot work has completed? | | | | | | | |
| 36) Are welding screens or other arc-flash preventative measures being used as required? | | | | | | | |

## MWS Solutions Inc. - Site Safety Inspection



**Job Name:** **Date:**_____

**Job Number: N/A**

| | YES | NO | N/A | Action required by who & when | Prob Number | Impact Number | Rating Letter |
|---|---|---|---|---|---|---|---|
| 37) Hot work permit where required | | | | | | | |
| 38) Other Site Specific requirements: | | | | | | | |
| | | | | | | | |
| **Confined Space (if not applicable please skip to next section)** | | | | | | | |
| 39) Has the confined space permit been completed correctly? | | | | | | | |
| 40) Is monitoring equipment calibrated & being used correctly? | | | | | | | |
| 41) Is ventilation appropriate? | | | | | | | |
| 42) Is there proper means of egress? | | | | | | | |
| 43) Are personnel trained in confined space? | | | | | | | |
| 44) Other Site Specific requirements: | | | | | | | |
| | | | | | | | |
| **Excavations & Open Pits (if not applicable please skip)** | | | | | | | |
| 45) Is there safe access and egress to the excavation? | | | | | | | |
| 46) Are the sides of the excavation properly sloped back to prevent collapse? | | | | | | | |
| 47) Are there guard rails or other equivalent protection to stop people or objects falling in? | | | | | | | |
| 48) Is the excavation inspected at the start of every shift to confirm stability and above items? | | | | | | | |
| 49) Other Site Specific requirements: | | | | | | | |
| | | | | | | | |
| **Project Co-Ordinator/Estimator & Manager's use only** | | | | | | | |
| 50) Copies of weekly safety talks on site | | | | | | | |
| 51) SDS sheets available | | | | | | | |
| 52) Notice of Project (where applicable) | | | | | | | |
| 53) Occupational Health & Safety Act on site | | | | | | | |
| 54) MWS Health & Safety Manual on site | | | | | | | |
| 55) First Aid Kits (with updated logs) on site | | | | | | | |
| 56) Emergency phone numbers and hospital routes posted | | | | | | | |
| 57) Jobsite journals being used | | | | | | | |
| 58) Are employees properly orientated including being made aware of the site specific potential hazards? | | | | | | | |

Rating System

**Prob =** Likeliness of event occurring ( on a scale of 1 to 5,,, 1 being the lowest) 1 - Lowest 5 - Highest

**Impact =** Severity inflicted on workers / property (on a scale of 1 to 5,,, 1 being the lowest) 1....2....3....4....5

**Rating =** Prob. + Impact ÷ 2,,, then assigning corresponding grade, A, B, or C. **C B A**

High Risk - Immediate Countermeasures Required **A**

Moderate Risk - Timely Countermeasures Required **B**

Low Risk - Countermeasures to be Applied **C**

| **General Comments:**<br>Please also use this space to refer to specific item # above and add any additional information or instructions if required | | | |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Foreman Name: | | | |
| Foreman's Signature: | | | |

| | | | |
|---|---|---|---|
| Project Co-Ordinator/Estimator Name: | | | |
| Project Co-Ordinator/Estimator Signature: | | | |

| | | | | |
|---|---|---|---|---|
| *Confirm safety issue has been corrected* | Date: | | | |
| Name: | | | | |
| Signature: | Title: H&S Manager | | | |

# TAB 12-POLICY AND PROCEDURE FOR WORKER'S REFUSAL TO WORK

Introduction
This Policy and Procedure shall establish the protocols for compliance with legislation related to Part V Section 43 of the Occupational Health and Safety Act.

Objective
The purpose of this Policy and Procedure is to ensure the continued safety and well-being of all people working for MWS.

Implementation of this Policy and Procedure will not only assure compliance with the Occupational Health and Safety Act but will provide an orderly administration of any Work Refusal both from the perspective of the Worker and the Employer.

MWS strongly believes in the welfare and the health and safety of all their employees and is committed to continual improvement of their Health and Safety Programs and their measured performance. By following the procedures as prescribed in this policy both the Worker and Employer can effectively communicate any area of concern that may arise.
Scope of Application

This Policy and Procedure shall apply to all persons employed by MWS Solutions Incorporated
Worker
A Worker means a person who performs work or supplies services for monetary compensation...as defined by Section 1 of the Occupational Health and Safety Act.

All workers by law may refuse to work when he or she has reason to believe that the work is likely to endanger himself or herself or another worker.

In the event that a worker believes that any equipment, machine, device or thing they are to use or operate, the physical condition of the workplace or any equipment, machine, device or thing is in contravention of the Act and will endanger either himself or herself or another worker, the worker shall notify his or her supervisor immediately.

The worker shall remain in a safe place near his or her workstation until the investigation is completed. The worker shall be present during the subsequent investigation in the presence of the company representative and a worker member of the Joint Health & Safety Committee.
Supervisor
A supervisor means a person who has charge of a workplace or authority over a worker... as defined by Section 1 of the Occupational Health and Safety Act.

Upon notification of a work refusal, the supervisor must immediately notify the Health and Safety Manager or his delegate. Supervisors may be required to investigate Work Refusals, as appointed by the Health and Safety Manager or his delegate, in conjunction with a worker member of the Joint Health and Safety Committee
Inspector
Inspector means an inspector appointed for the purpose of this Act and includes a Director...as defined by Section 1 of the Occupational Health and Safety Act.
Procedures
The following Work Refusal procedure shall be strictly adhered to. Any variance from the following procedure shall not take place without prior written approval from the Mechanical Manager.

The MWS Work Refusal Procedure shall consist of the following steps:
Worker's Recognition and Refusal
Reporting
Notification
Investigation
Determination and Corrective Measures
Notification of Ministry of Labour
Worker's Duties During Ministry's Investigation
Investigation and Reporting by Ministry
Completion of "Unsafe Work Refusal" Form
Corrective Measures Resulting from Orders from Ministry
Worker's Recognition and Refusal
A worker may refuse to work or refuse to do particular work where he or she has reason to believe that one or more of the following

conditions exist.
Any equipment, machine, device or thing the worker is to use or operate that is likely to endanger the worker or another worker.
The physical condition of the workplace or the part thereof that in which he or she works or is to work is likely to endanger the worker or another worker.
Any equipment, machine, device or thing he or she is to use or operate or the physical condition of the workplace or the part thereof in which he or she is to work is in contravention of the Act or the regulations and as such is likely to endanger the worker or another worker.
Reporting
The worker may exercise his or her right under the Act to refuse to work by immediately reporting the unsafe condition to their supervisor and verbally stating their reason why they are refusing to work.

In as much as an investigation has not yet been undertaken, it is premature under the terms of the Occupational Health and Safety Act to contact the Ministry. The Employer requests that no worker shall take it upon himself or herself to contact the Ministry of Labour directly.
Notification
The supervisor upon receiving a work refusal notification from a worker shall notify the Mechanical Manager or his designate and shall contact a worker member of the JHSC forthwith and an investigation shall take place.
Investigation
The Mechanical Manager or designate shall at this juncture decide whether the investigation of the work refusal shall be investigated personally or be delegated to the supervisor. If the supervisor is delegated to undertake the investigation, the supervisor shall keep the Mechanical Manager apprised of the investigation on a regular basis.

The employer representative with worker member of the Joint Health & Safety Committee and the Worker shall attend the area of the work refusal and undertake an investigation at the earliest possible time and without delay.
If, at this point, the parties deem it necessary to have a further investigation, the certified members may be asked to continue the investigation.
Determination and Corrective Measures
In the event that the employer representative determines that corrective measures are required, the remedial work to the equipment, machine, device, thing or area shall be completed within a reasonable period of time. As soon as the corrective measures are completed, or the worker agrees with the results of the investigation, the worker shall return to work.

If the worker has reasonable grounds to believe that the conditions as outlined under *"Workers Recognition and Refusal"* are unchanged or still an endangerment to his or her health and safety or another worker, the worker may continue to refuse to work.

If the worker continues to refuse to work, the employer representative, the worker member of the Joint Health & Safety Committee, and the worker shall cause the Mechanical Manager to call an Inspector from the Ministry of Labour.

Reprisals by the employer against a worker who exercises his / her rights under Section 43 of the Occupational Health and Safety Act are prohibited as defined by Section 50 of the Occupational Health and Safety Act.
Notification of the Ministry of Labour
Upon notification from the investigating parties that an Inspector is required to be notified, the Mechanical Manager *shall* without delay contact the Ministry of Labour at the Kitchener branch office, telephone number (519) 885-3378, or 1-800-265- 2468 during off-shift hours.

Worker's Duties During the Ministry's Investigation
Pending the outcome of the internal investigation the worker shall remain in safe place at or near his or her workstation.

Pending the inspector's investigation, the Mechanical Manager or delegate shall at his or her discretion, assign the worker reasonable alternative work subject to the provisions of the Act.

Pending the inspector's investigation and the decision thereof no other worker shall be assigned the duties associated with the work refusal unless in the presence of a worker member of the Joint Health & Safety Committee and that worker is advised of the other worker's refusal and his or her reason for the refusal.
Investigation and Reporting by Ministry
The Inspector may investigate the refusal to work in the presence of the Mechanical Manager or designate, a worker member of the Joint Health and Safety Committee, and the Worker. The Inspector may also elect to conduct the investigation over the telephone.

The Inspector following his investigation will decide whether the equipment, machine, device, thing or the workplace or part thereof is likely to endanger the worker or any other person.

The Inspector shall give his/her decision in writing as soon as practical to the Mechanical Manager, the Worker Member of the Joint Health & Safety Committee, and the Worker.
Completion of "Unsafe Work Refusal" Form.
The employer representative will complete the Unsafe Work Refusal form.
The completed form will be forwarded to the MWS office.
Corrective Measures Resulting from Orders from Ministry
***The Company*** shall, upon receiving written orders from an Inspector, correct the deficiencies identified in the report as soon as practical or within the compliance time.

Upon completion of the corrective measures identified in the Inspector's report, the two Co-Chairs of the Joint Health & Safety Committee will indicate the order has been complied with by signing the Ministry's Compliance Form.

UNSAFE WORK REFUSAL FORM

As per O.H.S.A. Section 43:

Employee _____ Date _____ Time _____ am/pm

Dept. _____ Job Classification _____

Supervisor Notified _____ Time _____ am/pm

Mechanical Manager/Delegate Notified _____ Time _____ am/pm

Employer Representative _____

JHSC Member _____ Time _____ am/pm

What equipment, procedure or task is being refused? - Be specific! - _____

_____

_____

State reason job is believed to be unsafe. _____

_____

What section(s) of the O.H.S.A. or Regulation is in contravention: _____

Employer Representative's solution: (Indicate time frame)

Short Term: _____

_____

Long Term: _____

_____

Work Order # _____ Attached copy of work order.

Employee Agrees: Yes ____ No ____

Ministry Of Labour Called: Yes ____ No ____

Telephone Numbers: Days - (519) 885-3378 Nights - 1-800-265-2468

If yes - Time _____ Who called _____

Employee assigned alternate work? Yes _____ No _____

What was suitable alternate work assigned? _____

Did another worker agree to perform the refused work after the reasons for the refusal were disclosed to them? Yes ___ No ___ Name of Worker: _____

Name of JHSC member present: _____

**Investigation Report:**

Include **all** pertinent information. For example, specific job, specific Oven, piece of equipment, work station, product. Describe the work site, draw a diagram if easier.

**WHO - WHAT - WHEN - WHERE - HOW - WHY**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

JHSC Member Signature

_____

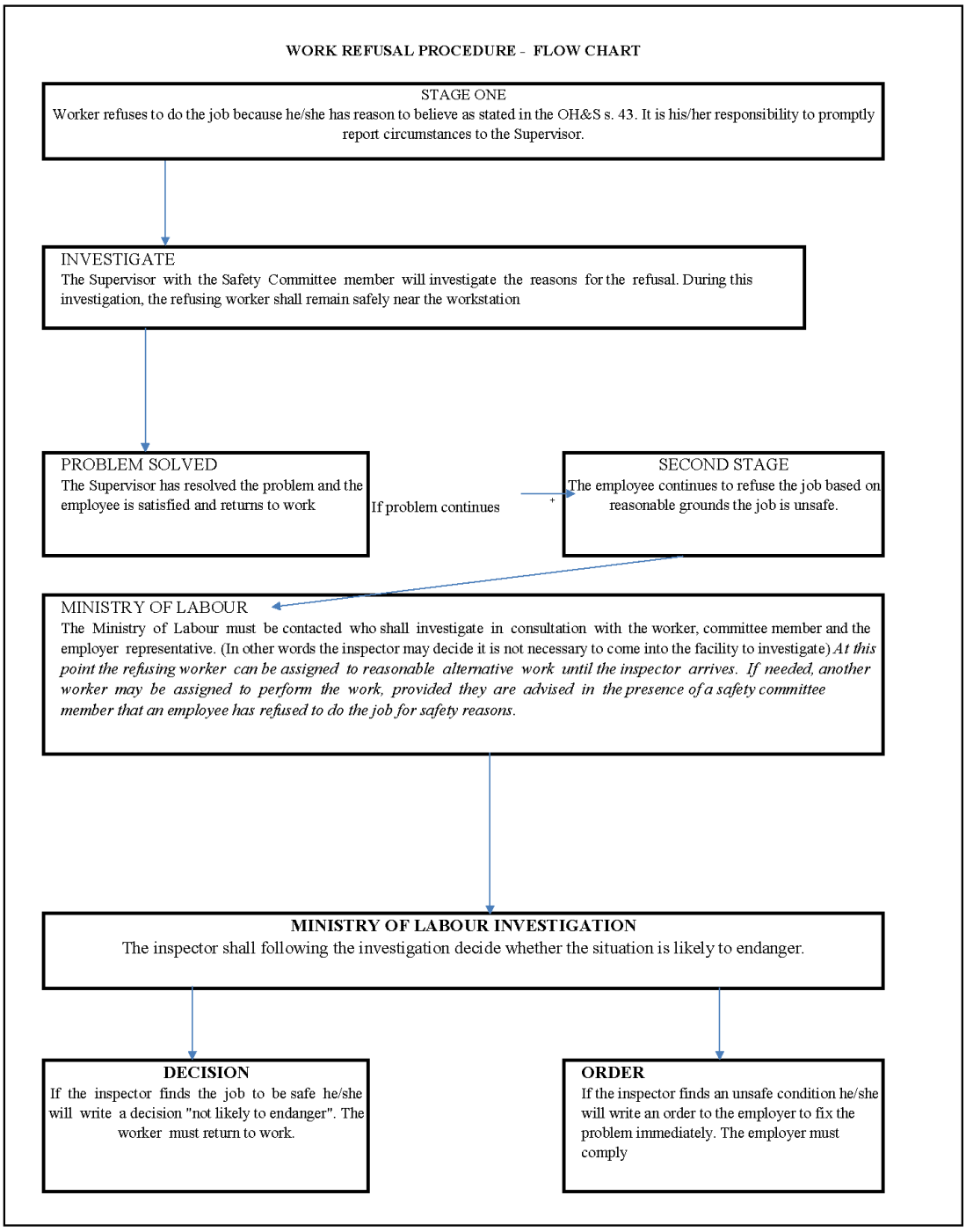
Employer Representative's Signature

_____

Date: _____

*Continue notes on back of this form if more space is needed.*

## WORK REFUSAL PROCEDURE FLOW CHART



# TAB 13 WORKER ORIENTATION

It is acknowledged that certain field projects will have unique safety hazards requiring specific orientation time to ensure the newly hired employee understands the risk and is taught the methods of dealing with such hazards.

Orientation

Worker Orientation: Office

All workers will receive an orientation by their individual Manager before being allowed to commence work. This will ensure that general rules & practices as well as specific departmental procedures are brought to the new employee's attention. Field Supervisors must also receive Safety Responsibilities before going into the field.

Worker Orientation: Field

All workers on a field project will have the MWS "Health & Safety Policy and Program Manual" reviewed with them by their immediate foreman or supervisor. These parties will sign the back page, detach, and send it to the MWS office within 5 days.

Worker Orientation: Shop

All workers will receive an orientation by their individual Supervisor/Manager before being allowed to commence work. This will ensure that general rules & practices as well as specific shop procedures are brought to the new employee's attention.

SENIOR MANAGEMENT RESPONSIBILITIES

Senior management shall:

- ✓ Prepare a corporate "Orientation Checklist" for all new workers signing on, and compile records of orientation.
- ✓ Provide orientation to subcontractors.
- ✓ Ensure that new employees and subcontractors receive a written copy of the company's "Health and Safety Policy and Program".

SUPERVISOR RESPONSIBILITIES

The supervisor shall:

- ✓ Review the corporate "Orientation Checklist" with each new member of MWS and return a copy to MWS office for recording.

SUBCONTRACTOR RESPONSIBILITIES

All subcontractors shall:

- ✓ Provide site orientation to their direct-hire employees and sub-trades under their direction.
- ✓ Forward copies of completed orientation checklists to MWS office.

ORIENTATION CHECKLIST

EMPLOYEE_____ SUPERVISOR _____

JOBSITE/PROJECT _____

| | | EMPLOYEE INITIAL | SUPERVISOR INITIAL |
|---|---|---|---|
| 1. | Explanation of project and of employee duties | _____ | _____ |
| 2. | Provide copy of company safety policy and program | _____ | _____ |
| 3. | Requirements for personal protective equipment | _____ | _____ |
| 4. | Accident reporting procedures | _____ | _____ |
| 5. | Location of: - first aid<br>- fire extinguishers<br>- telephones<br>- emergency numbers | _____ | _____ |
| 6. | Emergency procedures details | _____ | _____ |
| 7. | Location and details of specific project hazards | _____ | _____ |
| 8. | Location of tool handling and storage area | _____ | _____ |
| 9. | Location of parking, lunch area, and toilets | _____ | _____ |
| 10. | Project telephone number and absentee reporting procedure. | _____ | _____ |
| 11. | Name of health and safety representative | _____ | _____ |
| 12. | Location of any hazardous substances and their MSDS, and confirmation of WHMIS training. | _____ | _____ |

SIGNATURES _____ DATE _____

# TAB 14 - HOUSEKEEPING AND GENERAL SAFETY

A well organized and maintained project is a safer project for all. Good housekeeping on a project and in the shop is everyone's responsibility.

