DIELCO

ELECTRIC LTD.

80 Enterprise Drive South, London, ON N6N 1C2

Phone # 519-668-6525

HEALTH & SAFETY POLICY/PROGRAM MANUAL

2025

DIELCO ELECTRIC LTD

HEALTH AND SAFETY POLICY STATEMENT

Management of Dielco Electric Ltd is vitally interested in the health and safety of its workers and subcontractors. Protection of workers and subcontractors from injury or occupational disease is a major continuing objective. Dielco Electric Ltd will make every effort to provide a safe and healthy work environment. All supervisors, workers, and subcontractors must be dedicated to the continuing objective of reducing injury risk.

Dielco Electric Ltd as the employer, is ultimately responsible for workers' and subcontractors Health and Safety. Dielco Electric Ltd gives you our personal assurance that every reasonable precaution will be taken for the protection of workers and subcontractors.

Supervisors will be held accountable for the health and safety of workers and subcontractors under their supervision. Supervisors are responsible for ensuring that machinery and equipment are safe and that workers and subcontractors work in compliance with established safe work practices and procedures. Workers and subcontractors must receive adequate training in their specific tasks to protect their health and safety.

Every worker and subcontractor must protect his or her own health and safety by working in compliance with the Occupational Health and Safety Act and applicable Regulations and with safe work procedures established by this company and/or its clients. All workers and subcontractors are reminded of their right to refuse to perform unsafe work.

It is in the best interest of all parties to consider health and safety in every activity. Commitment to health and safety must form an integral part of this organization, from the president to the workers and subcontractors.

The final responsibility for safety is Dielco and its management team, and by review of injury frequencies with all staff, ensuring the implementation of preventative measures to prevent the recurrence of any injuries and insisting on continuous improvements in inspection reports the accountability necessary to ensure implementation of this policy will be obtained.

I, Darren Elligsen of Dielco agree and accept the terms of this Health & Safety Policy Statement. Date: January 1, 2025.

Dielco Electric Ltd

Signature: *Darren Elligsen*

Name: Darren Elligsen

Date: January 1, 2025

2025 ver.1

DIELCO

ELECTRIC LTD.

NO LIVE WORK POLICY

Purpose

To establish a clear and precise policy of no live work. This ensures Dielco Electric, and their employees, provide a safe workplace and eliminate risks associated with working on live electrical systems.

Understanding

It is understood that the employer and the employee agree to a no live work policy. Live work is not allowed to be carried out.

The only exceptions being:

- When troubleshooting electrical systems which require the system to be powered on.
- When it is not reasonably possible to disconnect the equipment, installation, or conductor from the power supply before working on or near the exposed energized parts.
- When confirming phase rotation.
- When confirming that power is de-energized.

No exceptions noted above are to be taken without written confirmation between the employee and employer.

In the instances above, proper PPE must be worn which is correctly rated for the electric shock and arc flash. If an arc flash study or arc flash labels are not available or seen on the equipment, stop all work immediately are review with management to submit questioning to the Owner or Engineer.

Agreement

Under no circumstances are workers to place themselves at risk.

It is the responsibility of all workers to comply with this policy. No live work will be tolerated. Violation of any part of this policy, or other H&S program policies, is not acceptable and will result in disciplinary action.

By signing below, I agree, understand, and accept the terms of this No Live Work Policy.

Signature: _____

Print Name: _____

Date: _____

DIELCO ELECTRIC LTD.

WORKPLACE VIOLENCE AND HARASSMENT PROGRAM

Definitions

"Workplace violence" means:

- 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 behavior 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.

Examples of workplace violence include:

- verbally threatening a worker;
- leaving threatening notes at or sending threatening e-mails to or within a workplace;
- shaking a fist in a worker's face;
- wielding a weapon at work;
- hitting or trying to hit a worker;
- throwing an object against a worker;
- sexual violence against a worker;
- kicking an object, the worker is standing on such as a ladder;
- trying to run down a worker using a vehicle or equipment such as a forklift

Domestic Violence

A person who has a personal relationship with a worker-such as a spouse or former spouse, current or former intimate partner or a family member- may physically harm or attempt or threaten to physically harm that worker at work. In these situations, domestic violence is considered to be workplace violence.

Workplace Harassment

Workplace Harassment means:

"Engaging in the course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be known as unwelcome".

"Sexual Harassment" means:

Engaging in the course of vexatious comment 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 it 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 the solicitation or advance is unwelcome.

Workplace harassment can involve unwelcome words or actions that are known or should be known to be offensive, embarrassing, humiliating or demeaning to a worker or group of workers. It can also involve behaviors that intimidate, isolate, or even discriminate against the targeted individual[s].

Workplace harassment often involves repeated words or actions, or a pattern of behaviors, against a worker or group of workers in the workplace that are unwelcome.

This may include:

- making remarks, jokes, or innuendos that demean, ridicule, intimidate, or offend;
- displaying or circulating offensive pictures or materials in print or electronic form;
- bullying;
- repeated offensive or intimidating phone calls or e-mails;
- inappropriate sexual touching, advances, suggestions or requests.

What is not workplace harassment?

Reasonable action or conduct by an employer, manager or supervisor that is part of his or her normal work function would not normally be considered workplace harassment. This is the case even if there are sometimes unpleasant consequences for a worker. Examples could include changes in work assignments, scheduling, job assessment and evaluation, workplace inspections, implementation of dress codes and disciplinary action.

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

In addition, any behavior that would meet the definition of workplace violence would not be considered to be workplace harassment.

Assessing the Risks of Workplace Violence/Harassment

Management shall

1. Complete the Workplace Violence/Harassment Assessment Form attached.

2. Take into account the circumstances of the Dielco Industrial Contractors workplaces and circumstances common to other similar workplaces.

3. Develop measures and procedures to control identified risks that are likely to expose a worker to workplace violence and harassment.

4. Advise the J.H.S.C. –if any-or Health and Safety Rep. of the results of the Assessment results.
5. Repeat the assessment as often as necessary to ensure that the workplace violence/harassment policy and the program protect the worker from workplace violence and harassment.

Emergency Response Plan - Workplace Violence/Harassment

The worker shall

1. If a worker observes workplace violence occurring to another worker the worker must immediately notify the supervisor.

The supervisor shall

1. Immediately call 911 and ask for police assistance and if required ambulance services. Calling for police involvement demonstrates to all workers that Dielco Industrial Contractors is committed to a Workplace Violence Zero Tolerance Policy.

2. Never attempt to defuse violent situations by attempting to physically separate the parties involved in the act of workplace violence.

3. Instruct all other workers to remain at a safe distance from the parties involved in workplace violence.

4. If initial indications are that other workers could become involved in the occurrence of workplace violence, arrange for the emergency evacuation plan to be implemented. This will divert other workers away from the violent incident scene.

5. Attempt to safely remove from the adjoining area any object which could be used as a weapon [hammers, knives].

6. Provide the required information to the police investigation.

7. If required, after the police have managed the workplace violence incident, call for medical
8. assistance.

9. Report the incident to senior management using the Violent Incident Reporting Form.

10. See the form attached.

Reporting Workplace Violence/Harassment

Any worker who has been the victim of workplace violence or harassment or has witnessed workplace violence/harassment shall report the following information to their immediate supervisor:

- Information about the victim
- Information about the alleged offender
- A description of the interaction or work activity
- Details about the incident including:

    - a description of the incident
    - the location of the incident
    - any physical injuries received
    - the outcome
- Information about any witnesses
- Other relevant information - possible contributing factors or relevant events which preceded the incident; suggested preventive or remedial actions
- If the complaint involves his/her supervisor, the worker may notify any other member of management or the Health and Safety Representative.

Investigating Workplace Violence and Harassment Incidents

The immediate supervisor shall investigate the circumstances forthwith and report their findings in writing to management.

- If the victim is satisfied that all corrective actions possible to prevent a recurrence have been implemented, then the issue is resolved.

- If the issue is not resolved to the satisfaction of the victim, the victim will meet with top management and the J.H.S.C. –if any- to resolve the issue and to ensure that corrective actions to prevent a recurrence have been implemented.

- If the issue is still not resolved to the satisfaction of the victim, the M.O.L. will be called to
  investigate.

- If a worker sustains a disabling injury as a result of workplace violence the employer shall
  within four days of the occurrence, give written notice containing information and particulars
  as per O.H.S.A. sec 52[1].

- The steps taken to prevent a recurrence of the reported workplace violence/ harassment the occurrence will be recorded in the minutes of the J.H.S.C. – if any.

- If no J.H.S.C. exists at the workplace, the steps taken to prevent a recurrence shall be posted in writing in a conspicuous location likely to come to the attention of all workers.