Clean work and storage areas encourage better accident prevention.

Lighting
The area in which a worker is present, and the means to and from those areas must be adequately lit. if there is a temporary lighting system, then light bulbs must be enclosed by a mechanical protection device.

Ventilation
A construction project must be ventilated either by natural or mechanical means if a worker may be injured by inhaling a noxious gas, vapour, dust or fume or from lack of oxygen, or if the gas, vapour, dust or fume is capable of forming an explosive mixture with the air. If it is not practical to provide natural or mechanical ventilation, then workers must be provided with suitable respiratory protective equipment.

No engine which has internal combustion shall be operated in an excavation unless the exhaust fumes will not accumulate within the excavation. No internal combustion engine shall be operated in a building unless exhaust gases and fumes are discharged outside of the building or there is an adequate supply of air for combustion and there is adequate ventilation to ensure that exhaust gases and fumes do not accumulate.

Waste
Dispose of trash and scrap in designated containers. Daily cleanup is required for all work sites. Waste material and debris must not be stored in areas of entry or exit. Waste material and debris should not be thrown from one level to another, but be carried down, lowered in containers or deposited in a disposal chute. The Regulations for Construction Projects have specific requirements for waste removal.

Tools, materials and equipment should be stored in an orderly manner, a minimum of
1.8 meters from roof or floor openings, open edge of floor or roof. All shop materials and equipment shall be stored in their proper place. Keep roads, walkways, stairs and emergency exits clear. Cords, cables and hoses crossing roads or walkways are to be protected to prevent ripping or damage to equipment.

Round items must be choked to prevent them from rolling. Loose items should not be stacked higher than two meters. Cross tie the loose items such as bags or blocks. Banding straps must be kept in place during construction.

Material Storage

Material and equipment must be stored and moved in a manner which does not endanger any worker. If the material or equipment is to be piled or stacked, then it must be done in a way that prevents the material from tipping, collapsing or rolling. The Regulations for Construction Projects regulate the specific locations where material and equipment may not be stored. Stacked or piled.

Substance Storage

Any combustible, corrosive or toxic substance must be stored in a suitable container. Storage cylinders for compressed gas shall be secured in an upright position. Reference should be made to the Regulatory requirements for the appropriate containers for storage and transportation of flammable liquids.

Tools and Equipment
It is the intention of MWS to provide safe equipment and tools at all times. No unsafe equipment or tools are to be used on any work site. Any defective or unsafe equipment is to be drawn to the attention of the Supervisor, and/or office to determine repair requirements or replacement.

# TAB 15 - HAZARD CONTROL PROCEDURE

Every employee has the essential ingredient for effective Occupational Health and Safety action, that being expertise. Each employee knows the intimate details of their jobs better than anyone else and can therefore help identify potential or actual hazards. The following procedure gives you, the employee, the method of communicating your concerns on hazards throughout the operation directly to management.
Procedure

1) An employee who identifies a workplace hazard or potential hazard is to report the hazards to their immediate supervisor using the Health and Safety "Hazard Report Form".

2) Health and Safety "Hazard Report Forms" are located at the MWS office.

3) The supervisor who has received a Health and Safety "Hazard Report", is to address the issue if the corrective action falls within their areas of responsibility and expertise.

4) If the supervisor is not accountable for correction of this identified hazard, then they are responsible to immediately (same shift) forward the report form to the MWS Mechanical Supervisor who will investigate the issue.

5) The supervisor receiving the Health and Safety "Hazard Report" is responsible for the hazard classification of the sub-standard condition. (Please refer to the hazard classification next page).

6) Health and Safety "Hazard Reports[11] are to be resolved in order of hazard classification priority.

7) All Health and Safety "Hazard Reports" must be addressed within 24 hours and a copy, including planned corrective action and target completion date, returned to the employee who reported the hazard, their supervisor and the MWS office.

8) If an employee is not satisfied with the proposed solution to the hazard or potential hazard, they should,

   a) Discuss the recommendation with their supervisor,

   b) If still unsatisfied, then the employee may discuss the hazard with the union Health and Safety representative who will raise the concern with the Joint Health and Safety Committee for its recommendation.

HAZARDS CLASSIFICATION

Class "A" Hazard

A condition or practice likely to cause permanent disability, loss of life or body part, and/or extensive loss of structure, equipment or material.

Example 1 - Barrier guard missing on large press brake for metal shearing operation.
Example 2 - Maintenance worker observed servicing large sump pump in unventilated area.

Class "B" Hazard

A condition or practice likely to cause serious injury or illness (resulting in temporary disability) or property damage that is disruptive, but less severe than Class "A".

Example 1 - Slippery oil condition observed in main aisleway, Example 2 - Broken tread at bottom of Mezzanine stairs.

Class "C" Hazard

A condition or practice likely to cause minor (non-disabling) injury or illness or non- disruptive property damage. .

Example 1 - Carpenter observed handling rough lumber without gloves,
Example 2 - Strong rancid odour from cutting oil circulating in bed of large lathe.

Hazard Report Form

| |
|---|
| Name: Date: |
| Department: |
| Equipment:/Circumstance: |
| Description of the hazard(s): |
| Suggested corrective action: |
| Signature of Employee: |
| Supervisor's remarks: |
| Corrective action taken:<br><br>Signature of Supervisor: |

# TAB 16–COMPANY VEHICLE ACCIDENT REPORTING & INVESTIGATION

Policy

It is the policy of MWS that all Company vehicle incidents occurring through the operation of our fleet during performance of business-related activities must be reported. See Exhibit A - Vehicle Accident Report.
Vehicle Accident is defined as:
Any event in which an MWS vehicle is involved in a Traffic accident (whether in motion, temporarily stopped, parked, or being unloaded or loaded) that results in damage to the vehicle or injury to a person.

At the Scene Driver Responsibilities

- Call for help, police, medical
- Protect the scene from additional vehicle collision
- Provide reasonable assistance, within the limits of your training and knowledge, to any injured persons
- Notify the Safety Coordinator/MWS office as soon as practical

Accident Reporting System

The gathering of post-accident information is very important. The information may assist staff during the claim handling process, be used in determining preventability, and be used as a case study for training other drivers in accident prevention.
The form to be used for accident reporting and investigation is the Vehicle Accident Investigation Report. This report is to be completed within 24 hrs. of the incident and the completed report forwarded to the Safety Coordinator.

TRAFFIC ACCIDENT REPORTING FORM

## ( A ) In Case of Injury

1. Stop immediately, keep calm & warn oncoming traffic.
2. Help the injured. Do not render first aid unless you are trained. Call an ambulance if necessary.
3. Do not argue, accuse anyone or make admission of blame for the accident.
4. Call the Police. Call the MWS office manager or health & safety coordinator at 519-570-1511.
5. Complete this report in full and give it to the MWS office manager promptly.

## ( B ) Vehicle & Driver Information

| ***MWS Vehicle # 1*** | | | |
|---|---|---|---|
| TMI Driver's Full Name | | | TMI Driver's License # |
| TMI Driver's Address | | | TMI Driver's Phone # |
| City | Province | Postal Code | TMI Vehicle Description & TMI Vehicle # |

| ***Other Vehicle # 2*** | | | |
|---|---|---|---|
| Driver's Full Name | | | Vehicle Description (year, make, colour) |
| Driver's Address | | | Vehicle License Plate # |
| City | Province | Postal Code | Owner of Vehicle |
| Driver's License # | | | Insurance Company |
| Driver's Phone # | | | Insurance Policy # |

| ***Other Vehicle # 3*** | | | |
|---|---|---|---|
| Driver's Full Name | | | Vehicle Description (year, make, colour) |
| Driver's Address | | | Vehicle License Plate # |
| City | Province | Postal Code | Owner of Vehicle |
| Driver's License # | | | Insurance Company |
| Driver's Phone # | | | Insurance Policy # |

## ( C ) Get Names of all Occupants

| ***Occupant # 1*** | Vehicle # | | ***Occupant # 2*** | Vehicle # | |
|---|---|---|---|---|---|
| Occupant's Full Name | | | Occupant's Full Name | | |
| Occupant's Address | | | Occupant's Address | | |
| City | Province | Postal Code | City | Province | Postal Code |
| Occupant's Phone # | | Injured? | Occupant's Phone # | | Injured? |

| ***Occupant # 3*** | Vehicle # | | ***Occupant # 4*** | Vehicle # | |
|---|---|---|---|---|---|
| Occupant's Full Name | | | Occupant's Full Name | | |
| Occupant's Address | | | Occupant's Address | | |
| City | Province | Postal Code | City | Province | Postal Code |
| Occupant's Phone # | | Injured? | Occupant's Phone # | | Injured? |

## ( D ) Get Names of all Witnesses

| ***Witness # 1*** | Phone # | | ***Witness # 2*** | Phone # | |
|---|---|---|---|---|---|
| Witness's Full Name | | | Occupant's Full Name | | |
| Witness's Address | | | Occupant's Address | | |
| City | Province | Postal Code | City | Province | Postal Code |

# TAB 17-ELECTRICAL SAFETY-RELATED WORK PRACTICES

1. Purpose

The purpose of this procedure is to cover the actions that should be taken to protect employees from the risk of electrical shock.

2. Scope

This plan applies to both qualified and non-qualified employees. Electrical Safety- Related Work Practices apply to those who work near exposed electrical circuits that operate at 50 volts or more. Occupations generally affected by this regulation include, but are not limited to:

a. Electrical and electronic engineers, equipment assemblers and technicians
b. Electricians
c. Industrial machine operators
d. Maintenance Mechanics and repairers
e. Painters
f. Stationary engineers
g. Welders
h. Supervisors of the groups listed above

3. Exhibits

Electrical Protective Equipment
Requirements for Non-qualified Employees
Procedures for Qualified Employees

4. Definitions

**Qualified person** - One familiar with the construction and operation of the electrical equipment and the hazards involved. Only qualified workers may work on energized conductors or equipment. This is typically electricians, welders, and some maintenance personnel.

**Non-Qualified** - Employees that have not been specifically trained to work on live electrical parts but may be exposed to the risk of electrical shock due to the nature of their work. This could be full time and weekend cleaning crews, painters, and some maintenance personnel.

5. Reference

In various jurisdictions, rules and regulations may require the Company to follow stricter standards. In those instances, it is the policy of the Company and the responsibility of all people to comply with all applicable rules and regulations.

6. Safety-Related Work Practices

Safety-related work practices are used to prevent electrical shock or similar injuries by keeping workers away from energized equipment or circuits.

A. Whenever there is a reasonable capability to de-energize equipment in order to prevent exposure to live electrical circuitry, the Company Lockout and Tagout procedures shall be used. When this is not possible, electrical safety work practices shall be used to prevent injuries that can be associated with working on or near energized electrical circuitry. Situations where it could be considered "not" reasonable to de-energize equipment prior to working on it would be when:

1. The shutdown of the circuitry creates additional safety hazards (i.e. the removal of illumination for an occupied area) or when testing of an electrical circuit that can only be done when the circuit is energized.

2. Working on circuitry that forms an integral part of a continuous industrial process (i.e. when the entire plant would have to be shut down in order to permit work on one circuit).

B. Any employee working on or near energized parts shall follow such work practices that will prevent the energized part from coming directly in contact with any part of their body or indirect contact through some other conductive object.

C. Qualified persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special personal protective equipment, insulating and shielding materials, and insulated tools. Only insulated tools that comply with the International Electrotechnical Commission standard 900 (IEC 900), and marked with the international "l000V" rating symbol should be used. If insulated tools become damaged or worn, the tool must be removed from service and destroyed.

D. Conductive materials and equipment that are in contact with any part of an employee's body shall be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts. If an employee must handle long dimensional conductive objects (such as ducts, pipes, and

E. tools) in areas with exposed live parts, work practices (such as the use of insulation, guarding, and material handling techniques) which will minimize the hazard shall be used. (See Exhibit A)

F. Safety signs, tags, or barricades can be used to warn and protect workers. When these techniques do not provide sufficient protection, an attendant should be used.

a. Portable ladders shall be made of nonconductive material where the employee or the ladder could contact exposed energized parts.

G. Conductive articles of jewelry and clothing (such as watchbands, bracelets, rings, key chains, necklaces) shall not be worn.

H. Where live parts present an electrical contact hazard, employees shall not perform housekeeping duties at such close distances to the parts that there is a possibility of contact, unless adequate safeguards (such as insulating equipment or barriers) are provided. Electrically conductive cleaning materials are not to be used in proximity to energize parts unless procedures are followed which will prevent electrical contact.

I. Only a qualified person may defeat an electrical safety interlock, and then only temporarily while he or she is working on the equipment. The interlock system shall be returned to its operable condition when this work is completed.

7. ELECTRICAL EQUIPMENT

A. Portable equipment shall be handled in a manner which will not cause damage. Flexible electric cords connected to equipment may not be used for raising or lowering the equipment. Flexible cords may not be fastened with staples or otherwise hung in such a fashion as could damage the outer jacket or insulation.

B. Portable cord- and plug-connected equipment and flexible cord sets (extension cords) shall be visually inspected before use on any shift for external defects (such as loose parts, deformed and missing pins, or damage to outer jacket or insulation). If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item shall be tagged and removed from service. Electrical tape may not be used to cover defects to the cord insulation.

C. A flexible cord used with grounding-type equipment shall contain an equipment grounding conductor.

Attachment plugs and receptacles may not be connected or altered in a manner, which would prevent proper continuity of the equipment grounding conductor at the point where plugs are attached to receptacles.

The environment in which electrical equipment is to be used should also be considered. Ground Fault Circuit Interrupters (GFCI) or low voltage tools should be used in conductive work locations. Special equipment may also be required in areas that may contain flammable or ignitable material or vapors.

8. PERSONAL PROTECTIVE EQUIPMENT

A. Employees working in areas where there are potential electrical hazards shall use electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed (i.e. gloves, boots, etc.)

Note: Approved insulated gloves should always be worn when working with voltages in excess of 300 volts.

B. Employees shall wear protective equipment for the eyes or face wherever there is danger of injury to the eyes or face from electrical arcs or flashes or from flying objects resulting from electrical explosion.

C. Employees shall use insulated tools or handling equipment if the tools or handling equipment might make contact with such conductors or parts.

D. Fuse handling equipment (insulated for the circuit voltage) shall be used to remove or install fuses when the fuse terminals are energized.

E. Protection shields, protective barriers, or insulating materials shall be used to protect each employee from shock, burns, or other electrically related injuries while that employee is working near exposed energized parts. When normally enclosed live parts are exposed for maintenance or repair, they shall be guarded to protect non-qualified persons from contact with the live parts.

F. Safety signs, safety symbols, or accident prevention tags shall be used where necessary to warn employees about electrical hazards, which may endanger them.

9. Electrical Protective e quipment

1. Electrical Protective Equipment-also known as Insulating Equipment- includes items such as insulated blankets, matting, covers, line hose, gloves and sleeves. Blankets, gloves and sleeves are clearly marked with Class and Type. The Class refers to the maximum use voltage. Insulating equipment must not exceed maximum use voltages *(See Table 1).*

2. The Type marking refers to its ozone resistance. Type I is not ozone resistant; Type II is ozone resistant.

3. Insulated equipment must be inspected before each day's use and immediately following an incident that may have caused damage. If insulated equipment is found to have any of the following defects it must not be used:
   - Holes, tears, punctures, cuts;
   - Ozone cutting or checking;
   - Embedded foreign object(s);
   - Swelling, softening, hardening, loses elasticity or becomes sticky; or
   - Any other defect.

*4.* When insulated equipment is removed from service, it may not be used again until it has been retested and certified. All electrically insulated equipment must also be retested and certified periodically; the retesting period depends on each type of equipment. *(See Table 2.)*

5. In addition to wearing insulated rubber gloves, protector gloves-usually made of leather-are to be worn over the rubber gloves. There are two exceptions to this rule. Protector gloves are not required for:
   - Class O gloves where high finger dexterity is required; or
   - In a case when a person uses a glove one class higher than required in a situation where there's minimal chance of damage.

(The drawback of doing this is that the insulated glove may not be used again at that higher voltage rate until it has been retested and certified.)

Table 1
Class and Use Voltages

| Class | Maximum Use Voltage | Proof test (AC) | Retest Voltage **(AC)** | Proof Test (DC) | Retest Voltage (DC) |
|---|---|---|---|---|---|
| 0 | 1,000 | 5,000 | 5,000 | 20,000 | 20,000 |
| 1 | 7.500 | 10,000 | 10,000 | 40,000 | 40,000 |
| 2 | 17,000 | 20,000 | 20,000 | 50,000 | 50,000 |
| 3 | 26,500 | 30,000 | 30,000 | 60,000 | 60,000 |
| 4 | 36,000 | 40,000 | 40,000 | 70,000 | 70,000 |

Table 2

| Type of Equipment | When to Test |
|---|---|
| Line Hose | Upon indication that insulating value is suspect |
| Covers | Upon indication that insulating value is suspect |
| Blankets | Before first issue and every twelve months thereafter* |
| Gloves | Before first issue and every six months thereafter* |
| Sleeves | Before first issue and every twelve months thereafter· |

• If insulating equipment has been tested but not issued for service, it may not be placed into service unless it has been tested within the previous 12 months.

PROCEDURES FOR NON-QUALIFIED EMPLOYEES

Safety-related work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts when work is performed near or on equipment or circuits which are or may be energized.

Non-qualified employees shall receive direction/instructions in electrically related safety practices in general, which are necessary for their safety in the performance of their normal duties.

Non-qualified employees are:

- Employees with little or no training in the installation, maintenance, or repair of electrical circuitry and equipment.
- Employees who may have training in, or have knowledge of electrical equipment operation, but whose normal duties do not include involvement with electrical equipment outside their own workstations or departments.
- Non-qualified employees are in all departments of a plant, including office personnel.
- In the performance of their normal duties, non-qualified employees shall not:
- Remove, open, or interfere with the safe operation of any outlet, circuit, or control panel {including extension cords);
- Remove barriers provided to prevent entry into an unsafe area;
- Disregard any instruction or sign provided for safety while repairs are being conducted (electrical lockout/tagout).

Approach distances for non-qualified employees are:

- For voltages of 50kV or less,10 feet.
- For voltages greater than 50Kv, 10 feet plus an additional 4 inches for every l0kV above 50kV.

See Electrical Safety Training Guide for Non-Qualified Employees next page.

ELECTRICAL SAFETY TRAINING GUIDE FOR NON-QUALIFIED EMPLOYEES

1. Be familiar with the electrical tools or equipment you are using.
2. Examine electrical cords for wear and/or damage
   - At the equipment
   - At the plug
3. Does the plug have a ground (third) pin?
   - If not, is the equipment labeled as Double Insulated?
   - If it does not have a ground pin or indicate Double Insulated, DO NOT USE IT!
4. Check outlets for signs of arcing or sparking, before plugging in any electrical device.
5. If you receive on electric shock, notify supervision immediately.
6. Before plugging or unplugging tools or equipment, be sure the power is turned "OFF".
7. Never unplug equipment by pulling on the cord. Grip the plug at the outlet.
8. Be alert for warning signs and messages that may be on the equipment or power supply, such as:
   - DO NOT USE!
   - Danger - Do Not Operate!
9. Remember that water conducts electricity.
   - Do not wear wet clothes around electrical sources.
   - Rain or perspiration con make YOU more conductive.
   - Make sure your hands are dry.

REQUIREMENTS FOR QUALIFIED EMPLOYEES

A QUALIFIED person may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown below unless:

1. The person is insulated from the energized part (gloves, with sleeves, if necessary, rated for the voltage involved are considered to be insulation of the person from the energized part on which work is performed), or
2. The energized part is insulated both from all other conductive objects at a different potential and from the person, or
3. The person is insulated from all conductive objects at a potential different from that of the energized part.

TABLE: APPROACH DISTANCES FOR QUALIFIED EMPLOYEES-ALTERNATING CURRENT

| Voltage range (phase to phase) | Minimum approach distance |
|---|---|
| 300V and less | Avoid Contact |
| Over300V, notover750V | 1 ft.0in. (30.5cm). |
| Over 750V, not over 2kV | 1 ft. 6 in. (46 cm). |
| Over 2kV, not over 15kV | 2 ft. 0 in. (61 cm). |
| Over 15kV, not over 37kV | 3 ft. 0 in. (91 cm). |
| Over 37kV, not over 87.5kV | 3 ft. 6 in. (107 cm). |
| Over87.5kV, not over 12lkV | 4ft.0 in. (122cm). |
| Over 121kV, not over 140kV | 4 ft. 6 in. (137 cm). |

# TAB 18 - HAZARD COMMUNICATION - WHMIS 2015/GHS

Purpose
The purpose of this standard is to ensure that employees who are exposed to hazardous chemicals in the workplace, are informed about those hazards through labels on the containers, safety data sheets [SDS] and training in order to properly handle accidental chemical illnesses and injuries.
Scope
This program applies to all MWS employees and sub-contractors who work with or may come in contact with any chemical or substance which may be hazardous to health.
Policy
Hazard Communication or Workplace Hazardous Materials Information System (WHMIS) is in place to inform employees, sub-contractors and other visitors on site, about the hazards of chemicals used in the workplace. This policy specifies minimum standards that must be met.
\ 4. Responsibility
\ Each Supervisor has the ultimate responsibility for the implementation of the Hazard Communication/ WHMIS policy. Competent people will carry out the
technical duties associated with Hazard Communication / WHMIS.
Reference:
It is the policy of MWS and the responsibility of all persons designated with safety responsibility to comply with all applicable rules and regulations.
Definitions

**Safety Data Sheets -SDS's.** These sheets are typically prepared by the manufacturer for each chemical shipped and indicate the physical and chemical health hazards, the personal protective equipment (PPE) that is required to be worn, precautionary measures to be taken to prevent exposure and emergency and first aid measures to be taken in the event of exposure to the chemical.

**Exposure or Exposed Employee** - means an employee is subjected to a hazardous chemical, in the course of employment, whether by accidental or possible exposure through any route of entry inhalation, ingestion, skin absorption or contact.
**HMIS** - is a standardized labeling system known as the Hazardous Material Information System that identifies on labels health, fire, reactivity and personal protection required.
**NFPA** - is a standardized by the National Fire Protection Association that indicates, on labels, the health, fire, reactivity and specific hazards of chemicals, such as corrosivity.
**Competent Person** - means a person who is capable of recognizing and evaluating physical and chemical health hazards from an SDS or other equivalent sheets; is capable of specifying the necessary PPE to be used; the precautions to be taken to ensure the safety of employees; and capable of training employees on the physical and health hazards, the PPE to be worn and emergency and first aid procedures to be taken.

Minimum Standards
Hazardous Chemicals Inventory
MWS will complete a written inventory of all chemicals used or stored onsite.

The inventory must identify each chemical by:
the primary name on the label,
the location of the chemical.

The chemical inventory must be available and maintained current by the following actions:

Request an SDS for every chemical requisitioned.
New chemicals to be used in the plant must be approved for use and added to the chemical inventory list.
Periodic (annual) review.

Current SDS sheets and labels for each chemical, where available, shall be obtained from the manufacturer specifying the physical hazards (e.g. flammability), potential health effects of the chemical due to exposure, and emergency and first aid procedures to follow in the event of exposure to the chemical.

An inventory of SDS sheets for chemicals used in the SHOP shall be kept on file.

All current SDS sheets shall be available in the workplace where chemicals are used, stored or handled, and all employees shall have immediate access to such information in their work area during their work shift. **The SDS's will be kept in a binder in the shop.**

A standardized labeling system (e.g. HMIS, NFPA) shall be used to identify the physical and chemical hazards listed on the SDS sheets, any common names used for the chemical and the PPE that should be used when working around the chemical.

The standard labels shall be placed on all containers.
Each area where the chemical is used shall have a label.
If there are a number of stationary process containers (e.g. storage tanks) in the area that contain the same chemical, a general placard or sign may be used to convey the chemical information and PPE required.
Pipes and piping systems containing hazardous chemicals are required to be labeled also indicating direction of flow.
Containers used to transfer chemicals must be labeled.
Procedures shall be in place to ensure that no new chemical is used, stored or handled without current SDS sheets or equivalent information, proper labeling and employee training.
Education, Training & Documentation
Initial training will be provided, by a competent person, for employees exposed to chemicals in the workplace. At a minimum, the training must include:

Instructions to employees on the physical and chemical hazards associated with chemicals used at the facility.
Instructions on how to read and interpret the labels.
How and where employees can obtain information contained on the SDS sheets.
The personal protective equipment that is to be worn by employees working with or around chemicals at the facility. See also PPE standard.
Methods and observations workers can use to detect the presence of the chemical to which they may be exposed (e.g. visual appearance or smell).

The emergency and first aid procedures to be taken in the event of exposure to the chemical. (e.g. emergency showers/eyewashes).
All employees shall be retrained if any of the following occur:

The employer has reason to believe that the employee deviates from or does not have adequate knowledge of the hazards associated with the chemical.

The chemical or process area presents a newly identified hazard.
Sub-Contractors

All subcontractors working onsite must be given specific information about hazardous chemicals within the location that may pose a risk to contract employees.

All subcontractors must provide the location contact with information (SDS) concerning hazardous chemicals to be used in contracted work before that work begins.

# TAB 19-PERSONAL PROTECTIVE EQUIPMENT PROGRAM

Purpose
MWS has implemented a Personal Protective Equipment program to prevent injury from exposure to workplace hazards.

Scope
This program applies to all employees, subcontractors and visitors who have the potential to encounter workplace hazards.
Responsibility
The Mechanical Manager/Supervisor has the ultimate responsibility for the implementation of the Personal Protective Equipment (PPE) policy. Competent people will carry out the technical duties associated with PPE.
Reference Documents
Exhibits
Hazard Assessment Form
Hazard Assessment Guide
Eye and Face Protection Chart
Hand Protection Chart
Head Protection Chart
Foot Protection Chart
Definitions
**Hazard Assessment** - is conducting an inspection in the workplace to determine hazardous or potentially hazardous conditions that may necessitate the use of PPE by employees.
**Competent Person** - a person who is capable of recognizing and evaluating hazardous and potentially hazardous or unsafe workplace conditions; is capable of specifying the necessary personal protective equipment to be used; the precautions to be taken to ensure the safety of employees; and capable of training employees to identify these conditions and use proper personal protective equipment.

Reference:
It is the policy of this Company and the responsibility of all persons to comply with all applicable rules and regulations.
Minimum Standards
Subject to the following conditions, the Company will supply each employee with the personal protective equipment necessary for the employee to perform his/her assigned responsibilities in a safe and healthy manner. Listed below are the personal protection equipment and the associated hazards that require their use:
a. **Eye and face protection** must be approved and worn when there is potential exposure to:
flying particles,
molten metal,
liquid chemicals, acids, caustics,
chemical gases or vapors,
electrical arcing or sparks,
potentially damaging light or from welding, cutting, brazing, or soldering,
dusts or
swinging objects such as ropes or chains.

Safety glasses with side shields and a full-face shield are required whenever a high-speed grinder, brush, abrasive wheel or disk, or impact operations (hammering, chipping) presenting similar danger.

A full chemical style goggle or equivalent protection is required anytime a person may potentially contact a hazardous chemical, powder or mixture. A full eye goggle, such as a chemical goggle, is required anytime pressurized pipes and ducts are opened or during any task where there is a high risk of a foreign body· to get behind the standard eye protection.
Appropriate eye and face protection must be used whenever conducting thermal burning, cutting, welding, or brazing operations where there is a need to protect from potentially injurious light radiation.
**Skin protection** including hand, arm and torso protection are required to protect against burns, cuts, abrasions, punctures, heat, hot metals and liquids, acids, radiation, electrical shock, and adsorption of chemicals. (See Exhibit D for more information)
Canvas, leather or equivalent gloves are necessary when there is a potential for being struck by/ against or coming in contact with sharp, hot or splintered objects which can cause cuts, abrasions, contusions and thermal burns. Though not a primary protection, using this can lessen the impact of radiation and electrical shock.
Approved chemical resistant gloves and protective coats must be worn when there is potential contact with chemical hazards causing burns, skin adsorption and dermal rashes.
**Head protection** Safety helmets shall be CSA approved and undamaged. The helmet will be fitted with a properly installed suspension system. Only approved type liners may be worn underneath the helmet. This excludes baseball caps and toques. No paint of any type is to be applied to the helmet. No holes or indentations are to be made in the helmet. Safety helmets will be worn as required by the project.
**Foot protection** must be worn at all times.
Boots insulated against electrical hazards must be worn when there is no other practical way to isolate the person from ground. A

combination of an insulated pad and boot is recommended.
Steel-toe leather boots or shoes for impact and compression exposures to heavy tools, rolling, falling or pinching objects, rolls, carts or vehicles.
The Company has determined at minimum, the safety footwear shall be CSA approved Grade 1 (Green Patch) with the protection of puncture resistant and steel plate.
Safety footwear shall be in good condition and be fully laced and tied.

**Hearing protection** Anyone exposed to excessive noise (OHSA & Industrial Regulations Section 139) will be responsible to wear suitable ear protection.

**Fall protection A** worker must wear a full body harness, meeting the requirements of the Construction Regulations (213/91) connected to a fall- arrest system, with the lanyard tied off to either a fixed support or a lifeline whenever the worker is:

3 metres or more above the floor
above operating machinery, or
above hazardous substances or objects.

**Respiratory protection** is required when, after all engineering controls are considered, a potential exists for employees to be exposed to harmful dusts, fogs, fumes, gases or other vapors.
All PPE shall meet the following standards:
be adequate for the hazards presented;
approved by a recognized standards association (e.g. ANSI, NIOSH, CSA);
fit properly;
maintained in good repair;
maintained in a sanitary condition, and;
re-usable PPE is capable of being disinfected.

## HAZARD ASSESSMENT GUIDE

It is a requirement of the Company to conduct a hazard assessment to determine if there are any hazards present or likely to be present which require the use of Personal Protective Equipment (PPE). The assessment must match the PPE to the particular hazard.

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

Review injury and Accident Data:

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

1. Weekly Injury Report
2. WCB *I* Workers Compensation Claims

Inform Employees and Supervisors of the Process:

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

Conduct a Walk-Through Survey:

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

Consideration should be given to the following basic hazard categories:

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

**Organize the Data:**

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

**Analyze the Data:**

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

**Selection guidelines:**

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

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

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

**Fitting the Device:**

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

**Reassessment of the Hazards:**

Reassess the workplace as necessary by identifying and evaluating:

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

**Eye and Face Protection Chart:**

1. Refer to the Eye and face Protection Chart for guidance on the proper selection of PPE for eye and face protection.
2. Some occupations for which eye and face protection should be routinely considered are: carpenters, electricians, machinists, lathe operators, maintenance mechanics, plumbers, pipe fitters, sheet metal workers, assemblers, machine operators, welders, those working on battery-powered forklifts, sanitation workers, etc.

**Head Protection Chart:**

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

**Foot Protection Chart:**

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

**Hand Protection Chart:**

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

**Cleaning and Maintenance:**

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

**Hazard Assessment Certification:**

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

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

EYE AND FACE PROTECTION CHART

| Source | Assessment of Hazard | Protection |
|---|---|---|
| **IMPACT** – chipping, grinding, machining, masonry, woodworking, sawing, drilling chiseling, sanding, etc. | Flying fragments, objects, large chips particles of sand, dirt, etc. | Spectacles with side protection, goggles faceshields. See notes (1), (3), (5), (6), (10). For severe exposure, use face shield. |
| **HEAT** – furnace & oven operations, etc. | Hot sparks | Face shields, goggles, spectacles with side protection. For severe exposure use faceshield. See notes (1), (2) and (3). |
| **CHEMICALS** – acids, caustics, degreasers, cleaning chemicals, etc. | Splashing liquids | Goggles, eyecup and cover types. For severe exposure, use faceshield. See notes (3) and (11). |
| **DUST** – woodworking, buffing, general dusty conditions. | Nuisance dust | Goggles, eyecup and cover types. See note (8). |
| **LIGHT and/or RADIATION -Welding: Electric arc** | Optical radiation | Welding helmets or welding shields. Typical shades: 10-14. See notes (9) and (12). |
| **-Welding: Gas** | Optical radiation | Welding goggles or welding faceshield. Typical shades: gas welding 4-8, cutting 3-6, brazing 3-4. See note (9). |
| **-Cutting, Torch brazing, Torch soldering** | Optical radiation | Spectacles or welding faceshield. Typical shades: 1.5-3. See notes (3) and (9). |
| **-Glare** | Poor vision | Spectacles with shaded or special-purpose lenses, as suitable. See notes (9), (10). |
| **CONTACT WITH BODY FLUIDS / BLOODBORNE PATHOGENS** | First Aid Procedures, CPR | Safety glasses with solid sideshields. Use safety goggles or faceshield plus goggles for severe exposure. CPR mask as barrier during resuscitation. |

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

Exhibit C Eye & Face Protection
Page 1 of 1

HAND PROTECTION CHART

Some of the hazards that threaten hand safety are skin absorption of harmful substances, chemical hazards, such as caustic material, solvents or cutting oils, cuts or lacerations; punctures; chemical burns; thermal burns; harmful temperature extremes; bacteriological, blood or other infectious materials; and musculoskeletal disorders.

**Preventing Hand Injuries**
When substitution of less hazardous materials and work practice controls fails to eliminate the risk of injury to hands, protective gloves are the primary means of protection.
Protective equipment includes gloves, hand pads, tapes and mitts. There are many types of gloves available and the challenge is to find the right glove for the job.

| GLOVE TYPES | PROTECTION |
|---|---|
| **Butyl** | Gas or water vapors, common acids and alcohols |
| **Hot-Mill or Aluminized** | Heat and welding sparks |
| **Latex** | Food Processing, some maintenance, construction, lab tasks |
| **Natural Rubber** | Liquid proof protection against acids, caustics and dye stuffs |
| **Nitrile/Natural Rubber** | Used for most acids, alkalis, cutting oils, fats, alcohol and grease. Nitrile/Rubber blend resists abrasions, cuts, tears, punctures |
| **Neoprene** | Acids, caustics, oils, grease and many solvents |
| **Neoprene Latex** | Detergents, salts, acids and caustic solutions |
| **PVC-Coated** | Many chemicals, oil and grease |
| **Silver Shield** | Wide range of solvents, acids and bases |
| **Vinyl** | Irritants |
| **Viton** | PCBs, chlorinated and aromatic solvents, gas and water vapors |
| **Cotton or Canvas** | General work including parts handling, general maintenance to provide abrasion resistance |
| **Leather** | Mild heat resistance and good abrasion resistance |
| **Metal-Mesh or Cut Resistant** | Cuts, abrasions. Used in glass handling, metal fabrication and food processing applications. |
| **Shock Absorbing** | Repetitive pushing and pounding or extended contact and to help lessen the effects of constant vibration |

ADDITIONAL INFORMATION:

- Gloves must be inspected frequently.
- Change if cracked, peeling, torn, punctured or otherwise deteriorating.
- If irritation or rashes appear, evaluate the use of another type of glove.
- Some gloves can trigger an allergic reaction.
- Order the proper size/type!
    - Tight-fitting gloves can cause fatigue.
    - Loose fitting gloves can be hazardous.
    - Review the chemical compatibility chart to determine breakthrough performance to determine the suitability of a glove for a specific application.