Right to Refuse Work – Workplace Violence/Harassment

Under the O.H.S.A. a worker can refuse to work if he or she has reason to believe he or she may be endangered by workplace violence. A worker may refuse to work if it is reasonably determined that a threat to exercise physical force could cause injury to the worker.

However, work cannot be refused on the grounds of workplace harassment.

It is important to follow all steps as outlined in the O.H.S.A. [sec. 43] regarding the work refusal procedure. See the company Health and Safety Policy and Program Manual for the correct work refusal procedures.

By closely following this Workplace Violence/Harassment Policy and Program, these measures should help all workplace parties to address potential workplace violence/harassment before they escalate to work refusals.

Information about a Person with a History of Violent Behaviour

The O.H.S.A. clarifies that employers and supervisors must provide information, including personal information, related to a risk of workplace violence from a person with a history of violent behavior.
However, this duty is limited and applies only when the:
A) worker can be expected to encounter the violent person in the course of his or her work:
and the B) risk of workplace violence is likely to expose the worker to physical injury.

Employers and supervisors must also not disclose more information than is reasonably necessary for the protection of a worker from physical injury.

It is the policy of Dielco Electric Ltd. that when this information is brought to our attention we will seek legal advice to comply with this requirement.

Domestic Violence in the Workplace

Under the O.H.S.A. an employer must take every reasonable precaution reasonable in the circumstances for the protection of workers when they are aware, or ought reasonably to be aware, that domestic violence may occur in the workplace, and that it would likely expose a worker to physical injury.

Workers should be told in the training program that they can report their concerns to employers if they fear domestic violence [family, partners, spouse] may enter the workplace.

It is the policy of Dielco Electric Ltd. that when this information is brought to our attention, we will seek legal advice to comply with this requirement.

Worker Training – Workplace Violence/Harassment Program

All workers at Dielco Electric Ltd. will receive training in the following elements:

- The necessity of a company-wide Workplace Violence/ Harassment Policy and Program
- What constitutes workplace violence and all forms of harassment
- The content of the company Policy and Program
- The reporting of workplace violence/harassment procedures
- Emergency Response procedures
- Reporting potential domestic violence being brought to the workplace
- The right to refuse work if workplace violence could cause physical injury
- Information about a person with a pattern of violent behavior with the potential to cause
- physical harm in the workplace.

All of the above elements will be discussed at the regularly scheduled activities listed below:

a) Tool Box/ 5-minute safety talks sessions,
b) Scheduled company health and safety meetings,
c) New worker orientation sessions.

As is the policy of Dielco Electric, all workers who attend the above regularly scheduled sessions must sign an attendance sheet.

DIELCO ELECTRIC LTD.

WORKPLACE VIOLENCE AND HARASSMENT POLICY

DATE

The management of Dielco Electric Ltd. is committed to providing a work environment in which all workers are protected from workplace violence and harassment of any kind.

Violent behavior in the workplace will not be tolerated from any person. Workplace harassment will not be tolerated from any person.

There is a workplace violence and harassment program that implements this policy. It includes measures and procedures to protect workers from workplace violence and harassment, a means of summoning immediate assistance, training of workers and a process to report incidents or raise concerns.

Dielco Electric as the employer will ensure that this policy and supporting program are implemented and maintained and that all workers and supervisors have the appropriate information and instruction to protect them from violence and harassment of any kind in the workplace.

Supervisors will adhere to this policy and the supporting program. Supervisors are responsible for ensuring that measures and procedures are followed by workers and that workers have the information they need to protect themselves.

Every worker must work in compliance with this policy and the supporting program. All workers are encouraged to raise any concerns about workplace violence and harassment and to report such.

Management will investigate and deal with all incidents and complaints of workplace violence and all forms of harassment in a fair and timely manner respecting the privacy of all concerned as much as possible.

Printed: _____

Signed: _____

Date: _____

DIELCO ELECTRIC LTD.

ACCESSIBLE CUSTOMER SERVICE POLICY

DATE

Dielco Electric is committed to excellence in serving all customers, including people with disabilities that respect the dignity and independence of persons with disabilities.

Dielco Electric will provide training to workers, volunteers, and others who deal with the public or other third parties on our behalf. Individuals in the following positions may be trained – management, office staff, site superintendents, site supervisors, and others as deemed necessary by management. Training will include all elements as listed in Ont. Reg. 429/07.

Dielco Electric welcomes all assistive devices, service animals, support persons that all persons with disabilities may require. Every accommodation –within the requirements of the Occupational Health and Safety Act and Ont. Reg. 213/91 -will be made if the person with disabilities requires access to a construction project.

A copy of this policy will be posted on office/ administrative premises and all active construction projects.

People with disabilities who wish to provide feedback on the way Dielco Electric provides goods and services to people with disabilities can provide a written or verbal report to the president of Dielco Electric who will provide a written response within 21 days.

In the event of a planned or unexpected disruption to services or facilities for people with disabilities Dielco Electric will clearly post a notice at the entrance containing information about the reason for the disruption, its anticipated length of time and a description of alternative facilities or services if available.

Any policy of Dielco Electric that does not respect and promote the dignity and independence of people with disabilities will be modified or removed.

Any person may request a copy of the Dielco Electric policy, plan and training program.

Printed: _____

Signed: _____

Date: _____

DIELCO ELECTRIC LTD.

ATTENDANCE AT WORK POLICY

A. PURPOSE

The purpose of this Policy is to ensure that all employees of DIELCO ELECTRIC LTD. (Dielco) understand their obligation to attend work as scheduled. This policy will outline the obligations of employees to attend work and also provide Dielco the framework to deal with any late or absenteeism.

B. WHO THE POLICY EFFECTS

All employees of DIELCO ELECTRIC LTD.

C. DEFINITIONS

- **Immediate Family** – includes a spouse, common-law partner, (grand) child, (step, in-law) parents, or sibling.
- **Other Family Members** – includes grandparents, aunts, uncles, niece, nephews, 1st cousins.
- **Leave of Absence** (LOA) is defined in the Employment Standards Act. Including Medical and Emergency Leaves
- **Hours of Work**- Defined hours communicated to employees obligated to attend work.
- **Substantiation**- Documentation or proof indicting a reasonable reason for absence. (Example a doctor's note or tow truck receipt)
- **ESA**- Employment Standards Act of Ontario

D. ROLES and RESPONSIBILITIES

1. The manager is responsible for administering this policy.

2. Supervisors are responsible for enforcing this policy

3. Employees are responsible for understanding and abiding by this policy.

E. PROCEDURE

Each employee of Dielco is expected to come to work on time and as scheduled. Absenteeism will be detrimental to the success of Dielco and to ensuring our customer's contract is completed on time. Dielco understands at times emergency situations or illness will affect our employees, and this policy will address those situations. Where the ESA establishes a greater benefit Dielco will adhere to those requirements. However, Dielco reserve the right to manage each attendance situation independently. Incidents of misrepresentation, untruthfulness or unacceptable absenteeism or lateness will be dealt with on a case by case situation and may result in discipline, including up to termination of employment.

1.0. Holidays / Vacation

1.1. Statutory holidays and vacation time will be provided as per the ESA requirements.
1.2. Vacation holidays must be booked two (2) months prior to the first day of vacation.
1.3. Vacation approvals may be approved on first come bases, and Dielco reserves the right to limit the number of employees off at any one time due to vacations.
1.4. Single vacation days off may be granted at the discretion of Dielco. At least 24 hours' notice is required.

2.0. Leave of Absence

2.1. Non-ESA regulated Leave of Absences (LOA) will be granted at the discretion of Dielco. The employee will provide a reason for the LOA, including the duration and date of return. At least a 2-month notice is required.
2.2. ESA regulated LOA will be considered as per the ESA requirements to approve the LOA.
2.3. All LOA requests must be made in writing to the employees' direct supervisor.

3.0. Sick Day

3.1. Three unpaid sick days will be available to all employees without substantiation per year. All additional sick days will require the Employee to provide substantiation of the absence. Failure to provide substantiation may result in discipline.
3.2. Employees are required to call in prior to their shift start time and report their sickness to their supervisor. Failing to call in will result in a no call no show situation, which may lead to discipline.

4.0. Bereavement

4.1. Bereavement leave will be provided to employees as follows:
4.1.1. Immediate Family- 3 days paid leave will be provided for the employee to attend services.
4.1.2. Other Family- 2 Days of paid leave will be provided for the employee to attend services.

5.0. Lateness

5.1. Employees are expected to be at work on time and ready to work in their work area. If in the event an employee is going to be late, they must call their supervisor and inform them of the reason for the lateness and expected time of arrival. The employee may be required to provide substantiation of why they were late. Employees will be docked pay by the ¼ hour. (Example 16 minutes late, docked 30 minutes.)
5.2. Employees who are late two or more unsubstantiated times in a 30-day rolling average will be subject to discipline.

6.0. Days off In Conjunction

6.1. An employee who has an unauthorized absence on any day in conjunction with a holiday, a denied day off, or LOA will be subject to discipline.

6.2. Examples - 1) An employee asks for a Friday off, and their supervisor denies the day off, but the employee calls in sick or does not show up for work on that Friday. Or, 2) An employee has a week vacation approved, and the Friday before their vacation, they do not show up for work. This is deemed to have taken an unauthorized absence in conjunction.

7.0. Leaving Work Early

7.1. If an employee needs to leave work, early permission must be given by their direct supervisor. The remainder of the shift will be unpaid.

7.2. An employee who leaves work without informing their supervisor is in violation of this policy. Repeated offenses of leaving early without notification will be deemed as time theft and may result in termination of employment.

F. COMMUNICATION

This policy/procedure will be communicated to and a copy provided to each employee of DIELCO ELECTRIC LTD.

G. LEGISLATION

This policy is intended to comply with the ESA of Ontario.

H. TRAINING

The DIELCO ELECTRIC LTD. will ensure all employees are trained in this policy along with any responsibilities. Dielco Electric LTD Sign-Off Sheet will be used to document the training and who has received it.

I. FORMS/OTHER DOCUMENTATION

- Copy of the Attendance at Work Policy

DIELCO ELECTRIC LTD.

CANNABIS IN THE WORKPLACE

INTRODUCTION

DIELCO ELECTRIC LTD. (Dielco) has developed this policy statement for Cannabis use in the workplace to provide clear guidance to all supervisors, workers, and contractors regarding cannabis and the workplace.
October 17, 2018 the legalization date of recreational Cannabis in Canada. The use and potential impairment caused by the use of cannabis in the workplace is of great concern to Dielco. This Policy will outline the expectations and requirements for the use of medical cannabis versus recreational cannabis. Dielco is committed to providing the necessary accommodations when required under the Human Rights code while at the same time ensuring that our employees are provided a safe workplace as required under the Occupational Health and safety Act of Ontario.

DEFINITIONS

1. Medical Cannabis- Cannabis prescribed by a certified medical practitioner in the province of Ontario to treat a bonified diagnosed medical condition.
2. Recreational Cannabis- Cannabis that is obtained by any other means and is not prescribed as Medical Cannabis.
3. Proof of Medical Cannabis- A medical cannabis license and prescription provided by a certified medical practitioner in the province of Ontario.
4. Cannabis- In any form, including smoke, liquid, gummy, eatable. Marijuana is considered the same in this policy
5. Impairment:
    a. as personality changes or erratic behavior (e.g., increased interpersonal conflicts; overreaction to criticism)
    b. the appearance of impairment at work (e.g., an odour of alcohol or drugs, glassy or red eyes, unsteady gait, slurring, poor coordination)
    c. working in an unsafe manner or involvement in an accident/incident
    d. failing a drug or alcohol test
    e. consistent lateness, absenteeism, or reduced productivity or quality of work

PROCEDURE

Recreational Cannabis Use in the Workplace
Ontario law prohibits the use of recreational cannabis in:

1. Any public place
2. Any workplace
3. Motorized vehicles

Consuming recreational cannabis in the workplace is illegal and will continue to be illegal after legalization for private consumption on October 17, 2018.

Commercial drivers face zero-tolerance sanctions for the presence of drugs, as detected by an approved drug-screening device prescribed by the Criminal Code of Canada. A commercial vehicle driver for the purposes of applying zero-tolerance sanctions as a person operating the following classes of motor vehicles from having any alcohol or drugs in their body:

- a vehicle that requires the driver to hold a Class A, B, C, D, E, or F driver's license
- a road-building machine as defined in Regulation 398/16. E.g., bulldozers, graders, low-speed street sweepers, etc.
- a vehicle that requires a Commercial Vehicle Operator's Registration (CVOR) (e.g., trucks with a registered or actual weight greater than 4,500 kg or buses with a designed seating capacity of more than ten passengers.)

Commercial drivers also face zero-tolerance sanctions for the presence of alcohol in the blood, as detected by an approved screening device.

Duties and Responsibilities

Employer:

1. Dielco, as an employer, has to take all reasonable precautions to protect workers from hazards in the workplace.
2. Develop, maintain and enforce this policy
3. Provide EAP assistance to individuals who may require assistance.

Supervisor may:

1. Call for first aid or emergency medical assistance, if necessary.
2. Speak to the employee in a private area to discuss their behavior.
3. Ask another supervisor or designated person to be present as a witness.
4. State your concerns about safety for others and themselves to the employee and request that they explain what is going on. Do not assume substances are the cause.
5. Based on employee response, discuss options, where applicable and available.
6. Based on an assessment of impairment in some cases, it may be necessary to assign non-safety sensitive work or to ask the employee to stop their work.
7. If applicable, notify senior management and/or union representative.
8. Be familiar with available resources and supports (e.g., Employee Assistance Programs, or agencies within the local community), and help employees seek treatment as necessary. Encourage access and use of support programs and reassure the employee that the services are voluntary and confidential.
9. If necessary, call a taxi, or have employee escorted home; do not allow them to drive if you suspect impairment.
10. If disciplinary action is required, follow Delco's policies on discipline.
11. Document the incident in writing.

Worker/ Contractor:

1. Shall not consume recreational cannabis in any part of Dielco's workplace, including buildings, grounds, job sites, or vehicles.
2. Will come to work free of any impairment, ready and able to work.
3. Have a duty to perform work safely and to report hazards to their supervisor or employer.

Discipline / Corrective Actions

Any Employee, Worker or Contractor employed by Dielco that is found or suspected of using or being impaired from the use of recreational cannabis will be removed from the workplace and will face disciplinary action up to and including termination of employment or contracts.

Medical Cannabis Use in the Workplace

Dielco understands it obligations to provide accommodations in the workplace up to undue hardship. Dielco is committed to working with and cooperating with individuals who will require such accommodations while balancing the obligations to provide a safe workplace. As such, Dielco has implemented the following policy for the use of medical cannabis in the workplace.

Duties and Responsibilities

Employer:

1. Dielco, as an employer, has to take all reasonable precautions to protect workers from hazards in the workplace.
2. Develop, maintain and enforce this policy
3. Provide accommodations to an individual as required under the Human Rights Code.
4. Will work with the individual that requests an accommodation in an effort to ensure that the measures taken are both effective, and mutually agreeable.
5. In the event that medical cannabis is deemed to pose a significant or potential hazard to the employee and/or other employees, Dielco will attempt to find alternative work for the employee.
6. Will keep confidential all information provided by an employee regarding their use of medical cannabis.
7. May if they have safety concerns with an employee, worker, contractor, and the work they perform complete a hazard assessment of their duties.
8. This hazard assessment may be provided to the employee, worker, contractor to be taken to their treating doctor for validation that their level of potential impairments will not put them at risk in the workplace.

Supervisor:

1. Will be informed of a worker's restrictions and accommodations relating to the use of medical cannabis by a worker in the workplace.
2. Will monitor the worker to ensure no potential impairment will affect workplace safety.
3. If a risk/hazard is suspected or if the workers safety is in harm's way will speak to the affected worker and if necessary, remove them from that task. The supervisor will seek further direction from upper management.

Worker/ Contractor;

1. Who is required to use medical cannabis while at work, he/she must inform Dielco before using cannabis at the workplace? Any person who does not disclose the use of medical cannabis will be treated as using recreational cannabis.

2. An employee is not required to disclose his/her specific medical diagnosis; however, he/she is required to provide a note from his/her doctor and a copy of the possession license to Dielco.
3. May only use medical cannabis with a license in their name from a physician.
4. That requests accommodation will cooperate with Dielco in an effort to ensure that the measures taken are both effective, and mutually agreeable to both parties.
5. Understand in the event that they are taking medical cannabis during regular working hours, he/she is expected to use it in moderation, only at the recommended level of dosage and the applicable frequency of the doses.
6. Where possible, will use a method of ingestion other than smoking medical cannabis.
7. Who choose to smoke medical marijuana must abide by all provincial smoking regulations and the Dielco's smoking policy and are not permitted to smoke in the presence of other employees.
8. Understand that they have a duty under the OHSA of Ontario to perform work in a safe manner. If the use of medical cannabis causes and impairment of any kind that could pose a hazard to themselves or others, they must report that hazard or concern to their supervisor. If impaired in any way, not perform any task such as operating equipment, machines, or drive.
9. Will cooperate if Dielco has a concern that medical cannabis is causing an impairment and safety risk to themselves or others in the workplace. Dielco may conduct a hazard assessment of the required job functions or tasks.
10. Will cooperate with Dielco and take this hazard assessment to their treating doctor for validation that their level of potential impairments will not put them at risk in the workplace based on the tasks they perform.
11. Will not share their medical cannabis with others in the workplace, even if the other person is also taking medical cannabis.
12. Will inform Dielco of any material change in their use or discontinued use of medical cannabis.
13. Understand that any miss representation or false claims of the use of medical Cannabis to Dielco can result in disciplinary action up to and including termination of employment.