Exhibit D Hand Protection
Page 1 of 1

head protection chart

| Source | Assessment of Hazard | Protection |
|---|---|---|
| IMPACT | Falling objects | Hard Hat. Specify Type. (See ANSI performance requirements below). |
| | Collision with a fixed object | Bump Cap for light protection against bumps and lacerations (Non-ANSI) |
| ELECTRICAL | Contact with exposed electrical wires, conductors | Class A or Class B Hard Hat, depending upon exposure. (See ANSI performance requirements below). |

**ANSI PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL HEAD PROTECTION**

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

APPENDIX E

FOOT PROTECTION CHART

| Source | Assessment of Hazard | Protection |
|---|---|---|
| **IMPACT** | Falling objects, heavy tools | Safety shoes. For severe exposure use metatarsal guards (See ANSI performance requirement) |
| **PENETRATION** | Nails, scrap metal, and other sharp objects | Footwear with puncture resistant soles/steel insert |
| **COMPRESSION** | Rolling or pinching objects, rolls, carts or vehicles | Safety shoes. For severe exposure use metatarsal guards (See ANSI performance requirement) |
| **CHEMICALS** | Splashing/spilling liquids, i.e., solvents, oils, paints, corrosives, acids, etc. | Leather shoes for mild exposures. Rubber boots for severe exposure. Acid resistant when applicable. |
| **ELECTRICAL** | Contact with power lines, conductors, arcing, sparks or static discharges. | Footwear with special conductive/ insulated soles. |
| **WATER** | Wetness/ moisture from prolonged exposure | Insulated shoes or boots |
| | Slipping hazard | Footwear with slip resistant soles. |
| **TEMPERATURE** | Exposure to extreme cold | Insulated shoes/ boots |

**CSA/ANSI PERFORMANCE REQUIREMENTS FOR OCCUPATIONAL FOOT PROTECTION**

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

Exhibit F Foot Protection
Page 1 of 1

FALL PROTECTION RESCUE PLAN

Discussion: where an employee is working in a position where he has a potential to fall from a height greater than 3m (10-ft), the employee must be adequately tied off.

☑ If employee falls and is suspended, immediately put in place this rescue plan.
☑ If employee is suspended for longer than 15 minutes call 911 for assistance.

Procedure:

1. All employees must wear a full body harness with shock absorbing lanyard that is properly attached (tied off) to the recommended tie off location.

2. Employee: who has fallen and is suspended will call for assistance.
   ☑ Stay calm, remain suspended
   ☑ *Do not attempt to climb back onto structure.*

3. First responder will check your condition, if unconscious call emergency (911) and notify supervisor immediately. *Keep talking to suspended employee.*

4. Immediately get ladder or elevated work platform (boom or scissor lift or similar access device) into position below employee to come up under the individual facilitating his/her rescue. DO NOT unhook lifeline until employee is on platform bed or footing of the ladder.

5. If unable to rescue employee call 911.

6. Ensure employee gets proper first aid treatment.

7. Notify manager health & safety; arrange to have fall arrest equipment sent to office for evaluation.

ELEVATED WORK PLATFORM RESCUE PLAN

Discussion: where an employee is working in a position where he has a potential to fall from a height greater than 3m (10-ft), the employee must be adequately tied off.

- ☑ If employee falls and is suspended, immediately put in place this rescue plan.
- ☑ If employee is suspended for longer than 15 minutes call 911 for assistance.

Procedure:

1. All employees on the job will be shown the emergency lowering device on elevated work platforms.

2. All employees will wear a full body harness (properly fitted), with shock absorbing lanyard that is properly attached (tied off) to the manufactures recommended tie off location.

3. Employee who has fallen out of the platform will call for assistance.
   - ☑ Stay calm, remain suspended
   - ☑ *Do not attempt to climb back onto structure.*

4. First responder will check your condition, if unconscious or unresponsive call 911 and notify supervisor immediately

5. Lower the platform by use of equipment emergency lowering device. Lower the employee to the ground slow and steady. If the employee cannot reach the ground safely, move the equipment to a location where this can be accomplished.

6. If equipment can not be manually lowered, use second platform to come up under the individual to rescue him.

7. If unable to rescue employee call local fire emergency call 911

8. Insure employee gets proper first aid treatment. Call 911

9. Notify manager health & safety, arrange to have fall arrest equipment sent to office for evaluation.

PERSONAL PROTECTIVE EQUIPMENT (PPE) HAZARD ASSESSMENT SURVEY AND ANALYSIS

Company: _____ Location: _____

Job Classification: _____ Operation: _____

Person Performing Assessment: _____ Title: _____

**THE FOLLOWING HAZARDS HAVE BEEN NOTED**

| Part of Body | Hazard | Required PPE | Notes |
|---|---|---|---|
| **Hands**  | ☐ Penetration sharp objects<br>☐ Penetration animal bites<br>☐ Penetration rough objects<br>☐ Chemicals(s)_____<br>_____<br>☐ Extreme cold<br>☐ Extreme heat<br>☐ Blood<br>☐ Electrical shock<br>☐ Vibration power tools<br>☐ Other _____ | ☐ Leather/cut resistant gloves<br>☐ Leather/cut resistant gloves<br>☐ General purpose work gloves<br>☐ Chemical resistant gloves; Type _____<br>☐ Insulated gloves<br>☐ Heat/flame resistant gloves<br>☐ Latex or nitrile gloves<br>☐ Insulated rubber gloves Type_____<br>☐ Cotton, leather or anti-vibration gloves<br>☐ Other_____ | |
| **Eyes and Face**  | ☐ Exposure to sparks<br>☐ Impact-flying objects, chips, sand or dirt<br>☐ Nuisance dust<br>☐ UV light-welding, cutting, torch brazing or soldering<br>☐ Chemical splashing liquid<br>☐ Chemical irritating mists<br>☐ Hot sparks grinding<br>☐ Splashing molten metal<br>☐ Sun Exposure/Glare/High Intensity Lights<br>☐ Laser operations<br>☐ Other_____ | ☐ Leather welding hood<br>☐ Safety glasses w/side shields<br>☐ Glasses/goggles w/face shield<br>☐ Impact goggles<br>☐ Welding goggles<br>☐ Welding helmet/shield w/safety glasses & side shields<br>☐ Chemical goggles/ face shield<br>☐ Chemical goggles w/face shield<br>☐ Safety goggles w/face shield<br>☐ Shaded safety glasses<br>☐ Laser spectacles or goggles<br>☐ Other _____ | |
| **Respiratory System**  | ☐ Nuisance dust/mist<br>☐ Welding fumes<br>☐ Asbestos<br>☐ Pesticides<br>☐ Paint or Isocyanates (spraying)<br>☐ Organic vapors<br>☐ Acid gases<br>☐ Oxygen deficient/toxic or IDLH atmosphere<br>☐ Other_____ | ☐ Disposable filtering face piece (dust/mist mask)<br>☐ Welding respirator<br>☐ Respirator w/HEPA filter<br>☐ Respirator w/pesticide cartridges<br>☐ Air-supplied respirator<br>☐ Respirator w/paint spray cartridges<br>☐ Respirator w/organic cartridges<br>☐ Respirator w/acid gas cartridges<br>☐ SCBA or Type C airline respirator<br>☐ Other _____ | |

Page 1 of 2

| | | | |
|---|---|---|---|
| Ears  | ❒ Exposure to noise levels (>85 dBA 8-hour TWA) | ❒ Ear muffs or plugs | |
| **Part of Body** | **Hazard** | **Required PPE** | **Notes** |
| Foot  | ❒ Impact heavy objects<br>❒ Compression rolling or pinching objects/vehicles<br>❒ Slippery or wet surface<br>❒ Penetration sharp objects<br>❒ Penetration chemical<br>❒ Splashing chemical<br>❒ Exposure to extreme cold<br>❒ Other _____ | ❒ Steel toe safety shoes<br>❒ Leather boots or safety shoes w/metatarsal guards<br>❒ Slip resistant soles<br>❒ Puncture resistant soles<br>❒ Chemical resistant boots/covers<br>❒ Rubber boots/closed top shoes<br>❒ Insulated boots or shoes<br>❒ Other _____ | |
| Head  | ❒ Struck by falling object<br>❒ Electrical contact with exposed wires/conductors<br>❒ Struck against fixed object<br>❒ Other _____ | ❒ Hard hat<br>❒ Class A<br>❒ Class B<br>❒ Class C<br>❒ Bump Cap<br>❒ Other | |
| Body  | ❒ Impact Flying objects<br>❒ Moving vehicles<br>❒ Penetration sharp objects<br>❒ Electrical static discharge<br>❒ Hot metal or sparks<br>❒ Chemical(s) _____<br>❒ Exposure to extreme cold<br>❒ Exposure to extreme heat<br>❒ Unprotected elevated walking/working surface<br>❒ Other _____ | ❒ Long sleeves/ apron/ coat<br>❒ Traffic vest<br>❒ Cut resistant sleeves, wristlets<br>❒ Static control coats/ coveralls<br>❒ Flame resistant jacket/ pants<br>❒ Lab coat or apron/ sleeves<br>❒ Insulated jacket, hood<br>❒ Body cooling devices<br>❒ Body harness and lanyard<br>❒ Other _____ | |

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

**Name:** _____

**Signature:** _____ **Date:** _____

Page 2 of 2

WORKING AT HEIGHTS PLAN

Discussion: where an employee is working in a position where he has a potential to fall from a height greater than 3m (10-ft), the employee must be adequately tied off.

☑ If employee falls and is suspended, immediately put in place this rescue plan.
☑ If employee is suspended for longer than 15 minutes call 911 for assistance.

Procedure:

1. All employees must wear a full body harness with shock absorbing lanyard that is properly attached (tied off) to the recommended tie off location.

2. Employee: who has fallen and is suspended will call for assistance.
   ☑ Stay calm, remain suspended
   ☑ *Do not attempt to climb back onto structure.*

3. First responder will check your condition, if unconscious call emergency (911) and notify supervisor immediately. *Keep talking to suspended employee.*

4. Immediately get ladder or elevated work platform (boom or scissor lift or similar access device) into position below employee to come up under the individual facilitating his/her rescue. DO NOT unhook lifeline until employee is on platform bed or footing of the ladder.

5. If unable to rescue employee call 911.

6. Ensure employee gets proper first aid treatment.

7. Notify manager health & safety; arrange to have fall arrest equipment sent to office for evaluation.

AERIAL LIFTS

## 1.0 Policy

Aerial personnel lifts shall be operated, maintained, and controlled in a safe manner.

## 2.0 Purpose

To define the procedures and standards that apply to the care, control, maintenance, inspection, and operation of aerial personnel lifts.i.e boom, ewp,sizzor lift equipment

## 3.0 Scope

Applies to all **MWS-SOLUTIONS INC.** work sites, i.e., offices, client job sites, etc., requiring the use of aerial personnel lifts.

## 4.0 CSA Standard References

- Portable elevating work platforms - CAN/CSA-B354.1-04 (R2011)
- Mast-climbing work platforms - CAN/CSA-B354.5-07 (R2011)
- Safety Code for Man-lifts - CAN/CSA-B311-02 (R2012)
- Safety code for suspended platforms - CAN/CSA-Z271-10
- Self-propelled elevating work platforms - CAN/CSA-B354.2-01 (R2013)

  (platform that cannot be positioned completely beyond the base)

- Self-propelled boom supported elevating work platforms - CAN/CSA-B354.4-02 - R2013 (platforms having a platform that can be positioned completely beyond the base)

## 5.0 Definitions

**Aerial personnel lift** means any vehicle-mounted device, telescoping or articulating, or both, which is used to position personnel. These include extensible boom platforms, aerial ladders, articulating boom platforms, vertical towers, and a combination of any of the above.

**Articulating boom platform** means an aerial personnel lift with two or more hinged boom sections.

**Extension boom platform** means an aerial personnel lift (except ladders) with a telescopic or extension boom. Telescopic derricks with personnel platform attachments shall be considered to be extension boom platforms when used with a personnel platform.

**Insulated aerial device** means an aerial personnel lift designed for work on energized lines and apparatus.

**Platform** means any personnel-carrying device (basket or bucket) that is a component of an aerial personnel lift.

**Vertical tower** means an aerial personnel lift designed to elevate a platform in a substantially vertical axis.

## 6.0 Requirements

### General

**Equipment that is not designed for use as a personnel lift shall not be used as a personnel lift (e.g., front end loader buckets, backhoe buckets and cranes).**

- Only trained personnel who have been deemed competent and designated by their supervisor are authorized to operate aerial personnel lifts. All operators must have a valid operators' ROT for the applicable

unit, and it must be with them on the job site. Workers will receive theory training on safe operation of the equipment and validated on their competence that will be done on a 3 year cycle.

- All rented equipment must be thoroughly inspected before being accepted on the job site.
- Lift controls shall be tested prior to use to determine that such controls are in safe working condition.
- Personnel should not be permitted to stand on the rails of aerial devices.
- A body harness shall be worn and a lanyard appropriately attached to manufactures anchor point when the unit is in motion (up/down/forward/backward.)
- Personnel shall not be permitted to use an aerial personnel lift as a means of access. In the event that there are no other means of access, specific procedures including rationale (feasibly), duration, evacuation, fall protection, etc. shall be developed and reviewed with affected employees prior to implementation.
- Large or excessive amounts of material, excluding tools, shall not be transported in an aerial personnel lift. Other material lifts would be necessary for such activities.
- Load limits specified by the manufacturer shall not be exceeded.
- Shall be used only on firm level ground.
- Aerial personnel lifts that can operate horizontally shall set brakes and outriggers, when used, be positioned on pads or a solid surface, and chock wheels before using on an incline.
- Shall be used only in accordance with written instructions from the manufacturer, Companies OH&S policies and procedures and OHSA , including daily inspections, and

- Shall not be loaded and used in such a manner as to affect its stability or endangered a worker.

**Boom**

- An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment that is specifically designed for this type of operation.

- Articulating boom and extendible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

- The insulated aerial devices shall not be altered in any manner that might reduce its insulating value. The insulated boom of a lift shall be regularly maintained and certified to ensure the continued insulating properties.

- Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position.

**Modifications**

- Aerial lifts may be "field modified" for uses other than those intended by the manufacturer, provided the modification has been certified in writing.

**Inspect before daily use and document the inspection:**

If at any time a worker must leave the basket and climb onto the structure, the following procedure must be adhered to;

1. Bring the top rail of the basket even with the steel or structure that you will be stepping onto.
2. Using an additional lanyard, tie yourself off to the steel or structure and then untie from the man-lift / EWP.

3. Step or kneel on mid-rail and onto steel or structure. Never step onto top rail.
4. When getting back into the basket, tie off to the basket with second lanyard (Y style lanyard) then untie from structure or steel.
5. Whenever attempts have been made to reposition both basket and man-lift, and work area is just out of reach, worker may step up on to the mid-rail and perform non-reaching type work for a maximum of 15 minutes. Whenever work is performed while on the mid-rail, the worker must ensure that the lanyard for the fall arrest system is almost tight.

**Note:** ***No planks are to be used for this purpose, and abuse of the time restraint can result in disciplinary action.***

## Training: Use of Access equipment

All Workers, must have a current "MOL approved "Working at heights "training certificate to be working in construction or operating elevated equipment.

## Inspection of access equipment:

All access equipment that puts the worker at risk of falling, must be inspected before each use by a competent person regularly, the schedule should not be longer than daily.

All inspections should be documented and any deficiencies reported to your supervisor.

DO NOT USE / OPERATE UNSAFE EQUIPMENT.

MWS SOLUTIONS INCORPORATION January 1 / 2019

# TAB 20 - POWERED INDUSTRIAL LIFT TRUCK SAFETY

**POLICY**

MWS has implemented a Powered Industrial Truck Safety Program meeting the requirements set forth in the CSA Standard for Lift Trucks B335-04. This policy pertains to forklift trucks, platform lift trucks, motorized hand trucks, tow motors, scissor lifts, and other specialized industrial trucks.

**REFERENCE DOCUMENTS**

A. Operating Rules
B. Powered Industrial Truck Inspection Checklist
C. Performance Evaluation

**GENERAL REQUIREMENTS**

All MWS employees must practice strict adherence to the Policy and Operating Rules (Exhibit A).

A. **Operator training -** Only trained employees who have successfully completed the Powered Industrial Truck Training Program shall be permitted to operate Powered Industrial Trucks. This shall include both formal instruction and "hands-on" training.

B. **Training program implementation -** All operator training shall be conducted by knowledgeable persons in the operation of the trucks and the program contents.

C. **Training program content -** Based on site-specific characteristics; 13 truck related, 9 work related topics and the requirements of the CSA standard shall be evaluated for inclusion into the training program.
   - **a. Truck Related Topics**
     i. Operating Instructions, warnings, and precautions for the types of truck the operator will be authorized to operate.
     ii. Differences between the truck and the automobile.
     iii. Truck controls and instrumentation: where they are located, what they do, and how they work
     iv. Engine or motor operation.
     v. Steering and maneuvering.
     vi. Visibility (including restrictions due to loading)
     vii. Fork and attachment adaptation, operation, and use limitations.
     viii. Vehicle capacity.
     ix. Vehicle stability.
     x. Any vehicle inspection and maintenance that the operator will be required to perform.
     xi. Refueling and/or charging and recharging of batteries.
     xii. Operating limitations.
     xiii. Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicles that the employee is being trained to operate.
   - **b. Workplace Related topics:**
     i. Surface conditions where the vehicle will be operated.
     ii. Composition of loads to be carried and load stability.
     iii. Load manipulation, stacking, and un-stacking.
     iv. Pedestrian traffic in areas where the vehicle will be operated.
     v. Narrow aisles and other restricted places where the vehicle will be operated.
     vi. Hazardous (classified) locations where the vehicle will be operated.
     vii. Ramps and other sloped surfaces that could affect the vehicle's stability.
     viii. Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
     ix. Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

D. **Refresher training and evaluation -** Refresher training is triggered if:
   a. An evaluation reveals the operator is not operating safely.
   b. Change in workplace conditions or
   c. The job assignment changes to a different type of truck or
   d. There are changes in the workplace that could affect the safe operation of the truck.
   e. In addition, a written, documented evaluation of each operator's performance must be conducted annually. (Exhibit C)

**Certification -** Management must certify that each operator has been trained and evaluated. This shall include name of trainee, date of

training/evaluation and identity of trainer/evaluator.

## DAILY CHECKSHEET FOR FORKLIFTS

Forklift # : Make & Model : WO#:

| | S | M | T | W | T | F | S | Week Ending: |
|---|---|---|---|---|---|---|---|---|
| ***Items in Document Holder*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Operator's Manual | | | | | | | | comments: |
| * Service Reports | | | | | | | | |
| * Blank check sheets | | | | | | | | |
| ***Operator's Station*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Load Chart | | | | | | | | comments: |
| * Windows \ Mirrors | | | | | | | | |
| * Horn | | | | | | | | |
| * Fire Extinguisher | | | | | | | | |
| * Lights | | | | | | | | |
| * Gauges | | | | | | | | |
| * Back-up Alarm | | | | | | | | |
| * Controls | | | | | | | | |
| * Seat Belt | | | | | | | | |
| ***Mechanical & Structural*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Forks: bent, worn, cracks | | | | | | | | comments: |
| * Fork Carriage | | | | | | | | |
| * Mast: distortion, cracks | | | | | | | | |
| * Chains, Rollers, Stops | | | | | | | | |
| * Boom: if attached | | | | | | | | |
| * Cylinders & Hoses | | | | | | | | |
| * Overhead Guard | | | | | | | | |
| * Tires, Wheels & Lugs | | | | | | | | |
| * Hydraulic Leaks | | | | | | | | |
| * Service & Parking Brakes | | | | | | | | |
| * Steering | | | | | | | | |
| ***Fluids*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Engine Oil Level | | | | | | | | comments: |
| * Hydraulic Oil Level | | | | | | | | |
| * Coolant Level | | | | | | | | |

***Inspected By:***

***Sunday***
print name: signature: date:

***Monday***
print name: signature: date:

***Tuesday***
print name: signature: date:

***Wednesday***
print name: signature: date:

***Thursday***
print name: signature: date:

***Friday***
print name: signature: date:

***Saturday***
print name: signature: date:

Note: Repairs affecting the safe operation of this piece of equipment are to be completed prior to using.
Items of a maintenance nature will be completed during it's regular maintenance cycle.
All repairs and maintenance items are to brought to your supervisor's attention immediately.

***This form is to be handed in to the office with your timesheets when job is complete or weekly at the latest.***

## DAILY CHECKSHEET FOR MANLIFTS

Manlift # : Make & Model : WO#:

| | S | M | T | W | T | F | S | Week Ending: |
|---|---|---|---|---|---|---|---|---|
| ***Items in Document Holder*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Operator's Manual | | | | | | | | comments: |
| * Service Reports | | | | | | | | |
| * Blank check sheets | | | | | | | | |
| ***Operator's Station*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Railing & Deck | | | | | | | | comments: |
| * Safety Chains & Bars | | | | | | | | |
| * Deck Clear of Debris | | | | | | | | |
| * Gauges | | | | | | | | |
| * Horn | | | | | | | | |
| ***Mechanical & Structural*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Boom or Scissor Sections | | | | | | | | comments: |
| * Structure Welds | | | | | | | | |
| * Cylinders & Hoses | | | | | | | | |
| * Steering | | | | | | | | |
| * Tires, Wheels & Lugs | | | | | | | | |
| * Hydraulic Leaks | | | | | | | | |
| ***Electrical*** | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Battery Condition | | | | | | | | comments: |
| * Charger Condition | | | | | | | | |
| * 110 volt to Platform | | | | | | | | |
| * Up\down Switch | | | | | | | | |
| * Forward\reverse Switch | | | | | | | | |
| * Left\right Switch | | | | | | | | |
| * Emergency Stop Button | | | | | | | | |
| ***Fluids*** *(if internal combustion)* | *check-mark = ok, x = not ok or na = not applicable* | | | | | | | |
| * Engine Oil Level | | | | | | | | comments: |
| * Hydraulic Oil Level | | | | | | | | |
| * Coolant Level | | | | | | | | |

***Inspected By:***

***Sunday***

print name: signature: date:

***Monday***

print name: signature: date:

***Tuesday***

print name: signature: date:

***Wednesday***

print name: signature: date:

***Thursday***

print name: signature: date:

***Friday***

print name: signature: date:

***Saturday***

print name: signature: date:

Note: Repairs affecting the safe operation of this piece of equipment are to be completed prior to using.
Items of a maintenance nature will be completed during it's regular maintenance cycle.
All repairs and maintenance items are to be brought to your supervisor's attention immediately.

***This form is to be handed in to the office with your timesheets when job is complete or weekly at the latest.***

# TAB 21 – POWERED HAND TOOLS

Purpose

There are various types of tools and equipment used in the workplace for many different purposes. Examples include, but are not limited to, portable hand tools, power tools, pneumatic tools, and powder-actuated tools. The purpose of this policy is to provide employees with appropriate knowledge relating to the care and use of tools and equipment and to protect employees from hazards associated with improper use of tools and equipment and defective and poorly maintained tools and equipment.

Policy

Only trained and/or experienced employees may use/operate tools or equipment. Tools and equipment shall not be modified, and they are to be used only for their designed purpose. It shall be the responsibility of the employee to inspect tools and equipment prior to use and to use all tools and equipment in a safe manner. Employees observed abusing, altering, modifying or misusing tools or equipment shall be subject to disciplinary action. Employees shall wear all appropriate personal protective equipment while using tools and equipment. Additionally, if a tool or piece of equipment is found to be defective, the tool/equipment shall be red tagged, taken out of service until it can be replaced or repaired by a qualified person.

It shall be the responsibility of the Project Manager or Site Superintendent to designate a competent person who will be assigned to be responsible for testing/inspecting and repairing all tools and equipment. All periodic inspections, maintenance and repairs of tools or equipment shall be documented.
All tools will be returned to the MWS tool crib/warehouse in Waterloo for final inspection.

CSA Standard References

1. Bench Grinders - CAN/CSA-E1029-2-4-94 (R2013)
2. Band Saws - CAN/CSA-C22.2 NO. 60745-2-20A-05 (R2009)
3. Hammers - CAN/CSA-C22.2 NO. 60745-2-6B-04 (R2013)
4. Drills and Impact Drills - CAN/CSA-C22.2 NO. 60745-2-1-04 (R2013)
5. Electric bench tools - C22.2 NO. 71.2-10
6. Grinders, Polishers & Disk-Type Sanders - CAN/CSA-C22.2 NO. 60745-2-3-07 (R2012)
7. Hand-Held Motor-Operated Electric Tools - CAN/CSA-C22.2 NO. 60745-2-5-12
8. Screwdrivers and Impact Wrenches - CAN/CSA-C22.2 NO. 60745-2-2A-04 (R2013)
9. Electrical Equipment for Woodworking Machinery - C22.2 NO. 105-1953 (R2013)
10. Powder Actuated Tools - Use and Handling - CAN3-Z166.2-M85
11. Safety of Portable Battery-Operated Tools - CAN/CSA-C22.2 NO. 745-4-36-95 (R2014)
12. Safeguarding of Machinery - Z432-04 (R2014)

Procedure:

1. General Tool Safety

Many serious injuries have resulted from the improper use of tools and equipment. Many of these injuries could have been prevented if the following rules were followed:

Inspection and Maintenance

- All tools shall be identified and inventoried either individually or by group.
- All tools in the inventory shall have a documented inspection at least once every six months. In addition to these periodic documented inspections all tools shall be inspected prior to issue and upon return by the tool room attendants and prior to each use by the user.
- All tools will be kept in good working condition with no modifications.
- All periodic inspections and all maintenance & repairs shall be documented. Completed forms shall be kept in a binder in the tool room or tool trailer for one year. The binder shall contain a copy of the inspection checklist for the type of tools and/or equipment being inspected.

Selection

- Use the right tool for the task instead of trying to make the wrong one fit.

Use

- Keep control of yourself, the tool, and the job. When applying force with a tool, remember that it may slip, break, or just suddenly do its job. Watch your hands and your balance (body mechanics) to avoid injury.
- Vibration Absorbing Gloves are to be made available to workers using pneumatic impact guns or other vibrating equipment. These gloves are required PPE for workers operating heavy vibrating tools (i.e. jack hammers, 90 guns, impact guns etc.). The use of these gloves are designed to dampen vibration, dissipate impact and absorb shock, they can assist in the prevention of cumulative trauma injury often associated with operating this type of equipment. They only work if you use them.
- Select the right protective equipment for the task and use it properly.
- Do not use tools and equipment that you have not been trained to use.

Care

- Take proper care of your tools and equipment. Keep them stored where they will not get damaged and will not present a hazard.
- Check your tools and equipment prior to use for defects, wear, or damage. Immediately remove from service and tag any defective tools. Damaged tools shall be turned into the tool room for repair or replacement.

Supervision

- Supervisors shall be responsible for ensuring that employees are trained before using a specific tool. Watch your employees at work. Ask them about their immediate assignment and take an interest in finding the safest way to do the job. Then follow up to ensure that the tools and equipment in your area are being used safely.

2. Hand Tool Safety

- Hand tools shall only be used for the purpose for which they are intended.
- All appropriate PPE will be worn while using hand tools.
- Wrenches, including adjustable, pipe and socket shall not be used when jaws are sprung to the point of slippage.
- Pipe wrench parts (i.e., jaws) are not to be removed and used for anything other than manufactured use.
- The use of snipes and cheater bars or double wrenching to gain leverage is prohibited.
- Always use tool holder while using hammer and knocker wrenches.

Hand tools shall be tagged and removed from service if any of the following defects are present:

- Impact tools, such as hammers, flange wedges chisels, drift pins, pin bars and knocker wrenches with visible signs of mushrooming, cracking or bending.
- Wooden handle tools, such as hammers, picks, shovels, and brooms with visible sign of cracking, loosening or splintering of the handle.
- Wrenches, such as adjustable, combo and pipe with visible signs of bending, cracking, defective handles or other defects that impair their strength.

3. Electrical Power Tool Safety

- All appropriate PPE will be worn while using power tools.
- Be sure that the proper permit has been obtained prior to use of electrical power tools.
- GFCI's are to be used with all portable electric equipment. GFCI's are to be
- inspected and tested prior to each use.
- Do not connect electrical power unless the operating switch is turned off.
- Employees shall avoid loose fitting clothing when operating power tools.
- The power source on tools shall be physically disconnected prior to attempting any repairs or attachment replacement.
- Protective guards on power tools shall not be removed, altered or modified.
- Trigger/switch locks on power tools are prohibited. (Part 12 of BC Legislation)
- All electrical tools and power cords must be inspected per the Electrical Equipment Safety and Inspection Policy.
- Electrical tools and power cords must display the current inspection color code for the current inspection period to it being placed in service.
- Electrical tools shall not be hoisted or carried by their power cords.
- Cords are tripping hazards. Route them so as to minimize interference in walkways. Overhead is preferred.

Electrical power tools shall be tagged and removed from service if any of the following defects are present:

- Electrical power tool cord does not have current inspection color code.
- Power cord is frayed, cut or damaged. The use of electrical tape to cover damage to cords is prohibited.
- Defective or faulty on/off switches.
- Loose or defective components

4. Air Power Tool Safety
    - All hoses exceeding 1/2" inside diameter shall have a safety device at the source
    - of supply or branch line to reduce pressure in case of hose failure.
    - Chicago fittings shall be pinned.
    - Attachments on air tools shall be secured by retainer pins and rings.
    - Do not connect air unless the operating switch is turned off.
    - Do not disconnect tool until air supply is shut off and air pressure is bled off.
    - Air power tools shall not be hoisted or carried by their hoses.
    - Hoses are tripping hazards. Route them so as to minimize interference in walkways. Overhead is preferred.

Air power tools shall be tagged and removed from service if any of the following defects are present:

- Air power tools, such as air power grinders, impact wrenches, German hacksaws with visible signs of deformities in the body of the tool, improperly functioning actuator, bent or deformed blades, or any signs of obvious damage to the air supply line fittings.
- Hoses must be visually inspected for cracking, signs of aging, worn or damaged connecting fittings, or any other obvious deformities, such as blistering or bulges.

5. Abrasive Wheel Machinery

Abrasive wheels shall be used only on machines provided with safety guards as defined:

- The safety guard shall be mounted so as to maintain proper alignment with the wheel, and the strength of the fastenings shall exceed the strength of the guard.
- Grinding machines shall be equipped with flanges
- Never exceed the maximum wheel speed RPM. Check the speed marked on the wheel and compare it to the speed on the grinder.
- When installing the wheel, check for cracks and defects. Ensure mounting flanges are clean and the mounting blotters are used. Do not over tighten the mounting nut.

# TAB 22 – EXCAVATIONS AND TRENCHES

It is important to understand the terms "trench" and "excavation". Simply stated, an excavation is any hole left in the ground as the result of removing soil or material. A trench is an excavation in which the depth exceeds the width.

A significant number of deaths and injuries in the construction industry are directly related to trenching. Trenching fatalities are mainly caused by cave-ins where death by suffocation occurs or crushing when a worker is buried by falling soil. The Ministry of Labour focuses a great deal of its effort and attention on the inspection and prosecutions of employers and contractors that do not follow the trenching requirements under the construction regulations

Where personnel are required to enter a trench or excavating, it must be properly sloped or shored and trench boxes used where required.

The following are the main causes of injuries related to trenching:

- Material falling into the trench.
- Slips and falls as workers climb or descend access ladders.
- Handling and placing of pipe and other materials
- Being struck by moving equipment.
- Falling over equipment or excavated material
- Exposure to toxic, irritating, or flammable gases.

No engine which has internal combustion shall be operated in an excavation unless the exhaust fumes accumulate within the excavation.

Because of the complexity of the subject matter, Supervisors and workers must refer to the Construction Regulations (213/91) Sections 222 to 242

# TAB 23-Ladders, Scaffolding, Guardrails, Swing Stages and Manlift Procedures

## LADDERS

1. Ladders which have been damaged will not be used on any project. The painting of ladders will not be allowed, except for company identification, as this can cover up defects. Damaged ladders shall be visibly marked as such and be removed from the site.

2. Metal ladders or ladders with metal reinforcing will not be used near energized electrical conductors.

3. The feet of the ladder must be placed on a firm surface. Ladders should not be placed directly on soft un-compacted or rough soil.

4. When a task must be done while standing on an extension ladder, the length of the ladder should be such that the worker stands on a rung no higher than the second from the top.

5. Depending on the length, straight ladders should be set at an angle such that the horizontal distance between the top support and the base is not less than one-quarter or greater than one-third the vertical distance between these points.

6. All ladders erected between levels must be securely fastened, extend at least 90 centimeters above the top landing, and afford clear access at the top and bottom.

7. Ladders should not be used as substitutes for scaffold planks, runways or any other service for which they have not been designed.

8. Workers on a ladder should not straddle the space between the ladder and another object.

9. Three points of contact should always be maintained when climbing up or down a ladder. (Two feet and one hand or two hands and one foot).

10. Straight ladders must be tied off or otherwise secured to prevent movement. If this cannot be done, then an employee shall be designated to steady the ladder while it is in use.

11. The joining of two or more ladders to provide extra reach is not permitted.

## SCAFFOLDING

As there are many requirements for the use and maintenance of scaffolding and work platforms, reference must be made to the applicable Occupational Health and Safety Act and its regulations relating to Construction sites (213/91) Sections 125 to 149. At minimum the following will apply:

1. All scaffolding should be erected and dismantled by competent personnel, under supervision of personnel knowledgeable and experienced in such operations. Scaffolds must be erected and maintained in a plumb condition. Scaffolds must be erected with all braces, pins, screw jacks, base plates and other fittings installed as required by the manufacturer.

2. Scaffolds over 15 metres in height must be designed and approved by a professional engineer and constructed in accordance with the design.

3. Scaffold platforms must be at least 46 centimeters wide and if they are over 2.4 metres high, they must be planked across their full width. Scaffold planks must be good quality, free of defects such as loose knots, splits or rot, rough swan measuring 8 mm thick x 248 mm wide in cross section, and No. 1 spruce or better when new. Scaffold planks must be securely fastened to prevent them from sliding.
4. Scaffold platforms are to be kept free from ice, snow, oil grease and other slippery material. Scaffold planks and platforms must not overhang their supports by more than 150 mm or less than 30 mm. All scaffold planks must be stamped with number/grade of spruce.

5. Scaffolds must be equipped with proper ladders for access. Vertical ladders must be equipped with 15 centimetres standoff brackets and all ladder climbing fall protection device or safety cage when they are more than 5 metres high.

6. Scaffolds must be tied into a building at vertical intervals not exceeding three times the least lateral dimension, including the dimension of any outrigger stabilizing devices. Where scaffolds cannot be tied to a building, guy lines adequately secured should be used to provide stability.

7. Rolling scaffolding will have a proper braking system for each wheel. Workers will not be permitted to ride on these structures.

## GUARDRAILS

Guardrails must be provided around work platforms on all scaffolds, floor openings, ramps and open areas where a worker can fall from one lever to another. When guardrails or opening covers are temporarily removed, workers in the area must be protected by a full body harness connected to a fall-arrest system, meeting the requirements of the Construction Regulations (213/91) connected to a fall-arrest system, with the belt and lanyard tied off to a secure anchor. Barricades, guardrails and covers must be replaced in a proper manner immediately after work is completed.

A guardrail must consist of a top rail (between 91cm and 1.07 metres high), a mid-rail and a toe board. Guardrails must be capable of resisting any load likely to be applied. Guardrails should be installed on balconies. It is not sufficient to simply barricade the entrance to a balcony.

## WORKING FROM SWING STAGES

A worker who is getting on or is getting off a suspended platform, suspended scaffold or boatswains chair shall wear full body harness connected to a fall-arrest system meeting the requirements of the Construction Regulations (213/91). Every lifeline shall be suspended independently and securely attached to fixed supports.

When working from a swing stage, a worker must utilize a properly constructed fall-arrest system tied off to:

a) an independent lifeline if the swing stage has only two independent suspension lines or
b) the swing stage, if it has four independent lines (two at each end).

## MANLIFTS

If at any time a worker must leave the basket and climb onto the structure, the following procedure must be adhered to;

1. Bring the top rail of the basket even with the steel or structure that you will be stepping onto.
2. Using an additional lanyard, tie yourself off to the steel or structure and then untie from the manlift.
3. Step or kneel on mid-rail and onto steel or structure. Never step onto top rail.
4. When getting back into the basket, tie off to the basket with second lanyard then untie from structure or steel.
5. Whenever attempts have been made to reposition both basket and manlift, and work area is just out of reach, worker may step up on to the mid-rail and perform non- reaching type work for a maximum of 15 minutes. Whenever work is performed while on the mid-rail, the worker must ensure that the lanyard for the fall arrest system is almost tight.

Note: No planks are to be used for this purpose, and abuse of the time restraint can result in disciplinary action.

# TAB 24 – WORKING ALONE

Scope

There may be situations where personnel sometimes work alone. Examples include:

- staying late to complete a job that must be done before the next day's work
- completing a task where there is only room for one worker
- servicing equipment in a remote area
- cleaning up scrap and debris when work is done for the day.