DIELCO ELECTRIC LTD..

PROGRESSIVE DISCIPLINARY ACTION PROGRAM

To ensure that the Health and Safety policy and program of DIELCO ELECTRIC LTD.. are complied with at all workplaces by all workers –including sub-contractor workers - the following disciplinary action sequence shall be enforced whenever deemed necessary by the supervisory or management staff at DIELCO ELECTRIC LTD..

The items which will result in disciplinary action include but are not limited to:

- Continued absenteeism without reasonable cause.
- Health and Safety violations of the O.H.S.A.
- Poor or unacceptable conduct including insubordination.
- Carelessness which endangers one-self or another worker.
- Willful damage to company property, tools, equipment and/or machinery.
- Illegal drugs and/or alcohol consumption at the workplace or work site.
- Failure to report an unsafe act/conditions.
- Non-compliance to Health and Safety Policy and program of DIELCO ELECTRIC LTD..
- Other violations not noted above but which in the opinion of DIELCO ELECTRIC LTD.. warrant enforcement of this procedure.

The above-noted items shall be administered by the supervisor or management in the following sequence:

Step #1: Written/Verbal Warning - Complete Employee Disciplinary Form signed and leave a copy with the employee. Send a copy to J.H.S.C and management.

Step #2: Written/Verbal Warning - Complete Employee Disciplinary Form signed and leave a copy with the employee. Send a copy to J.H.S.C and management.

Step #3: Suspension or Dismissal – Complete Employee Disciplinary Form and leave a copy with the employee and send a copy to J.H.S.C. and management.

All notices shall be explained to workers, their supervisor, subcontractors, and to the union (if applicable) regarding the violation and corrective action.

Copies shall be distributed to all appropriate parties and personnel records.

DIELCO ELECTRIC LTD.

RESPONSIBILITIES – CONSTRUCTOR

As "Constructor" Dielco Industrial Contractors Ltd. shall:

1. Ensure that all the required signage is properly posted at projects as per Ont. Reg. 213/91.

2. Ensure that all the public way protection is provided as per Ont. Reg. 213/91.

3. Ensure that all toilet, wash facilities and potable drinking water requirements are provided as per. Ont. Reg. 213/91.

4. Ensure that the required Notice of Project and Trench Work Notification is submitted to the M.O.L.

5. Ensure that the supervisor representing the constructor and a supervisor for each employer meets the requirements of Ont. Reg. 213/91 [more than 5 workers at a project].

6. Establish written procedures to be followed in the event of an emergency at the project as per Ont. Reg. 213/91.

7. Ensure that every worker at the project has ready access to a means of communication in the event of an emergency.

8. Ensure that all accident reporting requirements are properly completed as per Ont. Reg. 213/91.

9. Ensure that as constructor all parties at a project adhere to the requirements of the O.H.S.A. and all applicable regulations.

DIELCO ELECTRIC LTD.

RESPONSIBILITIES – EMPLOYER

As "Employer" management of Dielco Electrical Ltd. shall

1. Ensure that equipment, materials, and protective devices are provided and maintained in good condition.

2. Annually review the company's health and safety policy.

3. Review the Health and Safety program to ensure that the program is current and that all are adhering to the program.

4. Provide the necessary resources to implement, support, and enforce the health and safety policy and program.

5. Ensure that all accident and incident reports are reviewed at least annually.

6. Promote the exchange of health and safety information with outside groups [e.g.-C.S.A.O., M.O.L., and consultants].
7. Review training programs to ensure that all health and safety regulations and other applicable regulations are complied with.

8. Provide compensation and time necessary to workers who are selected as a Health & Safety Representative and or members of a J.H.S.C.

9. Ensure that as employer **Dielco Electric Ltd.** adheres to all requirements of the O.H.S.A. and all applicable regulations.

10. Ensure that all inspections are completed as required by O.H.S.A. regulations.

11. Establish and ensure that all staff is evaluated [accountability] regarding compliance to the company's Health and Safety program.

12. Ensure that a system recognizes and commends contributions to the health and safety program.

13. Ensure that all sub-contractors hired to perform work on **Dielco Electric Ltd.** projects work in compliance to all legislation.

14. Provide competent supervision.

DIELCO ELECTRIC LTD.

RESPONSIBILITIES – SUPERVISORS/FORMAN

All Supervisors/Forman shall

1. Ensure that workers use or wear the equipment, protective devices, or clothing that are required to be used or worn by DIELCO ELECTRIC LTD. and all applicable legislation.

2. Ensure that workers work in the manner required by the Health and Safety program of DIELCO ELECTRIC LTD. and the Occupational Health & Safety Act and all applicable Regulations.

3. Provide orientation for new workers.

4. Conduct weekly safety talks and ensure that the necessary record of topics and attendance are received by the JHSC.

5. Conduct regular workplace inspections as required by DIELCO ELECTRIC LTD.

6. Prior to assigning a new task to a worker, review all health and safety concerns.

7. Conduct accident and incident investigations.

8. Report safety problems to senior management.

9. Ensure housekeeping is completed at least daily.

10. Review SDSs with workers before using hazardous materials for the first time.

11. Review the Ministry of Labour orders and safety directives with workers.

12. Recognize the worker's contributions to employer health and safety program.

13. Appoint a competent replacement before leaving the workplace.

DIELCO ELECTRIC LTD.

RESPONSIBILITIES – CONTRACTORS/SUBCONTRACTORS

A. PURPOSE

The purpose of this procedure is to ensure that any contractor performing any work for Dielco Electric Ltd. complies with the minimum standard of Health and Safety.
Dielco Electric is committed to ensuring all its employees are safe while at work, their assets are protected, and no harm is done to the environment from work performed by a contractor.

B. WHO THE POLICY EFFECTS

Dielco Electric contact person for the contractor (s).

C. DEFINITIONS

- Dielco Electric contact person is an employee of Dielco Electric Ltd. who is responsible for contracting in the services of the contractor.

- The contractor means any company or persons who Dielco Electric Ltd. Contractor or sub contracts or is sub contracted by the contractor to work or complete work for or on behalf of Dielco Electric contracts.

D. ROLES and RESPONSIBILITIES

1.0. Dielco Electric. contact person will ensure:

1.1. The following documents are provided by the contractor at least one week prior to commencing work:

- Contractors Health and Safety Responsibility Agreement- signed
- WSIB Clearance Certificate or
- An Independent Operator Letter or optional WSIB Insurance Certificate
- A copy of their current Liability Insurance Certificate.
- A signed copy of the Contractors Health and Safety Responsibility Agreement Checklist.
- Form 1000 if required

1.2. A copy of this Policy, and Dielco Electric Ltd. Safety Rules (Workers Safety Responsibilities Policy) are reviewed with the contractor prior to commencing work.

1.3. If a construction project is valued at/or above $50,000, including labour, as defined under Sec 6 (1) of the Construction Regulation, a notice of project will have to be completed.

2.0. The Health & Safety Representative may:

2.1. Audit the Contractor's compliance with their Health and Safety duties and responsibilities while working for Dielco Electric.

E. PROCEDURE

3.0. Contractors will ensure they:

3.1. Read, understand, and sign the Contractor Health and Safety Responsibility Agreement. Dielco Electric. contact person will ensure the Contractor signs the form in duplicate. One copy is to be provided to the contractor, the other to be retained and filed by the Dielco Electric. contact person.

3.2. Provide a current Liability Insurance Certificate to the Dielco Electric. contact person. The insurance coverage will be two million dollars ($ 2,000,000) per occurrence of public and property liability insurance.

3.3. Provide a WSIB Clearance Certificate(s) or an Independent Operators Letter prior to starting the work.

3.4. Provide all required documentation to Dielco Electric contact person prior to starting the work. They will sign and return to the Dielco Electric contact person the Contractors Health and Safety Agreement Checklist.

3.5. Work in compliance with their own health and safety policies , the OHSA and Regulations ad Dielco Electric Health and Safety Policies.

3.6. Provide qualified and trained individuals in respect to the work they are required to perform.

3.7. Upon request, provide any supporting licenses or documentation to prove the requirements in 3.6 to Dielco Electric.

3.8. Prior to starting the job, they will review the scope of the work with Dielco Electric. contact person, also reviewing any potential safety concerns or issues. If necessary, a pre-task safety plan will be developed by the contractor and submitted Dielco Electric.