A person is “working alone”, when he or she is on their own at work; when they cannot be seen or heard by another person; and when emergency assistance is not readily available.

The greatest risk in working alone is that no one is available to help a worker who may be injured, trapped, or unconscious. Even if co-workers realize that someone is missing, it may be difficult to locate an injured worker.

Planning

- Inspect the jobsite for real and potential hazards and take whatever steps are required to safeguard workers.
- If any personal protective equipment or clothing is required in addition to hard hat and safety boots, it should be provided, along with instruction in its proper use.
- All safety and work-related procedures should be reviewed with workers to ensure that each procedure is clearly understood. The procedures should also be spelled out in the company's health and safety policy.
- In some situations, like confined spaces, regulations under the Occupational Health and Safety Act prohibit entry or work without another person standing by outside the area. No work in confined space will be done without a qualified attendant and they are tethered for safe retrial.

Communication

- Communication is crucial in accounting for personnel working alone. A system must be established where, at regular intervals, someone checks on the worker or the worker reports to a designated person.
- Where hazard exposure is high, intervals should be kept short.
- Means of communicating between worker and outside contact must be predetermined and understood by both parties.
- If a site telephone is involved, it must be clearly identified, conveniently located, and working properly. The number of the individual to be contacted must be clearly posted near or on the phone.
- Cellular phones or two-way radios can also provide effective communication. Test the units on-site to ensure that reception is reliable.

Responsibilities

The supervisor shall ensure that any worker working alone is aware of real and potential hazards in the area. The worker should be trained in hazard recognition and in the procedures and equipment required to do the job safely. The supervisor must also ensure that:

- a method of checking in with the worker has been established
- check-in intervals are clearly understood
- the designated contact person is aware of the work schedule
- any communication equipment used is in good working order
- no obstructions or interference may block phone or radio communications.

No high-risk work will be performed when working alone.

# TAB 25 – RESPIRATORY PROTECTION PROGRAM

1. Purpose:

Improper use of or failure to wear respiratory protection when required can have devastating effects on the life and/or health of workers. Lack of a respirator, early removal of a respirator and improperly fitting respirators has resulted in needless worker injury and death.
The purpose of this policy is to establish a respiratory protection program that ensures that workers are provided with the necessary information, training, and equipment to protect themselves from respiratory hazards in the workplace and complies with applicable standards and regulations.

2. Policy:

It is management's responsibility to implement this program at no cost to the
employees and it is the employee's responsibility to comply with all aspects of this program. Any voluntary use of respiratory protection equipment by employees shall be governed by the provisions of this program, also at no expense to the employees.

3. CSA Standard Reference:

- CSA Standard Z94.4-11, Selection, Use and Care of Respirators.
- Z180.1-13 - Compressed breathing air and systems

4. Procedure:

Compressed breathing air and systems required to be used by MWS will be subcontracted out (i.e. confined space entry or exposure to asbestos or mould.

**Responsibilities**

**Management** - Has the responsibility of overseeing the implementation of this policy and assigning program administrators for each site location. These administrators must be suitably trained and have the appropriate accountability and responsibility to fully manage the site respiratory program. The program administrator will report, at least annually, on the effectiveness of the program to management, and be authorized to make appropriate changes to the site program. The administrators will be identified by name in the specific site program.

**Supervisory** - It is the responsibility of the supervisor to ensure that all personnel under their control are completely knowledgeable of the respiratory requirements of this program. Supervisors are to ensure that employees have been trained and are medically fit to use respiratory equipment safely. It is the supervisors' duty to monitor the employees' diligence in following procedures and take appropriate action when deficiencies are observed.

**Employees** - It is the responsibility of the employee to be aware of and practice the information presented in the training. Specifically, employee responsibilities are to report equipment malfunctions, seal check their respirator before every use, and to report medical or physical changes that could affect respirator use.
Hazard Assessment

Respiratory hazard determination starts at the planning stage of a job. The responsible party is to identify all known hazards as required by the hazard communication standard. Evaluation of the hazards consists of exposure duration, potential for contact, and known or potential concentrations. When the hazard is a federally controlled substance, that hazard shall be assessed and monitored as dictated by that specific standard. A respiratory hazard may not have an established permissible exposure limit documented; however, all provisions of this program will be enforced to protect the health of the employees.

Acceptable methods for estimating respiratory hazards include:

- Personal exposure monitoring is the most reliable and accurate method to determine exposure.
- Use of objective data – This is the use of data obtained from industry studies, trade associations or from tests conducted by chemical manufacturers. The objective data shall represent the highest contaminant exposures likely to occur under reasonably foreseeable conditions of processing, use or handling. If objective data is used for assessment, the data must be documented as part of the written program.
- Mathematical Approach – The use of physical and chemical properties of air contaminates, combined with information on room dimensions, air exchange rates, contaminant release rates, and other pertinent data including exposure patterns and work practices to estimate maximum exposure levels in the workplace.
- Where employee exposure cannot be identified or reasonably estimated, the atmosphere will be considered immediately

dangerous to life and health (IDLH). Also, atmospheres that are oxygen deficient will be treated as IDLH conditions.

- Accidental release or emergency response must be a consideration when estimating hazard exposure.

Hazard Control

1. Engineering Controls: This should be the first consideration when evaluating hazard exposure.

   - Substitution of a less or non-toxic substance to replace a more harmful one. Example: Sandblasting with black grit instead of silica sand.
   - Isolation or encapsulation of the process. Example: To spray asbestos insulation with glue paste to lessen exposure levels.
   - Ventilation to remove contamination from the work area before exposure. Example: Mechanical dust collection system installed to capture contaminants and reduce buildup.

2. Administrative Controls:

   - Especially effective for repetitive stress and heat stress control, crew rotation could increase productivity in contaminated atmospheres.
   - Adjust the length of the work shift. Instead of two 12-hour shifts, it may be more effective to have three 8-hour shifts.
   - Change scheduled work to limit the number of employees exposed. The scheduling of other work near the exposure area could be limited until exposure is gone.

3. Personal Protective Controls:

Personal protective devices for the control of respiratory hazards are to be used as a last resort, and only when other means of control are not practical or feasible.
Respiratory protection may be required while implementing engineering controls, or in conjunction with other control methods. Engineering controls may only lessen the exposure but are required to be implemented along with personal protective devices.

Respirator Selection

Selecting the proper respirator can be very complex and is critical in having an effective respiratory program. The program administrator must solicit information from all available professional resources concerning exposure controls.

Factors that must be considered include:

- The nature of the hazardous operation or process

- The type of respiratory hazard (including physical properties, oxygen deficiency, physiological effects on the body, concentration of toxic material or airborne radioactivity level, established exposure limits for the toxic materials, established permissible airborne concentration for radioactive material, and established immediately dangerous to life or health concentration for toxic material)

- The period for which respiratory protection must be worn
- The activities of workers in the hazardous area

- The physical characteristics and functional capabilities and limitations of the various types of respirators

Respirators for use under IDLH conditions:

The required respiratory protection for IDLH conditions caused by the presence of toxic materials, or a reduced percentage of oxygen, is a combination full face piece pressure demand supplied air respirator (SAR) with auxiliary self-contained air supply. For rescue applications, a full-face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes is acceptable.

When respirators are worn under IDLH conditions, at least one standby person shall be present in a safe area. The standby person shall have the proper equipment available to assist the respirator wearer in case of difficulty. Communications (visual, voice, signal line, radio, or other suitable means) shall be maintained between the standby person and the wearer. While working in the IDLH atmosphere, the wearer shall be equipped with safety harness and safety lines to permit removal to a safe area, if necessary. Provisions for rescue other than safety harness and lines may be used, if equivalent.

Breathing Air Quality

Workers using supplied breathing air equipment shall be thoroughly trained in its use.

Breathing air is typically supplied from cylinders or via a compressor. Appropriate measures shall be taken to ensure that all compressed

breathing air meets at least the requirements for quality breathing air described in CSA Standard Z180.1-13 Compressed Breathing Air and Systems.

Breathing air cylinders shall be tested and maintained as prescribed in the CSA Standards.

Breathing Air:

Compressors used to supply breathing air to respirators shall be constructed and situated so as to:

1. Prevent entry of contaminated air into the air-supply system.

2. Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (-5.56 deg.C) below the ambient temperature.

3. If required to ensure delivery of quality air to the user, provide suitable in-line air-purifying sorbent beds and filters. All filters, cartridges and canisters shall be labeled, and color coded with the NIOSH approval label and the label shall remain legible. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions. A tag containing the most recent change date, and the signature of the person authorized by the employer to perform the change shall be attached to the equipment.

4. For compressors that are not oil-lubricated, the company shall ensure that carbon monoxide levels in the breathing air do not exceed 5 ppm.
5. For oil-lubricated compressors, the company shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 5 ppm.

6. The air shall be routinely tested (every 6 months) to ensure that it meets CSA Standard requirements.

In addition, a stand-by attendant shall be on watch anytime workers are using breathing air supplied directly by a compressor.

Breathing air couplings shall be incompatible with outlets for nonrespirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.
Training

To protect employees from exposure to respiratory hazards using standards as minimum guidelines, all employees who will wear respiratory protection will be trained in this policy.

Training will be provided prior to job assignment where respirator equipment is required, and annually thereafter. Additional training is required when there are deficiencies in the employee's knowledge/skills or when there is a change in the workplace or respiratory equipment that renders previous training obsolete. The training will include the following:

- Responsibilities of employees and supervisors
- How, why and for what jobs we use respirators
- Hazard assessment including limitations of respirators
- Hazard control
- Respirator selection
- Medical evaluation
- Respirator fit test
- Maintenance, care and storage
- Medical surveillance
- Program evaluation

All training shall be conducted in a way that is understandable to the employee and is documented.

1. Why use respiratory protection

   - The nature, extent and effects of respiratory hazards
   - Consequences of improper fit, usage and maintenance on respirator effectiveness

2. Limitations and capabilities of the respirator

   - Air purifying respirators that filter either particles, or absorbing vapors and gases
   - Air supplying respirators that supply air from an uncontaminated source
   - Limitations of respirators in IDLH atmospheres and for emergency use only

3. How respirators are inspected, donned, removed, seal checked and worn

    - What to do if respirators have defects
    - Who to report problems to during use
    - Proper technique for donning and removing the respirator, and how to store when not in use
4. How to seal check using the positive and/or negative pressure method Methods of maintenance and storage

    - Visual inspection of parts for worn or defective items
    - How to keep the issued respirator clean and sanitary
    - Requirement to disinfect and sanitize before reissue to other employees
    - Proper storage in a cool, clean and dry location, placing them in a clean, sealed plastic bag after drying
5. Medical signs and symptoms that may limit or prevent the effective use of respirators

    - An awareness of physical conditions that may indicate warning signs
    - An obligation to report signs and symptoms and the opportunity for medical reevaluation
    - Changes in weight (gain or loss)
    - Physical changes in facial structure
    - Changes in endurance, stability or general health
    - Medication for illness

Medical Evaluation

All employees whose job classification may require use of respiratory protection shall be evaluated and certified by a physician or a licensed health care professional (PLHCP) as being "medically fit" to wear a respirator. For new hires, the medical evaluation shall be made before any use of respiratory equipment. Thereafter, the evaluation shall occur at a minimum annually. The medical evaluation consists of, at a minimum, the administration of a health questionnaire meeting federal guidelines or provisions for a physical examination by a PLHCP that elicits the same information as the questionnaire. The PLHCP shall be provided with supplemental information by the employer on the description of the job classification, possible work conditions and any additional P.P.E. that may be required of the employee while using respiratory equipment. Also, a copy of this program will be given to the PLHCP for reference along with the OHS standard.

The administration of the health questionnaire will be done during work hours and at no cost to the employee. The information on the questionnaire shall remain confidential between the PLHCP and the employee. The employee must have access to the PLHCP for discussion and asking questions concerning their medical evaluation. The company will only receive a recommendation of the employee's ability to wear respiratory equipment.

If an employee is restricted by the PLHCP from wearing a negative pressure respirator, but otherwise physically able to perform duties with a powered air respirator, then reasonable accommodations will be made by the program administrator not to have this restriction limit the employee's ability to perform his job.

Respirator Fit Test

Respirator fit testing is required of all employees prior to using a positive or negative tight-fitting respirator. The fit test will be specific for respirator manufacturer, model and size. This test is to be repeated annually, or if there is a change in the respiratory equipment. Some substance specific standards may call for more frequent testing and dictate a specific protocol, which would take precedence over this program. A change in the employee's physical appearance can affect the seal of a respirator and may require re-testing. If the respirator is unacceptable to the employee due to comfort, irritation, or inability to get a seal, the employee will be offered a reasonable selection for an alternate choice of respirators.

The employee will be asked to wear the proposed respirator for a period of time to become familiar with the feel and fit. No obstacles can be between their face and the sealing surface of the respirator, including facial hair of 24 hours or more growth, sideburns that extend into the sealing surface or hair that is long enough to prevent proper function of the respirator. Jewelry, caps, hats, scarves and certain safety gear must be evaluated as part of the fit test if the employee is permitted or required to wear them during work. Any adaptive devices for vision correction with respiratory equipment will be supplied at no cost to the employee. The employee will be instructed on how to field check respiratory equipment. The positive and negative seal check methods of verifying a good seal shall be required before each and every entry into a respiratory hazard area. These seal checks are not to be considered a fit test.

Fit testing shall be in accordance with the CSA Standard Z94.4-11, Selection, Use and Care of Respirators or a method approved by a Director of Occupational Hygiene.

Positive Seal Check

A positive seal check is accomplished by effectively sealing the exhalation valve and slowly exhaling. This should create a slight, positive pressure inside the face piece for a short period of time. The participant must be careful not to exhale too fast or small leaks can be nullified and/or large leaks artificially created.

Negative Seal Check

A negative seal check is accomplished by effectively sealing the inhalation ports of the respirator and inhaling slowly. The participant should be able to create a negative pressure inside the respirator and hold it for a short period of time. Inhaling too fast may nullify small leaks and/or artificially create other leaks.

Fit Test

- Qualitative fit test – a pass/fail test that relies on the subject to detect a challenge agent and is predicated on an individual's sensory response.
- Quantitative fit test – uses an instrument to measure the challenge agent inside the respirator and gives a numerical value to the test data.

If qualitative testing is used, the employee should be informed of the exposure limitations. A limit of 10 times the permissible exposure level for an 8-hour duration is the maximum exposure for either a half mask, or full-face piece negative pressure respirator.

Irritant Smoke Protocol

Irritant smoke protocol for qualitative fit testing is very effective, since it is the only challenge agent that does not rely on a voluntary response. This type of test requires that the tester be well trained in the correct and safe use of the irritant smoke tubes. The smoke tubes can be a health hazard if not used properly and in a well-ventilated room.

Maintenance and Care

The company will provide for the cleaning and disinfecting, storage, inspection and repair of respirators that are issued to their employees. Refer to the manufacturer's instructions to ensure the respirators are clean and disinfected. Respirators designated for the exclusive use of an employee shall be the responsibility of that employee to maintain and keep in a sanitary condition. Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals.
Respirators maintained for emergency, training, or fit testing use shall be cleaned and disinfected after every use.

Storage

Respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals. They shall be packed or stored to prevent deformation of the face piece. Emergency respirators shall, in addition, be kept accessible to the work area and stored in easily identifiable
coverings. Reference manufacturer's instructions for other recommendations

Recordkeeping

The Administrator shall retain copies of all respiratory protection program documents, including
fit test and training records.

Inspection

Respirators are inspected on a regular basis and employees are instructed on how to inspect their respirator. All respirators used on a routine basis shall be inspected before each use and during cleaning. All emergency respirators shall also be inspected at least on a monthly basis. Respirator inspection shall include the tightness of connections and the condition of various parts including, but not limited to, the face piece, head straps, valves, gaskets, connecting tubes, cartridges, canisters and filters. Also, check all elastic parts for deterioration and pliability. Inspection of self-contained breathing apparatus shall be done only by trained technicians competent with that specific brand, make and model of respiratory equipment. The technician conducting the inspection shall certify the inspection by attaching a signed and dated tag or label to the equipment.

Repairs

Equipment that is defective, broken or otherwise in need of repair shall be identified immediately by attaching a red tag and stating the reason it is out of service. Repairs to respirator equipment shall be made by competent employees and only with the manufacturers' recommended replacement parts. Absolutely no substitution of parts is allowed that is not authorized by the NIOSH approval.

Medical Surveillance

Employees should be aware of medical conditions that would prevent or limit their use of respiratory equipment. Supervisors shall be informed when employees experience medical difficulties that may affect or be a result of respirator use. Substance specific hazards may require a specific medical monitoring procedure that requires biological testing. Employees will be required to complete a medical

questionnaire initially, and then further evaluation at the frequency determined by the medical evaluator.

Program Evaluation

The supervisor will monitor the work site for acceptance of and compliance with the written respiratory program. The supervisor will address issues where employees have had deficient respiratory issues, i.e. cartridge breakthrough and the respirator effectiveness. Employees will be asked questions about the effectiveness of the program and encouraged to offer suggestions for improvement including how the fit test protocol was performed, the maintenance procedures for care and storage of respirators and overall program. Periodic audits will be documented and reviewed by the program administrator. The program administrator will report, at least annually, to the management on the effectiveness of the total program.

# TAB 26 – ERGONOMICS PROGRAM

**Scope**

Ergonomics is the study of people and their interaction with the elements of their job or task including equipment, tools, facilities, processes, and environment. It is a multidisciplinary field of study integrating industrial psychology, engineering, medicine, and design.

In a more practical sense, ergonomics is the science of human comfort.

When aspects of the work or workplace exceed the body's capabilities, the result is often a **musculoskeletal disorder (MSD**). To help avoid MSDs, work demands should not exceed the physical capabilities of the worker. MSDs are also known by several other names including:

- CTDs (cumulative trauma disorders)
- RSIs (repetitive stress or repetitive strain injuries)
- RMIs (repetitive motion injuries)
- Overuse syndrome

The most common, recognizable name for MSDs is cumulative trauma disorders or CTDs. Whatever the name used, these injuries belong to a family or group of wear and tear illnesses that can affect muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels or spinal discs of the body. MSDs do not include slips, trips and falls, cuts, motor vehicle accidents or other similar accidents; although a close look at the reasons for acute injuries often reveals design problems that can be corrected.

**CSA Standards Reference**

- CSA-Z412-00 (R2011) - Guideline on Office Ergonomics
- Z1004-12 - Workplace ergonomics - A management and implementation standard

**Policy**

It is the policy of MWS –Solutions Inc. to provide all employees with a safe and healthy workplace. A proactive ergonomics program is integrated into our company's written safety and health program. Records documenting the identification, prevention, and control of employee exposure to ergonomic risk factors will be maintained pursuant to all regulations.

This program is a collaborative effort that includes managers, supervisors, and labor. The Ergonomics Program Coordinator is responsible for the program's implementation, management, and recordkeeping requirements.
Ergonomics program

The purpose of an ergonomics program is to apply ergonomic principles to the workplace in an effort to reduce the number and severity of MSDs, thus decreasing workers' compensation claims and, where possible, increase productivity, quality, and efficiency. An ergonomically sound work environment maximizes employee comfort while minimizing the risk of undue physical stress.
A proactive approach focuses on making changes when risks have already been identified, as well as incorporating ergonomics into the design phase of a new facility or process, into purchasing new equipment or tools, and into the contemplation of scheduling changes. MWS-Solutions Inc. has such a program which includes the following components:

**Management Leadership.** The management of MWS is committed to the ergonomics process. Management supports the efforts of the Ergonomics Program Coordinator by pledging financial and philosophical support for the identification and control of ergonomic risk factors. Management will support an effective MSD reporting system and will respond promptly to reports. Management will regularly communicate with employees about the program.

**Employee Participation.** An essential element to the success of the ergonomics program, employees will be solicited for their input and assistance with identifying ergonomic risk factors, worksite evaluations, development and implementation of controls, and training. Employee participation in the program will occur only during company time.

**Identification of Problem Jobs**. Collecting data that identifies injury and illness trends is called surveillance. Surveillance can be either passive or active. Conducting a records review is an example of passive surveillance, which looks at existing data such as First Aid logs, workers' compensation
claims, trips to the medical facility, and absentee records. Active surveillance uses observations, interviews, surveys, questionnaires, checklists, and formal worksite evaluation tools to identify specific high-risk activities. MWS will be using both passive and active surveillance to identify problem jobs.

**Worksite Evaluations**

Triggers for a worksite evaluation:

- When an employee reports an MSD sign or symptom.

- Jobs, processes, or work activities where work-related ergonomic risk factors have been identified which may cause or aggravate MSDs.
- Any change of jobs, tasks, equipment, tools, processes, scheduling, or changes in work shift hours (for example, going from a traditional 5-day, 8-hour shift to a compressed 4-day, 10 hour shift).
- When a safety walk-through or scheduled inspection or survey has uncovered potential MSD hazards.

Work-related risk factors to be considered in the evaluation process include, but are not limited to:

- Physical risk factors including force, postures (awkward and static), static loading and sustained exertion, fatigue, repetition, contact stress, extreme temperatures, and vibration.
- Administrative issues including job rotation/enlargement, inadequate staffing, excessive overtime, inadequate or lack of rest breaks, stress from deadlines, lack of training, work pace, work methods, and psychosocial issues.
- Environmental risk factors including noise, lighting, glare, air quality, temperature, humidity, and personal protective equipment and clothing.

Combination of risk factors such as, but not limited to, highly repetitive, forceful work with no job rotation or precision work done in a dimly lit room.

**Setting Priorities**

Worksite evaluations will be scheduled based upon the following:

- Any job, process, operation, or workstation which has contributed to a worker's current MSD.
- A job, process, operation, or workstation that has historically contributed to MSDs; and
- Specific jobs, processes, operations, or workstations that have the potential to cause MSDs.

**Worksite Evaluations Methods**

Various methods will be used to evaluate problem jobs including:

- Walk-through and observations
- Employee interviews
- Surveys and questionnaires
- Checklists
- Detailed worksite evaluations
- Control of the Ergonomic Risk Factors

MWS will take steps to identify ergonomic risk factors and reduce hazards by using a three-tier hierarchy of control (in order of preference):

- **Engineering controls.** The most desirable and reliable means to reduce workplace exposure to potentially harmful effects. This is achieved by focusing on the physical modifications of jobs, workstations, tools, equipment, or processes.
- **Administrative controls.** This means controlling or preventing workplace exposure to potentially harmful effects by implementing administrative changes such as job rotation, job enlargement, rest/recovery breaks, work pace adjustment, redesign of methods, and worker education.
- **Personal protective equipment (PPE).** Although not recognized as an effective means of controlling hazards and do not take the place of engineering or administrative controls, there are acceptable forms of PPE, which include kneepads and anti-vibration gloves.

**Training**

Training is intended to enhance the ability of managers, supervisors, and employees to recognize work-related ergonomic risk factors and to understand and apply appropriate control strategies. Training in the recognition and control of ergonomic risk factors will be given as follows:

- To all new employees during orientation.
- To all employees assuming a new job assignment.
- When new jobs, tasks, tools, equipment, machinery, workstations, or processes are introduced.
- When high exposure levels to ergonomic risk factors have been identified.

Training will be provided by Trainers experienced in delivering training programs that address all work and non-work-related risk factors and will be familiar with MWS operations. Training will be provided from one, or a combination, of the sources listed below:

- Internally developed resources
- The workers' compensation carrier
- An outside consultant

All training will be documented. All employees will be required to sign a training sign-in roster.

**Program Evaluation and Follow-Up**

In order to ensure that issues have been addressed and that new problems have not been created, monitoring and evaluation will be conducted on an on-going basis. The methods include use of individual interviews and checklists to reevaluate the job/task to ensure that risks have been reduced, minimized, or eliminated.

# TAB 27–FIRE SAFETY & EXTINGUISHERS

**Purpose:**

The Fire extinguisher Prevention program is intended to provide compliance with all related regulations and standard safe work practice. The purpose of the policy is to prevent fires and to provide guidelines for action in the event that a fire does occur.

**Policy:**

MWS-Solution Inc. employees shall be informed of the proper actions to take in the event of a fire. This includes, but is not limited to, notification and evacuation procedures. It is STRESSED that at no time does the task of fighting fire supersede an employee's primary duties of:
Ensuring their own personal safety and the safety of others.
Reporting the incident to the proper authority and ensuring personnel accountability for yourself and all subordinates at the jobsite, in accordance with company and client policy.

**Procedure:**

MWS employees are responsible for good housekeeping practices to enhance fire prevention methods. Supervisors will be held accountable for the housekeeping of their job sites.
Fire extinguishers shall be inspected for defects or deterioration at least once a month by a competent worker who shall record the date of the inspection on a tag attached to it.

**In the Event of A Fire:**

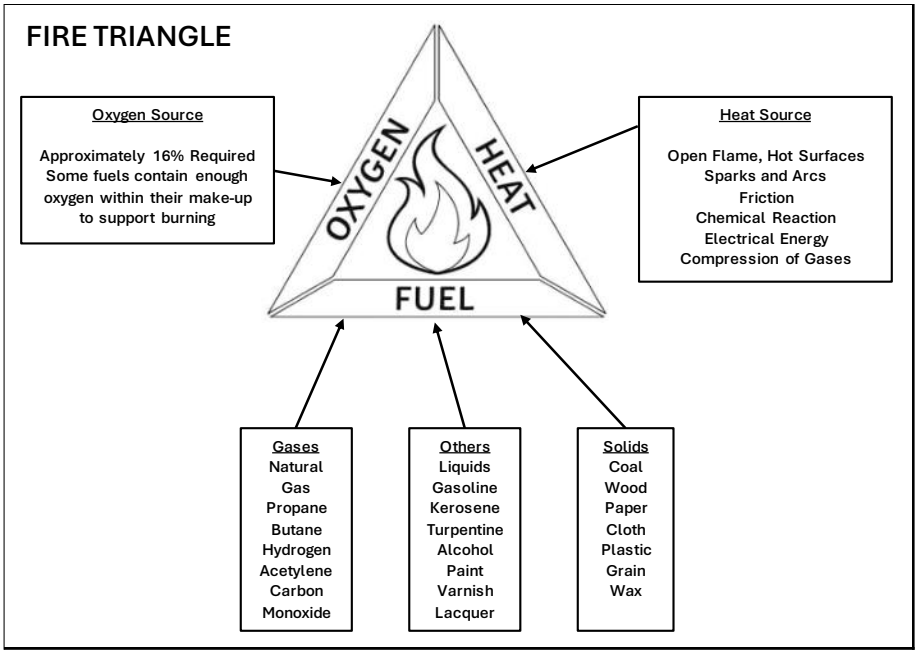
- Remain calm
- Only extinguish a fire when it is clearly within your abilities and the equipment available
- Know the location of the nearest alarm and how to activate the emergency system
- Know the evacuation routes and collection points
- If the fire cannot be extinguished, leave the area immediately and report to your evacuation area
- Await further instructions from the designated responsible personnel

**Training:**

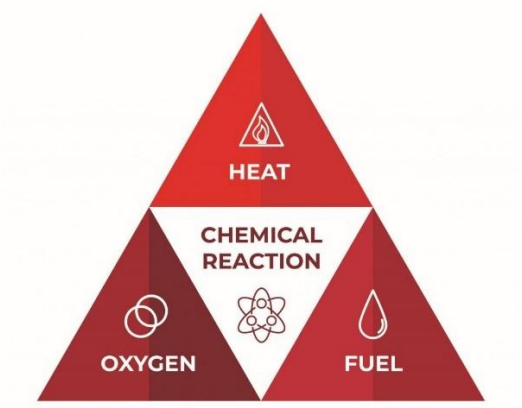
All employees who may be required to use a fire extinguisher shall be trained in its use. Watch for Fire Re-Starting.

**Basic Fire Science**:

- Fire is a chemical reaction which needs three things to be present: Oxygen + Fuel + Heat = Fire
- If one of these three things are not present, the fire cannot start. If one of these three things is taken away the fire will go out.



- To understand fire better, a fourth factor is added, a chemical chain reaction. This is because fire results from a series of reactions in which complicated molecules "crack" into easily oxidized fragments.
- Disruption of this chain, along with the removal of fuel, heat or oxygen, is recognized as a method of fire extinguishment using dry chemical extinguishers.




**Heat Energy** - Can be produced by building up molecules (composition) or breaking apart (decomposition) by heat or a solution when materials are dissolved in a liquid, or by combustion.

**Heat Transfer** - A law of physics states that heat tends to flow up from a hot substance or place to a cold substance or place. This is through conduction (transfer of heat through a medium such as metals) or through convection (transfer of heat with a medium-usually circulatory).

**Fuels** - Those substances that will burn when heat is applied. The most common fuels are not pure elements such as carbon, but compounds and mixtures such as paper and wood.

**Oxygen** - Makes up a major portion of the oceans and earth's crust and one-fifth of our atmosphere. Atmospheric oxygen is the major source of oxygen that supports combustion. Oxygen itself does not burn, however, without it, combustion is impossible. Normal burning is the combination of fuels with oxygen under the influence of heat.

**Combustion** - A rapid oxidation or chemical combination accompanied by heat.

**Oxidation** - The ability of materials to produce oxygen during a chemical reaction.
Spontaneous Combustion - When oxidation is allowed to occur, enough oxygen is available, heat is produced, molecules become more energetic and combine with oxygen at an increasing rate, temperatures rise and visible heat (flames) are produced.

CLASSES OF FIRES:

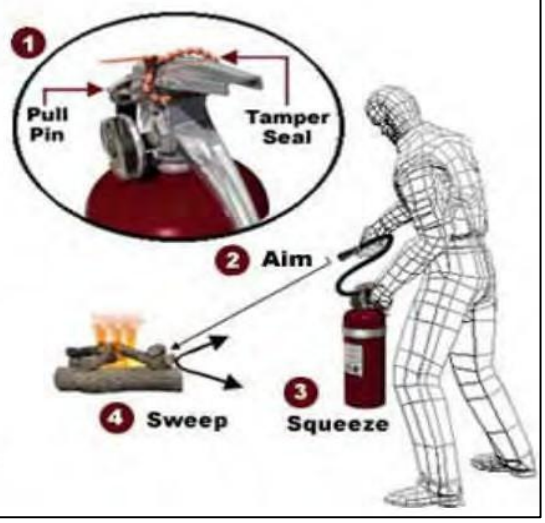
- **Class A** extinguishers are for ordinary combustible materials such as paper, wood, cardboard, and most plastics. The numerical rating on these types of extinguishers indicates the amount of water it holds and the amount of fire it can extinguish. Geometric symbol (green triangle)
- **Class B** fires involve flammable or combustible liquids such as gasoline, kerosene, grease and oil. The numerical rating for class B extinguishers indicates the approximate number of square feet of fire it can extinguish. Geometric symbol (red square)
- **Class C** fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish class C fires - the risk of electrical shock is far too great! Class C extinguishers do not have a numerical rating. The C classification means the extinguishing agent is non-conductive. Geometric symbol (blue circle)
- **Class D** fire extinguishers are commonly found in a chemical laboratory. They are for fires that involve combustible metals, such as magnesium, titanium, potassium and sodium. These types of extinguishers also have no numerical rating, nor are they given a multi-purpose rating - they are designed for class D fires only. Geometric symbol (Yellow Decagon)
- **Class K** fire extinguishers are for fires that involve cooking oils, trans-fats, or fats in cooking appliances and are typically found in restaurant and cafeteria kitchens. Geometric symbol (black hexagon) – Uses Wet Chemical

| Class of Fire | Type of Fire | Type of Extinguisher | Extinguisher Identification | Symbol |
|---|---|---|---|---|
| A | Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics | Water, Dry Powder, Halon | A | |
| B | Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar | Carbon Dioxide, Dry Powder Halon | B | |
| C | Fires involving Live Electrical Equipment | Carbon Dioxide, Dry Powder Halon | C | |
| D | Combustible Metals or Combustible Metal Alloys | Special Agents | D | No Picture Symbol D |
| K | Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats | V e | K | |

**Most fire extinguishers operate using the following P.A.S.S. technique:**

1. **PULL...** Pull the pin. This will also break the tamper seal.
2. **AIM...** Aim low, pointing the extinguisher nozzle (or its horn or hose) at the base of the fire. **Note:** Do not touch the plastic discharge horn on CO2 extinguishers, it gets very cold and may damage skin.
3. **SQUEEZE...** Squeeze the handle to release the extinguishing agent.
4. **SWEEP...** Sweep from side to side at the base of the fire until it appears to be out. Watch the area. If the fire re-ignites, repeat steps 2 - 4.

**If you have the slightest doubt about your ability to fight a fire....EVACUATE IMMEDIATELY!**



# TAB 28–SIGNAGE POLICY

Signage is one of the methods used to communicate information, and the following signage will be used:

EQUIPMENT IDENTIFICATION:

All property, trailers/vehicles and tools will be properly identified.

WARNING SIGNS AND BARRIERS

The following site safety signage will be used as a communication tool to inform workers of possible hazards, they may be used singularly or in conjunction with other signage.

Yellow Construction Caution/Warning Tape: Yellow Black (2")

This warning is to inform workers that there are hazards in the area, it could be placed around areas, like: material lay down area, areas adjacent to floor openings, slippery work area, areas where overhead work or hazards exists, live energy sources. Tape shall designate an area of "CAUTION" (Hot work overhead, excavation etc.)
This does not restrict access, but as in information for workers to check the area, perform a scene survey, look for hazards before entering and check with staff in the area, to see it is safe to pass.
Workers shall be allowed to move through an area marked with "CAUTION" markings, but only with the knowledge of why the area is marked and with the approval of the individuals who erected the barricade. **CAUTION is designated to alert workers to a Hazard exposure**.

Red Danger Tape: Red- Black (2")

This warning is placed to inform all that there are immediate dangers in the area. This tape shall not be removed, tampered with or crossed without checking the area for hazards and checking with the staff before crossing that area. If used for hoisting tape shall be used above and below the lifting zone and areas above where workers adjacent can be at risk. Violation of this will not be treated lightly. Tape shall designate an area of "DANGER" (swing radius, work overhead, high noise, sand blasting,
Only authorized personnel shall enter a designated "DANGER" area. All others shall go around.

Candy stripped Commissioning Tape

This warning tape is used when equipment is being energized and tested, the purpose is to inform workers to stay clear of the area, as equipment my start and run and stop suddenly. Only workers who are involved with this process will be allowed in close proximity to this process.

**DANGER DUE TO SIGNS**

These signs will be posted in prominent locations and in sufficient numbers to warn workers of a hazard. Sign shall have the word **"DANGER"** written in legible letter as least 150millimeters in height, and the specific hazard to be aware of, i.e., hoisting, open floors, Fall Hazard.

No one shall enter that area in which the sign is posted other than a worker authorized to work in that area.

**The following are areas where signs are required as per requirements under OHSA Construction Regulations R213/91 S26(3) & S44:**

- Guardrails removed
- Overhead lifting, and areas adjacent to hoisting area.
- Open floors
- Fall Hazard, with in 6 ft of opening or fall greater than 6 ft
- Overhead potential hazard to electrical conductor of more than 750 volts
- Working Overhead

**All signs and barriers must be removed as soon as the need has ended.** Foreman responsible for the work in the area will be held accountable for this important task. Failure to remove these items results in people paying little attention to them and this is a situation which cannot be allowed to develop.

| AREAS & WORK TYPE REQUIRING SIGNS AND / OR WARNING TAPE | | | | | |
|---|---|---|---|---|---|
| **WORK ACTIVITY** | **ROPE** | **TAPE** | | | **SIGNS** |
| | YELLOW | YELLOW | RED | RED/WHITE STRIP | |
| Hoisting | | | ☐ | | Danger Overhead Work |
| HOT Work | | | ☐ | | Danger Due To |
| High Hazard (Spills, Open Access, etc.…) | | | ☐ | | Danger Due To |
| Commissioning | | | | ☐ | Danger Due To Testing |
| Overhead Work | | | ☐ | | Danger Overhead Work |
| Loading / Unloading | | ☐ | | | Danger Due To |
| Confined Space | | | ☐ | | Caution Enter by Permit, Confined Space Only |
| Roof Access | Yellow rope as bump line | | | | "Fall Arrest Must Be Worn Beyond This Point" If work outside of Bump-Lines |
| Bump Line around Pit | Yellow rope as bump line | | | | Chock Wheels Beyond this Point |
| Live High Voltage Electrical | | | ☐ | | Danger High Voltage |

# TAB 29-HEARING CONSERVATION POLICY AND PROGRAM

**POLICY STATEMENT**

This Policy and Program applies to all employees, contractors, volunteers, and visitors of the Business. Exposure to high noise levels for long periods of time can cause irreparable hearing loss that occurs slowly, over the course of months or years, and often goes unnoticed until permanent damage has occurred. Through the use of engineering controls, training, work practices, administrative controls and personal protective equipment, the Business will seek to prevent hearing loss among those who may be affected.