3.9. Provide any Safety Data Sheets for any controlled product(s) they plan to bring into Dielco Electric facility or any of their work sites. Approval from Dielco Electric must be received before any controlled product can be brought onto the Dielco Electric premises or work sites.

3.10. Report any accidents, injuries or unsafe conditions immediately to their contact person.

3.11. Will not use any equipment or machinery belonging to Dielco Electric without their written permission.

3.12. Provide a copy of their Health and Safety Policies to any Subcontractors hired by the contractor. The contractor will ensure the Sub-contractor works in compliance with these policies and the OHSA and Regulations.

3.13. Provide their employees and sub-contracted employees with any required safety equipment or personal protective equipment required to complete the work in a safe manner. All costs associated with meeting this requirement will be the responsibility of the contractor.

3.14. Ensure their employees work in a safe manner and follow all the safety rules of Dielco Electric. and the OHSA and all Regulations. Contractors will be held accountable and responsible for the safety of their employees.

4.0 Other Requirements:

4.1. No person(s) will be allowed to continue to work if they are believed to be under the influence of illegal drugs or alcohol. They will be removed from the workplace immediately. The person(s) will not be allowed to drive any motor vehicle. If transportation is required, it will be the responsibility of the contractor to provide safe transportation at their cost.
4.1.1.It is the responsibility of the Dielco site supervisor to ensure all employees and subcontractors are made aware of the clients drug and alcohol policy.
4.2. No horseplay of any kind will be tolerated.
4.3. Contractors and their employees will treat the employees of Dielco Electric. with respect, including contributing to a workplace that is free from harassment and violence.
4.3 Dielco will preform a post-contract safety review with contractors or subcontractors. The purpose of the review will be to review the contactor's safety performance. Factors to be reviewed are:

- Safety on the job
- Housekeeping
- Participation in safety meetings
- Injury rates
- General safety performance and culture
- Quality of work.

Any contactor or sub contactor not meeting Dielco’s expectations will have to provide a safety improvement plan before being allowed to bid on further contracts.

F. COMMUNICATION

This policy/procedure will be communicated by the Dielco Electric. contact person to the contractor.

G. LEGISLATION

This policy is intended to comply with the OHSA , Regulations and Dielco Electric. Health and Safety Policy and Procedures.

H. TRAINING

The Dielco Electric. contact person will ensure the contractor and their workers are trained in this policy along with any responsibilities. Dielco Electric Ltd. Sign-Off Sheet will be used to document the training and who has received it.

I. FORMS/OTHER DOCUMENTATION

Contractors Health and Safety Responsibilities Agreement

- Contractors Health and Safety Responsibilities Agreement Checklist

CONTRACTOR HEALTH AND SAFETY RESPONSIBILITY AGREEMENT

THIS AGREEMENT made the _____ day of _____, 20___, between _____ (the "Contractor"), having an office at_____ and _____ (the "Company") having a facility at _____.

IN CONSIDERATION of the sum of two ($2.00) dollars paid by each of the parties to the other (the receipt of which is acknowledged by each party) the parties covenant and agree as follows:

1. The Contractor shall employ only orderly, trained, competent and skillful people to do the work and the contractor's employees shall be fully covered under the Workplace Safety and Insurance Act by the contractor and shall provide an up-to-date Clearance Certificate from the Workplace Safety and Insurance Board. All subcontractors must be approved in writing by the Company before commencing any work and the contractor is responsible for ensuring that their employees comply with the terms of this Agreement.

2. The Contractor acknowledges and accepts all risk arising or pertaining to the ownership, possession, use or operation of its equipment in completing its services, whether in whole or in part, whether directly or indirectly, by an act or omission or negligence of the contractor, or for those whom it is in law responsible.

3. The Contractor shall indemnify and save harmless the Company from any and all claims, demands, actions, losses or property damage arising directly or indirectly from the ownership, possession, use or operation of its equipment in completing its services, whether in whole or in part, whether directly or indirectly, by an act or omission or negligence of the contractor, or for those whom it is in law responsible. Contractor shall protect and hold Company harmless and shall pay all costs, expenses and reasonable legal fees incurred or paid by Company in connection with such litigation. The indemnities contained in this Agreement shall not be prejudiced by and shall survive the termination of this Agreement.

4. Contractor shall, during any time in which it is providing services to the Company, take out and keep in full force and effect property damage and public liability insurance in which the limits of public liability and property liability shall not be less than two million ($2,000,000) dollars per occurrence, the whole at the contractor's sole cost and expense. All policies shall be written with insurance companies qualified to do business in the Province of Ontario and shall name the Company as an additional insured and a certificate acknowledging same must be provided to the Company.

5. The Contractor shall abide by and shall ensure that each of the contractor's employees and sub-contractor's employees (if applicable) abide by the Company's Health and Safety rules and regulations. The contractor will also be able and willing at such times as recommended by the Company to provide additional precautions as deemed necessary by the Company for safe-guarding employees and equipment. The contractor further acknowledges and agrees that any violation of Health and Safety rules or regulations is justification for the immediate termination of its Contract with the Company, without any further obligation on the part of the Company.

6. The Contractor shall, at its own expense, obtain and maintain in good standing all permits and licenses required by any authorities having jurisdiction over the business of the contractor. The contractor shall also comply with all federal, provincial and municipal governmental laws and regulations which are applicable to its business, and in particular, those affecting health and safety, workers' compensation and environmental matters.

7. This Agreement shall be constructed and enforced in accordance with the laws of the Province of Ontario and the parties agree to attorn to the jurisdiction of the Courts of that Province.

8. This Agreement embodies the entire agreement of the parties with regard to the matter herein, and no other agreement shall be deemed to exist, except as entered into in writing by both parties to this Agreement.

9. The Contractor shall not assign this Agreement or any part of it and may not employ or retain anyone as a subcontractor or otherwise, to perform any part of its obligations under this Agreement without the prior written consent of the Company.

10. No contracted work offers will be granted by the Company unless this Agreement terms and conditions are fully accepted and agreed upon by the parties to the satisfaction of the Company.

Accepted this _____ day of _____ 20__.

CONTRACTOR COMPANY	Company
by: _____	by: _____
(authorized signing officer)	
Print Name: _____	Print Name: _____
Print Title: _____	Print Title: _____

Witness: _____ (only if not a corporation)

CONTRACTOR HEALTH AND SAFETY RESPONSIBILITY AGREEMENT CHECKLIST

Contractor Name:
_____

Contractor Representative:
_____

Phone and Fax No.:
_____

Address:
_____

Emergency Contact Number:
_____

Initial as Provided/Received	Review	Notes
	Signed Contractor Health and Safety Responsibility Agreement	
	WSIB Clearance/Independent Operator Certificate (Less than 60 days old)	
	Liability Insurance Certificate Minimum $2 Million dollars	
	Required proof of Licenses & Certificates	
	Provided/received a copy of Contractor Safety Policies and Procedures .	
	Provided/ received any SDS required Received permission to bring a controlled product into the Facility or work site.	
	Provided/received emergency procedures including emergency phone numbers.	
	Informed of nearest hospital	
	Required to report all injuries, first aids and near miss incidents to assigned contact person	
	Reviewed PPE requirements and understands that use is mandatory for all employees of the contractor	
	Site orientation completed for all Contractors Employees	
	Reviewed Dielco/ Client drug policy.	
	Provide form 1000 if required.	

Dielco Electric. Contact Person is:
_____
_____

The Contractors Contact Person is:
_____

Date: _____

Signed: _____ Signed:
_____

Contractor Dielco Electric. Contact Person

DIELCO ELECTRIC LTD.

RESPONSIBILITIES - WORKERS

All Workers shall

1. Work in accordance with the legislated requirements of the O.H.S.A. and all regulations and DIELCO ELECTRIC LTD. Health & Safety Policy and Program.

2. Use or wear the equipment, protective devices, or clothing that is required to be used or worn.

3. Report hazards or unsafe conditions to their supervisor after taking appropriate immediate action.

4. Report all accidents, injuries, and near-misses to their supervisor.

5. Clean-up work area at least daily.

6. Inspect personal protective equipment before use and report defects or damage to their supervisor.

7. Ensure that all guards and protective devices are in place and operating properly.

No Worker Shall

1. Work in a manner that may endanger themselves or any other worker.

2. Participate in any prank or such like actions which could harm a worker.

3. Remove or make ineffective any protective devices or guards.

DIELCO ELECTRIC LTD.

RESPONSIBILITIES - VISITORS

All supervisors and /or management shall

1. Escort all visitors through the workplace.

2. Ensure that all visitors wear the required personal protective equipment supplied by Dielco Electric Ltd.

3. Ensure that all visitors remain in designated areas.

4. Report injuries suffered by a visitor to Head office of Dielco Electric Ltd.

5. Ensure that the activities of visitors do not endanger the health and safety of workers at Dielco Electric Ltd. Ensure that the project is prepared for visitors by checking all guardrails; floor openings, temporary stairs, ramps, no protruding nails, and slipping hazards are all corrected.