**ROLES AND RESPONSIBILITIES**

Employer:

- Ensure to take all precautions necessary in the circumstances to protect workers from exposure to all hazardous sound levels.
- Ensure hearing protection is supplied and available to workers.
- Ensure no worker is exposed to sound levels greater than Time-Weighted Average (TWA) limit of 85 dBA measured over an eight (8) hour workday.
- Maintain training records.
- Ensure management, supervisors, and employees properly wear the prescribed hearing protection while working or traveling through any area that is designated as a high noise area; and
- Ensure that hierarchy of controls is considered to reduce the impact of noise.

Supervisor:

- Ensure employees wear hearing protection when noise levels reach or exceed 85 dBA.
- Ensure engineering and administrative controls are applied to limit employee exposure.
- Ensure adequate hearing protection is provided for employees.
- Ensure signs and warnings are posted in all high noise areas.
- Ensure noise surveys are conducted annually or when new equipment is acquired.
- Ensure an annual hearing test for all employees exposed to the 85 dBA threshold criteria.
- Ensure hearing conservation and training is provided for all new employees; and
- Ensure annual hearing conservation training is conducted for all employees affected by the 85 dBA threshold criteria.

Worker:

- Use business-approved hearing protection in designated high noise areas.
- Request new hearing protection when needed.
- Exercise proper care of issued hearing protection; and
- Attending training concerning the proper usage and wearing of hearing protection.

**HAZARDS**

**Noise Exposure**
Noise monitoring is conducted to determine employee noise exposures and identify activities and equipment which present a health or safety hazard.

**OCCUPATIONAL EXPOSURE LIMITS (OEL)**

OEL's are defined as a worker's maximum permitted daily exposure to noise without hearing protection. OEL's take into consideration the loudness of the noise — measured in decibels (dBA) — and the duration of exposure to that noise — measured in hours per day. The Business is responsible for making sure that workers are not exposed to noise that exceeds the OEL's and 85 dBA LEX.

LEX is the worker's level of total exposure to noise in dBA, averaged over the entire workday and adjusted to an equivalent 8-hour exposure (based on a 3-dBA exchange rate). In other words, a worker exposed to 88 dBA for 4 hours or 91 dBA for 2 hours would be exposed to 85 dBA Lex (an exposure equivalent of 85 dBA for 8 hours).
Threshold Shift is defined as the decrease in the ear's sensitivity to noise and protection.

The following table sets the occupation exposure limits for noise. It is the responsibility of the Business to ensure that a worker's exposure to noise does not exceed 85dBa LEX and the exposure limits listed.

| Occupational exposure limits for noise | |
|---|---|
| **Exposure level (dBA)** | **Exposure duration** |
| 82 | 16 hours |
| 83 | 12 hours and 41 minutes |
| 84 | 10 hours and 4 minutes |
| 85 | 8 hours |
| 88 | 4 hours |
| 91 | 2 hours |
| 94 | 1 hour |
| 97 | 30 minutes |
| 100 | 15 minutes |
| 103 | 8 minutes |
| 106 | 4 minutes |
| 109 | 2 minutes |
| 112 | 56 seconds |
| 115 and greater | 0 |

# HEARING CONSERVATION PROGRAM

When workers are exposed to noise levels that exceed the OEL's, the Business will implement its Noise Management Program to reduce the potential for hearing loss and other adverse effects on its workers.

The Business shall conduct a noise survey, either in – house or by hiring a consultant, or determine whether an exemption applies. As well it will consider engineering controls that will eliminate or reduce noise.

The program consists of the following elements:

- Worker education.
- Measuring and monitoring sound levels.
- Posting of suitable signs.
- Controlling noise exposure.
- Hearing protection devices.
- Conducting audiometric tests; and
- Evaluating the program.

**Worker Education**

Annual hearing conservation training shall be provided to those employees whose job activities expose them to noise levels above the Occupational Exposure Limits (OELs).

The hearing conservation training program includes the following components, and will be updated periodically to address changes in equipment, protective equipment, or work practices:

- Regulatory requirements and responsibilities of worksite parties.
- Physical properties of noise.
- Physiological effects of noise on hearing.
- Purpose and procedures of noise monitoring.
- Purpose and procedures of audiometric testing.
- Purpose, selection, fitting, use and care of hearing protection.
- Information on the selection, use and maintenance of hearing protection equipment required to be used by the workers.
- Use the Hearing Conservation Training Log Form to document training.

**Measuring and monitoring sound levels**

Measure and monitoring noise levels allows the following:

- Identification of employees, job tasks, and operations with eight (8) hour TWA exposure above the action level.
- Selection of hearing protection with enough attenuation to reduce noise levels to within acceptable levels.
- Classification of noise exposures for prioritizing controls and protection; and
- Evaluation of noise sources and methods of control.
- The measuring and monitoring program will be implemented when information indicates that a worker's noise exposure may exceed the OEL levels as an eight (8) hour time weighted average.

**More Than One Noise Source**

Noise from different pieces of equipment contributes to the overall sound level in the work area. When more than one noise source is involved in an area, the loudest source should be evaluated and controlled first.

**Posting of Suitable signs**

Where noise levels exceed 85 dBA, suitable posters will be posted to warn workers of the existing noise hazard.
Controlling Noise Exposure

Worker exposure to noise can be reduced through engineering controls, administrative controls or by providing workers with appropriate personal hearing protection.

**Engineering Controls**

The preferred method is the use of engineering controls as they can minimize or even eliminate exposure by altering or removing the source of the noise. Some examples of engineer controls are:

Replacing noisy equipment or machinery with quieter equipment or machinery.

Modifying equipment or the processes so that less noise is generated. For example, operating equipment at a slower speed or if practicable, placing the noisy equipment further away from the workers to isolate the workers from the source of the noise; and

Regular maintenance of equipment and ensuring that they are operating at optimal conditions can lead to significant noise reduction.

**Administrative Controls**

When noise levels cannot be sufficiently reduced or eliminated through engineering controls, administrative controls can still be used to significantly reduce worker exposure. An administrative schedule can be developed to rotate employees in and out of the work area so that their cumulative noise dose remains below permissible levels.

**Personal Protective Equipment (Hearing protection devices)**

When reducing noise levels through engineering controls and exposure times using administrative controls have not reduced workers exposures below the OEL's, the Business will provide appropriate hearing protection to those workers.

The hearing protection provided to the workers must meet the requirements in CSA Standard Z94.2-14, Hearing Protection Devices – Performance, Selection, Care and Use.

CSA classifies muffs and earplugs as Class A, B, or C or Grade 1, 2, 3, or 4 based on the level of protection they provide.

Personal stereo headsets, or "music earbuds," are not approved for hearing protection and are not permitted.
Reusable earplugs and earmuffs should be washed periodically and stored in a clean area.
Foam inserts should be discarded after each use.
Hands should be washed before handling hearing protectors to prevent contaminants from being placed in the ear.

Refer to the Hearing Protection Information Package which summarizes the minimum levels of hearing protection required.

# TAB 30- SUBCONTRACTOR MANAGEMENT POLICY

**POLICY STATEMENT**

MWS Solutions Inc. ("The Business) is committed to ensuring the health and safety of its employees and taking the necessary steps to protect persons (including workers, visitors, and the public) and property from any harm during the service contract. The Policy applies where the Business contracts for the performance of work or services (non-construction) and where the Business contracts an independent contractor/constructor to undertake a project (construction).

**Maintenance & Service Work**

1. Includes services provided under the service contract, such as electrical, custodial, security, heating, ventilation and air conditioning specialists, elevated tanks, signal repairs, patchwork, landscaping, land surveying, environmental assessments requiring drilling/excavation, inspections, equipment list and others, as determined by the terms and conditions of the agreement; and

2. Services provided on an "ad hoc" basis, such as plumbers, appliance repair persons, or general handypersons, who are employed periodically for short-term assignments.

**Construction Projects**

Includes project general contractors, such as construction companies, where they are employed to carry out a project and where the final completion of the project is determined by management. Examples include construction of a building, installation of an elevator, or replacement of boilers and other major mechanical equipment.

**ROLES AND RESPONSIBILITIES**

**Employer**

Business owners are responsible for ensuring that the requirements of this Policy are carried out with respect to contracted work performed under their authority or control (this includes work completed under their direction for all sites/locations).

**Management**

- Ensure that any contracted work performed under their authority or control complies with the requirements of this Policy.
- Ensure that contract personnel (non-construction) are aware of the requirements of the Policy and that a pre-commencement meeting and checklist is completed prior to commencing work, as outlined below in Stage 2 of the Contractor Safety Program.
- Report any performance issues and concerns as outlined below in Stage 3 of the Contractor Safety Program to management and/or the Joint Health and Safety Committee or Health and Safety Representative, as applicable.
- Monitor contractor performance and use the forms provided below in Stage 3 and 4 of the Contractor Safety Program to maintain records.

**Subcontractor**

- Enforce and comply with the requirements of the Policy.
- Ensure that their workers are aware of the Policy and that they comply with its requirements.
- Complete the Contractor Health and Safety Checklist Form, Contractor Responsibility Agreement Form, and Pre-commencement Checklist Form; and
- Keep copies of completed forms pertaining to the Contractor Safety Program in the contractor's file for future reference.

**SUBCONTRACTOR SAFETY PROGRAM REQUIREMENTS**

1. The Contractor Safety Program is comprised of the following four (4) stages:
   - **Stage 1 -** Contractor Health & Safety Agreement Checklist
   - A Contractor Health & Safety Agreement Checklist will be supplied to the successful bidder on a project. The checklist must be completed by the successful contractor prior to any work commencing. The checklist will help determine if a contractor is likely to perform the work in accordance with applicable legislative and regulatory OHS requirements.
   - **Stage 2 -** Pre-Commencement Meeting
   - After a contract has been awarded, but prior to the job commencing, **the Pre-Commencement Checklist Form** must be reviewed, and completed by the applicable representative with the successful contractor. The Joint Health and Safety Committee/Health and Safety Representative (where applicable) should assist in this process.
   - **Stage 3 -** Performance Monitoring
   - The employer is liable for contractor safety infractions, particularly in the case of serious injuries and fatalities.
   - During the contract, the employer and contractor are responsible for overseeing contract performance and will monitor the

performance of the contractor(s), subcontractor(s), and employees on a regular basis, documenting any issues or concerns. If any issues or concerns arise, the contractor and employer will be notified both verbally and written.

- **Stage 4 -** Post Contract Performance Evaluation

2. **The Post Contract Performance Evaluation Form** must be completed, signed, and retained in the bid file and a copy must be sent to the JHSC. In the case of documented "poor performance," the contractor may be disqualified from bidding on future work.
3. **Default and Noncompliance**
    a. In the event of any default or noncompliance with the requirements of the Contractor Safety Program, the Business reserves the right to:
    b. Disqualify a contractor based on past performance.
    c. Obtain documentation to demonstrate that the contractor does not comply with the program requirements.
4. **TRAINING REQUIREMENTS**
    a. All contactors/subcontractors must provide training to all workers regarding all work tasks, tool and equipment handling, and safety preventative measures.
    b. Contractors must be trained in:
    c. WHMIS 2015 (if handling hazardous substances)
    d. Working at Heights (if working at heights above 3 meters)
    e. First Aid (a minimum of 1 certified person per worksite at all times)
    f. Work process/Task specific hands-on training.

**POLICY REVIEW**

The policy must be reviewed at least annually and updated as necessary by the Business, in consultation with the JHSC or the HSR, as applicable.

# TAB 31-Hoisting and Rigging Policy

**PURPOSE**
The purpose of this section is to outline policy regarding the use and maintenance of cranes and hoists, lift trucks, rigging and similar equipment for material handling.

**SCOPE**
This section applies to all employees and subcontractors of MWS Solutions Inc.

**DEFINITIONS**
**Boom** - ls the projecting part of a crane or similar lifting device from which a load is supported.

**Hoist and Rigging** - Electric powered equipment used to raise or lower material or objects and includes hardware, hooks, ropes, slings, rails and other components.

**Lifting Devices** - ls a device that is used to raise or lower any material or object and includes its rails and other supports but does not include a device to which the Elevating Devices Act applies.

**Competent Person** - Is a person who is qualified because of knowledge, training and experience to organize the work and its performance, is familiar with the Act and the Regulations that apply to the work and has knowledge of any potential or actual danger to health or safety in the workplace.

**Competent Worker** - In relation to specific work, means a worker who is qualified because of knowledge, training and experience to perfo1m the work, is familiar with the Act and with the provisions of the Regulations that apply to the work and has knowledge of all potential or actual danger to health and safety in the work.

**LEGISLATION CRANES AND SIMILAR HOISTING DEVICES**
**Section 150 - 154 of the Regulation for Construction Projects states that:**

- No worker shall operate a crane or similar hoisting device unless the worker holds a certificate of qualification issued under the Ontario College of Trades and Apprenticeship Act that is not suspended.
- No worker shall operate a crane or similar hoisting device unless the worker has written proof of training indicating that he/she is trained in the safe operation of the crane or hoisting device. The worker must always carry this proof.
- No crane or similar hoisting device shall be subjected to a load greater than its rated load-carrying capacity.
- Each crane or similar hoisting device shall have a load rating plate affixed. The operator must be able to read the load rating plate while at the controls. The plate must have enough information for the operator to determine the load that can be lifted for each configuration of the crane.
- The owner of a crane or similar hoisting device shall keep a permanent record of all inspections of tests of, repairs to, modifications to and maintenance of the crane or similar hoisting device.
- The owner of a crane or similar hoisting device shall prepare a logbook for use at a project that shall include records covering a period that is the greater of the preceding twelve months or the time that the crane is on the project.
- The owner of a crane or similar hoisting device shall make available, upon request, copies of all logbooks.
- A crane or similar hoisting device shall be set up, assembled, extended and dismantled by a competent worker only. The competent worker must perform his/her tasks in accordance with the written instructions of the manufacturer and in such a manner as not to endanger any person or property.

**RIGGING**
**Sections 173 and 176 of the Regulations for Construction Projects state that:**

- Every hoisting hook shall be equipped with a safety catch.
- A hoisting hook shall have its load rating legibly cast or stamped on it in a location where the person using the hook can readily see it.
- A hoisting hook shall not be used if it is cracked, has a throat opening that is greater than as manufactured or is twisted from the plane of the unbent hook.
- Only an alloy steel chain or a chain manufactured for the purpose shall be used for hoisting.
- No alloy chain shall be annealed or welded

**RESPONSIBILITIES**
**Manager/Supervisors are responsible for:**

- Ensuring that employees under their supervision are properly trained and are certified and licensed to operate the cranes and hoists in their areas.
- This training must be conducted by a qualified, designated instructor who is a licensed crane and hoist operator.
- Ensuring that hoisting equipment is inspected and tested monthly by a competent individual and that rigging equipment is

inspected annually.

- The employer shall ensure that every worker involved with the hoisting operation receives
- Adequate instructions about the requirements, restrictions and hazards associated with the hoisting operation.
- Adequate instruction would include understanding what hoisting and rigging is, how to determine hazards, weights, inspections etc.

**Crane and Hoist Operators are responsible for:**

- Operating hoisting equipment safely.
- Conducting functional tests prior to using the equipment.
- Selecting and using rigging equipment appropriately.

**Hoisting and Rigging**

- Having a valid operator's license on their person while operating cranes or hoists. Participating in the medical certification program, as required.

**PROCEDURE CRANE SAFETY GUIDELINES**

Annual and pre-use inspection shall be completed on all cranes and similar hoisting equipment. All cranes and rigging shall be inspected by a qualified person. A permanent record of each inspection shall be kept by the supervisor in a place readily accessible to the workers. Managers and Supervisors shall ensure that all operators are trained and qualified to operate a crane or similar hoisting device.

**HAND SIGNALS**

Signals to the operator shall be in accordance with the standard hand signals. It is vital to use hand signals when the operator's view is obstructed. Some special operations may require addition to or modification of the basic signals. For all such cases, these special signals shall be agreed upon and thoroughly understood by both the person giving the signals and the operator and shall not conflict with the standard signals. No response should be made to unclear signals. New or altered signs that are agreed upon and fully understood by the operator and signal person shall be documented, reviewed by the crane operator and signal person, and signed and dated by the crane operator and signal person prior to start of work.

**RIGGING SAFETY REQUIREMENTS**

Only rigging equipment that is certified CSA and in good condition without defect shall be used. All rigging equipment shall be inspected on a daily and weekly basis; defective equipment is to be removed from service and destroyed to prevent further use. The load capacity limits shall be stamped or affixed to all rigging components and these limits must never be exceeded.
When inspecting rigging, look for the following defects:

**Nylon slings with:**

1. Abnormal wear.
2. Tom stitching.
3. Broken or cut fibers.
4. Discoloration or deterioration.
5. Chemicals such as oils Wire-rope slings with:
6. Kinking, crushing, bird-caging, or other distortions.
7. Evidence of heat damage. Hoisting and Rigging
8. Cracks, deformation, or worn end attachments.
9. Six randomly broken wires in a single rope lay.
10. Three broken wires in one strand of rope.
11. Hooks opened more than 15% at the throat.
12. Hooks twisted sideways more than 10 degrees. from the plane of the unbent hook. Alloy steel chain slings with:
13. Cracked, bent, or elongated links or components.
14. Cracked hooks.
15. Defective rigging equipment shall be tagged and taken out of service and removed from site and disposed of immediately. Notify the Supervisor prior to disposing.

**Approval & Acknowledgement:**

Jason McKellar, President January 1, 2026