DIELCO ELECTRIC LTD,

EMERGENCY PROCEDURES - RESPONSIBILITIES

IN ALL CASES OF INJURY

The Supervisor shall

1. Ensure that the trained first-aider is readily available to administer first-aid.

2. Assess the severity of the injury and ensure that protection has been provided against continuing or further hazards.

3. Notify head office and the Health & Safety Representative or J.H.S.C.

4. Stay with the injured person until emergency vehicle arrives, and inform medical personnel of first aid treatment given.

5. Provide immediate transportation, or designate someone to do so, to a hospital, doctor's office, or the worker's home, if emergency vehicle transportation is not available.

6. Complete and give to the injured worker a "Functional Abilities Form" - complete with covering letter [Request for medical treatment] from Dielco Electric - if medical care is needed.

7. Refer all questions of the press or news media to a delegated person at head office. Simply state that all actions to relieve suffering are being taken care of and that all other enquires be referred to head office.

8. Train all workers in the Dielco Electric emergency evacuation procedures.

The following emergency situations have been identified as being possible reasons to evacuate a project site:

- Fire/Explosion
- Power Failure
- Gas leak
- Electrical hazard caused by a "downed" utility line
- Structural collapse
- Weather (cold/heat/rain/wind/snow/etc.) or
- Air quality concerns such as: fumes, odors or dust
- And others as deemed by the Project General Contractor

The worker shall

1. Promptly obtain first aid from the qualified first-aider at the workplace.

2. Notify the supervisor immediately of any injury.

3. If requiring medical care, obtain from the supervisor a completed “Functional Abilities Form” to take to the doctor or the hospital.

DIELCO ELECTRIC LTD.

FIRST AID REQUIREMENTS

FIRST AID BOXES

1. Management will ensure that all workplaces have a first aid box maintained in accordance with the WSIB First Aid Requirements (Regulation 1101).

2. The size and contents of the box will vary with the number of workers at the workplace.

3. The supervisor will ensure that the worksite or project has an adequate first-aid box.

4. Service crews must keep a first aid box in the service vehicle.

TRAINED FIRST AIDER

1. Management will ensure that the first aid kit is at all times in charge of a worker who:
    a. is the holder of a valid First Aid Certificate and
    b. work's in the immediate vicinity.

2. Management will ensure that the required number of workers have completed first aid training and that their names on the backside of the record of first aid inside the first aid boxes.

3. Management will ensure that all first-aid training is updated as required.

INSPECTION OF FIRST-AID BOXES

1. The supervisor will inspect the first aid boxes and their contents monthly using the First Aid Checklist.

2. The supervisor will assume the securities of the first aid box/first aid station.

Management shall

1. Ensure that at all times W.S.I.B. form 82 is displayed in trailer, lunchrooms, or shop in a conspicuous location likely to come to the attention of all workers.

2. Ensure that immediate transportation is provided for an injured worker to requested treatment facilities.

3. Ensure that full wages and benefits are paid for the full day or shift that the injury occurred.

4. Ensure that all Form 7 reports are submitted to the W.S.I.B. within three days of knowledge of the injury.

DIELCO ELECTRIC LTD.

HEALTH & SAFETY RULES

Electrical Hazards

1. All portable extension cords must be of the outdoor type, rated for 300 volts, and have an insulated grounding conductor.

2. All extension cords must be inspected prior to daily use, utilizing the Dielco "Extension Cord Inspection & Safety" form. This form shall be made available by your supervisor.

3. Defective cords must not be used. They must either be destroyed or be tagged and removed from the worksite until repaired.

4. Extension cords must be protected during use to prevent damage from sharp edges, movement of materials, flame cutting or welding operations.

5. All outlets must be protected with a Ground Fault Circuit Interrupter - G.F.C.I. - where tools are to be used outdoors or in wet locations in-doors

6. No object shall be brought closer than 3 meters to an energized power-line rated at more than 750 volts.

7. Signs advising of over-head power-lines shall be posted as required.

8. Lockout procedures must be developed and used when the need arises. If lockout procedures are necessary, all workers using the procedure must be trained.

9. All temporary panel boards must be securely mounted, have a cover, the area in front be kept free of obstructions, and not located in an area where water may accumulate.

10. All portable tools & equipment with cords shall be inspected before use. Ensure the cord, plug, and equipment are in good shape. If defects are found, equipment must be tagged out of service until the repair has been completed by a qualified technician.

Grounding Assurance

Grounding, GFCI's and Assured Grounding Procedures

Equipment, tools, and cord sets shall be provided and utilized so as to protect employees from electrical shock and to prevent fire.

Equipment and Tools

Note: Portable equipment which is "double insulated" and endorsed by a nationally recognized testing facility need not have a grounding conductor, but is subject to the inspection requirements of this section.

Tools and equipment subject to inspection and testing include:

- All portable electrical tools such as grinders, drills, etc.
- Stationary tools such as table saws, drill presses, belt sander(s), etc.
- Portable electrical extension cords.
- Portable and temporary lighting systems and cords.

Receptacles hall be of the grounding-type and their contacts shall be grounded by connection to the equipment grounding conductor of the circuit supplying that receptacle in accordance with the NEC (National Electrical Code).

Tools and equipment subject to inspection and testing include:

- All portable electrical tools such as grinders, drills, etc.
- Stationary tools such as table saws, drill presses, belt sander(s), etc.
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- Stationary tools such as table saws, drill presses, belt sander(s), etc.
- Portable electrical extension cords.
- Portable and temporary lighting systems and cords.

Receptacles hall be of the grounding-type, and their contacts shall be grounded by connection to the equipment grounding conductor of the circuit supplying that receptacle in accordance with the NEC (National Electrical Code).

- (for example, when a cord set is run over)

Test equipment must be evaluated for proper operation immediately before and after tests are conducted.

Removal from Service

Any equipment failing any test shall be tagged and taken out of service immediately or destroyed and disposed of.

Ground Fault Circuit Interrupters (GFCI's)

Ground fault circuit interrupters shall be used on receptacles greater than 15 amps and up to and including 30 amps for tool and equipment used in construction applications and potentially wet environments (either indoors or outdoors). Receptacles of temporary wiring systems and portable generators shall be protected with a GFCI.

Batteries – General

Batteries of the unsealed type shall be located in enclosures with outside vents or in well ventilated rooms and shall be arranged so as to prevent the escape of fumes, gases, or electrolyte spray into other areas. Ventilation shall be provided to ensure the diffusion of the gases from the battery and to prevent the accumulation of an explosive mixture.

Appropriate face shields, aprons, goggles, and rubber gloves shall be provided for workers handling acids or batteries. Contact lenses are prohibited while working with batteries unless using a type of goggle that will not allow the transference of gasses. Facilities for quick drenching of the eyes and body shall be provided within 25 feet of battery handling areas. Facilities shall be provided for flushing and neutralizing spilled electrolyte and for fire protection in the areas of battery use.

Battery charging installations shall be located in areas designated for that purpose. When batteries are being charged, the vent caps shall be kept in place to avoid electrolyte spray. Vent caps shall be maintained in a functioning condition. Smoking, eating, or drinking in areas where batteries are being stored, charged, or worked with, shall be prohibited.

Handling and Transportation

Packaging, markings and transportation of batteries shall be in accordance with federal and local laws, regulations and standards. After the packaging is removed, batteries shall be inspected for defect, including, but not limited to:

- Bulging
- Cracking
- Leaking

Batteries shall not be forced into equipment/locations.
Where feasible, old and new batteries shall not be intermixed.

Storage

Batteries shall be kept in their original packaging until they are ready to be used.

New and used batteries shall be kept separate. Batteries should be stored separate from combustibles and flammables and protected from being crushed, punctured or exposed to incompatible environmental conditions.

Used batteries, not intended for re-use, shall be properly disposed of.

Disposal

Batteries being disposed of shall be done so in accordance with federal and local laws, regulations, and standards. Where and when possible, batteries shall be recycled.

Ladders

1. All portable ladders must be equipped with non-slip bases.

2. Ladders must be set up on a firm level surface. If the base is to rest on soft un-compacted or rough soil, a mudsill shall be used.

3. Straight ladders will be tied off or otherwise secured to prevent movement. If this is not possible, one worker will hold the base of the ladder while it is being used.

4. When work is to be performed from a ladder, the worker shall use and wear a fall arrest system with lanyard tie-off. Where a lanyard equipped with a shock absorber is used and the length of a deployed shock absorber would cause the worker to hit a hazard or object or ground, a non-shock absorbing type lanyard shall be used. Where a shortfall distance is a concern, the use of a SRL shall be considered.

5. When climbing up or down, workers must always face the ladder and use 3-point contact. [one hand 2 feet or 2 hands one foot]

6. Unless suitable barricades have been erected or other adequate protection provided, ladders must not be set up in passageways, doorways, driveways or other locations where they can be struck or bumped by persons or vehicles.

7. Ladders must not be erected on boxes, carts, tables, scaffold platforms, elevating work platforms or on vehicles.

8. Straight ladders must be set up 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.

9. Metal ladders or ladders with wire reinforcing must not be used in the proximity of energized electrical conductors.

10. Wooden ladders are NOT permitted to be used by workers.

11. All ladders erected between levels must be securely fastened, extend 90 centimeters (3 feet) above the top landing and afford clear access at top and bottom.

12. Ladders with weakened, broken, bent or missing steps, broken or bent side rails, broken, damaged or missing non-slip bases, or otherwise defective must not be used and must be tagged and removed from the worksite.

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

14. Workers on a ladder must not straddle the space between the ladder and another object.

15. Workers are not to climb up and down a ladder while carrying anything in your hands. Tools and equipment, materials shall be placed in a container and raised or lowered by rope.

16. Ladders shall be visually inspected before use. Any defects found shall be documented on our "Equipment Reporting Form" immediately. If defects are found, the ladder shall be deemed inoperable and shall not be used until repairs have been made by a qualified technician or the ladder has been disposed of accordingly.

Elevating Work Platforms (EWPs) - Scissor Lifts/Articulating Booms

1. In accordance with Section 147 of the current Regulations for Construction Projects, a worker who operates an elevating work platform (EWP) must, before using it for the first time, be given oral and written instruction on the operation of the elevating device. Therefore, an EWP shall only be operated by a worker who has been instructed/trained in:

    a) operating the machine

    b) the daily inspections and maintenance required by the manufacturer

    c) the types of working surface on which the machine is designed to be used

    d) the maximum rated working load

    e) special conditions or limitations of the machine

    f) the significance of alarms

    g) the location of emergency controls

2. An EWP device which is not working properly or which has sustained damage to critical components must not be used until repaired by a qualified technician.

3. In the raised position a EWP shall only be used on surfaces specified by the manufacturer.

4. EWPs must not be driven in a raised position close to holes, depressions, trenches or similar hazards.

5. EWPs must not bear more than its rated working load and where possible the loads shall be distributed evenly over the platform.

6. When EWPs are used to lift materials, care must be taken to ensure that the materials are firmly secured to the platform.

7. Do not place makeshift platforms such as boxes or other access equipment such as ladders and scaffolds on an EWP to gain access to areas above.

8. Overhanging loads must not be lifted on an EWP.

9. An EWP platform or any other part of a EWP device must not be moved closer than 3 meters (10 feet) to overhead power lines unless the device is equipped for live electrical line work and the workers on the platform are qualified for such work.

10. A EWP must not be used for pulling, pushing, or dragging materials.

11. The platform of a EWP must not be extended by using cantilevered planks or similar platform materials. Only manufacturers' platform extension devices shall be used.

12. Planks or similar platform materials must not be used to bridge a gap between a EWP and other work areas.

13. Workers must always maintain 3-point contact (one hand and two feet or two hands and one foot) when getting on or off the platform of an EWP.

14. For all types of off-slab devices, the terrain on which the device is placed or over which it will travel must be firm enough to support the device and it's rated working load.

15. An EWP must not be used under high wind conditions. This is especially important for smaller scissor lifts and boom-type devices.

16. When the EWP is not being used, turn off the power system to prevent exhaust fumes from accumulating in an enclosed work area.

17. EWPs used on ramps or on sloping or uneven surfaces must be designed for such use and properly secured against horizontal and vertical movement.

18. All and any personnel required to operate or be in an EWP must at all times be wearing a full-body harness with a lanyard attached to the proper anchorage point supplied with the EWP equipment.

19. All personnel operating EWP equipment must have a current fall protection training certificate of compliance.

20. All EWP equipment shall have a pre-use inspection completed prior to using the equipment. Forms are available upon request if not already available on the equipment.

Fall Protection & Working at Heights

Working from Scaffolds

1. Scaffold platforms must be fully planked.

2. Guardrails consisting of a top rail, mid-rail and toe-board are required whenever the working platform is 2.4 meters (8 feet) or more above floor level.

3. Wheels and casters must be locked when personnel are working on the scaffold.

4. If the scaffold is more than 2.4 meters (8 feet) high, it must not be moved with personnel on it unless:
    a. they wear full body harness with lanyard and shock absorber or SRL tied off to an independent fixed support; and
    b. the floor is firm and level.

Working from Ladders

1. A worker must wear a full body harness with lanyard and shock absorber tied off to either an independent fixed support or a lifeline whenever the worker is:
    a. 3 meters (10 feet) or more above the floor, or
    b. above operating machinery, or
    c. above hazardous substances or objects.

Working from Swing Stages

1. A worker must wear a full body harness with lanyard and shock absorber 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 suspension lines (two at each end).

Working Beside Unprotected Openings and Edges

1. A worker must wear a full body harness with lanyard and shock absorber tied off to an independent fixed support whenever the worker is more than 3 meters (10 feet) above the next level or whenever the worker is above operating machinery, hazardous substances or objects regardless of the possible fall height.

Full Body Harnesses, SRL, Lanyards, and Shock Absorbers

1. All full body harnesses, lanyards and shock absorbers and SRL must be CSA-certified. Look for the CSA label.

2. Full body harnesses must be snug-fitting and worn with all hardware and straps intact and properly fastened.

3. Lanyards must be equipped with a shock absorber.

Lifelines

1. All lifelines must be:
    a. 16 millimeter (5/8") diameter polypropylene or equivalent
    b. used by only one worker at a time
    c. free from an danger of chafing
    d. free of cuts, abrasions and other defects
    e. long enough to reach the ground or knotted at the to prevent the lanyard from running off the lifeline
    f. secured to a solid object
2. All horizontal lifelines must be approved by a professional engineer and drawings kept at the project.

Rope Grabbing Devices

1. To attach the lanyard of a full body harness to a lifeline, use a mechanical rope grab that has been CSA-certified. Look for the CSA certification stamp.

Training

1. All workers required to use fall protection equipment & work at heights must receive the required CPO (Chief Prevention Officer) approved Working at Heights Training as per Ont. Reg. 297/13.

2. All training requirements shall be adhered to as set-out in Ont. Reg. 213/91.

Barricades and Guardrails

1. Hazardous areas must be cordoned off with barricades or danger tape to warn workers.

2. When barricades, guardrails or opening covers must be removed for work to proceed, permission to remove then must be obtained from supervision.

3. When guardrails or opening covers are temporarily removed, workers in the area must be protected by a safety belt or safety harness with the lanyard tied off to the project. Barricades, guardrails and covers must be replaced immediately after work is completed.

4. All guardrails must be constructed as per requirements of the O.H.S.A.

Temporary Work Platforms and Equipment Pre-Use Inspections.

Prior to using temporary work platforms or fall prevention equipment the proper pre use inspection must be completed by the persons using the platform or fall protection equipment. If any defects are found tag out the equipment " DO NOT USE" and inform your supervisor.

Personal Protective Equipment

General

Personal protective equipment (PPE) is the last means of protecting workers from injury. PPE is only employed when administrative and engineering controls are ineffective or insufficient. Hazards should be minimized by ensuring that all jobs are well planned, workers are properly trained and safe work practices and safe job procedures are followed. PPE provides an additional degree of protection from injury. Hazard assessments of the workplace shall be made to determine if hazards are present, or likely to be present, which necessitate the use of PPE.

PPE in our safety program generally falls into two categories:

1. Basic – The PPE that should be worn at all times by all personnel in the work place. This includes hard hats, safety glasses, safety footwear and appropriate clothing.
2. Specialized – Covers PPE which is used only for specific jobs or for protection from specific hazards. This includes gloves, welder's helmet, respiratory protective equipment, fall arresting equipment and special clothing.

Employee owned PPE is not allowed.

Employees expected to wear Personal Protective Equipment (PPE) will be trained as follows:

- Exposures and how to identify them.
- Types of PPE to wear as protection from each exposure.
- When to wear them and their limitations.
- How to wear PPE properly.
- How to care for, clean and properly store PPE.

Employees shall inspect all PPE prior to use. Any defects are to be reported to your supervisor. Defected PPE shall be replaced prior to starting any job.

Clothing

1. For personal protection at the workplace do not wear:
   a. loose clothing, cuffs or bootlaces
   b. greasy or oily clothing, gloves, or boots
   c. torn or ragged clothing or
   d. finger rings or earrings.

2. Neck chains are hazardous and must not be worn at all.

3. Long hair must be tied back or otherwise confined.

4. Long pants must be worn.

Head Protection

1. Workers must obtain and wear a CSA approved hard hat at all times in construction areas as prescribed by government legislation.

2. Hard hats must not be painted.

3. The shells and suspension of hard hats must be inspected regularly and replaced if cracks, deep scratches or other defects are detected.

Foot Protection

1. At all times at the workplace & construction sites, workers must wear CSA approved "*Green tag*" Grade 1 foot protection.

2. Electrical workers must wear electric shock resistant footwear identified by a white rectangular label bearing the CSA trademark and the Greek letter omega in orange.

Eye & Face Protection

1. Safety glasses are required at **ALL** times while working at Dielco shops or on customer job sites.
2. All workers shall wear CSA approved industrial safety glasses with properly mounted side shields at all times. Safety glasses with reflective lens are not permitted to be worn.
    a. Workers must wear safety glasses along with a ***face shield*** when cutting and grinding, as well as follow the manufactures recommendation and specifications.
    b. ***Face shields*** are required at all times when operating wire wheels with high-speed air tools or electric tools.
    c. Protective screens will be setup at all-time times when grinding or welding work is being carried out in the Dielco shop or onsite projects.
    d. Eye & Face Protection will be required drilling overhead.
    e. Eye & Face Protection is required when dealing with chemicals refer to manufactures SDS for all of the products PPE requirements.

Hand Protection

1. Appropriate hand protection shall be worn when handling materials which could cause an injury. At no time shall gloves be worn near any rotating device.

Hearing Protection

1. Hearing protection for each worker shall be available at the workplace or jobsite and used as required per the task at hand.

2. Dielco hearing protection and noise reduction requirements will be provided during all new worker orientation.

3. Disposable foam earplugs will be provided at all times. Earmuffs will be provided upon request per individual bases.

4. All employees must wear hearing protection while: grinding, welding, hammering, chipping, machining, lathe operations, pedestal grinding, operating any type of electric hand tool.

5. If anyone requires more information in regards to hearing protection, shall ask management or supervisors for guidance.

Respiratory Protection

1. Work areas must be ventilated to reduce hazards from dusts, fumes, gases, or vapors.

2. When ventilation is not practical, workers must be provided with respirators appropriate to the hazards and be trained to use and maintain the respirators properly.

3. All workers required to use respirators must be trained in the proper fit-testing of respirators. See the C.S.A.O. Health and Safety Manual for proper fit-testing procedures. All workplaces must have a copy of the manual readily available.

Personal Conduct

Riding on Equipment

Under no circumstance is a worker to ride on any piece of equipment unless the worker is properly occupying a place or seat designated for such a purpose. This is especially important around forklifts, aerial devices, hoists, cranes and earth-moving equipment. Seatbelts are required to be used on all powered mobile equipment fitted with rollover protection (ROPS) and or fitted with a seat belt.

Horseplay

1. Employees must not engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct.

Alcohol and Drugs

1. No person under the influence of or carrying intoxicating alcoholic beverages is to enter or knowingly be permitted to enter the workplace.

2. No person under the influence of or carrying an illicit drug is to enter or knowingly be permitted to enter the workplace.

3. The use of intoxicating beverages during working hours, including rest or lunch breaks, is prohibited.

4. The use of drugs during working hours, including rest or lunch breaks, is prohibited. A written statement from a physician indicating that the drug will not impair the employee's ability to work safely is required for prescription medication.

5. The use of drugs or alcohol within the workplace or site projects, will be grounds for immediate dismissal from Dielco.

Scaffolding

1. The erection and dismantling of scaffolds must be carried out under the supervision of a competent worker knowledgeable and experienced in such operations.

2. Workers erecting and dismantling a scaffold more than 2.4 meters (8feet) high must be tied off with a full body harness and lanyard equipped with a shock absorber.

3. Scaffolds must be erected with all braces, pins, screw-jacks, baseplates, and other fittings installed, as required by the manufacturer.

4. Scaffolds must be adequately braced horizontally and vertically.

5. Scaffolds must be equipped with guardrails consisting of a top rail, mid-rail and toe board.

6. Scaffold platforms must be at least 46 centimeters (18 inches) wide and when over 2.4 meters (8 feet) high they must be planked across their full width.

7. Scaffolds must be tied in to a building at vertical intervals not exceeding three times the least lateral dimension, including the dimension of any outrigger stabilizing devices.

8. Where scaffolds cannot be tied in to a building, guy lines adequately secured should be used to provide stability.

9. Scaffold frames must be properly pinned together where scaffolds are two frames or more in height or where they are used as rolling scaffold towers.
10. Scaffold planks must be securely fastened to prevent them from sliding.

11. Scaffold planks must be of good quality, free of defects such as loose knots, splits or rot, rough swan, measuring 48mm X 248mm (1 7/8" X 9-3/4") in cross section, and No. 1 spruce or better.

12. Scaffolds must be erected, used and maintained in a reasonably plumb condition.

13. Scaffold planks must be installed so that they overhang by at least 15 centimeters (6 inches) but no more than 30 centimeters (12 inches)

14. Scaffolds must be equipped with a proper ladder for access. Vertical ladders must be equipped with 15 centimeters (6 inch) stand-off brackets and a ladder climbing fall protection device or safety cage when they are more than 3 meters (10 feet) high.

15. Frame scaffolds over 15 meters (50 feet) high and tube-and-clamp scaffolds over 10 meters (30 feet) high must be designed by a professional engineer and constructed in accordance with the design.

16. Remove ice, snow, oil, grease and other slippery material from the platform, and apply sand to the surface.

17. Wheels or casters on rolling scaffolds must be equipped with braking devices and securely pinned to the scaffold frame.

18. Scaffolds shall generally never be modified from their original design or intent. If scaffolding is required to be modified in any shape or form to accommodate the job, a professional engineer or the manufacturer shall be involved and all changes are to be documented before put into use.

19. Any defects found during or before erection, shall be documented on our "Equipment Reporting Form" and the part(s) shall be tagged by the supervisor or foreman on the job. The tagged parts are not to be used until repairs or replacements have been introduced.

Compressed Gas Storage & Compressed Gas Cylinder Transportation

Storage

1. Valve protection caps are to be in place whenever cylinders are moved or in storage.
2. Cylinders are to be stored in a cool, dry, well ventilated location.
3. Cylinders are to always be stored in a vertical position and be secured.
4. Cylinders are not to be dropped, bumped or have caused any impact to them.
5. Cylinders are not to be used as rollers, dollies or supports.
6. Operate cylinder valves in accordance with manufacturer's recommendations.
7. Do not interchange regulators, hoses, etc.
   All cylinders should have a valve connection that prevents an inadvertent connection, which could result in a hazardous mixture of gases.

Transportation

1. All cylinders are to be transported in a secured upright position.
2. Valve protection caps are to be in place and secure.
3. Cylinders are to be secured by means of chains, straps, suitable packaging or as such that the cylinders do not shift or hit each other during transportation. Chains & straps should be located at 1/3 and 2/3 the cylinder height above the floor.

Compressed Air

1. Never apply compressed air to the skin or direct it at a person.
2. Never use compressed air to clean dirt or dust from clothing or body.
3. Compressed air is not to be used for cleaning purposes of any sort.
4. Hearing protection must always be worn during use of compressed air.
5. Never crimp, couple, or uncouple pressurized hose.
6. Hoses must be kept in good condition and protected from damage during use.

Housekeeping

1. Supervisors/Workers are responsible for ensuring a good standard of housekeeping is maintained at all times, at the shop and job site. Scrap and debris shall be removed from the work area as often as necessary or upon request.

2. The work area shall be “broom cleaned” at the end of each day. Loose equipment, tools, material, etc. shall be cleared and verified from all areas of work before leaving each day.

3. Protruding nails shall be removed or bent flush with the surface immediately.

4. Aisle ways are to be kept clear at all times. Free of trip, slip hazards.

Chain Falls/Hoisting Equipment

1. All hoisting/lifting devices & equipment shall have a legible load capacity label present before using. This includes any type of rope, sling, and chain-fall. An inspection of the hoisting/lifting device shall be performed prior to use. The capacity of any chain fall, hoisting or rigging equipment Rigging equipment shall be capable of supporting at least five times the maximum load to which it may be subjected and the rated capacity of rigging equipment must not be exceeded
2. Where chain falls are used, the chain shall be tied back to avoid entanglement with moving equipment within the vicinity.
3. All hoisting/lifting equipment shall be maintained in good condition and operated by a trained, competent worker. Each lifting device will have a maintenance inspection at least yearly as per the manufacture. A maintenance record will be maintained for each lifting device.
4. Suspended loads shall not be left unattended.
5. When overhead work is in progress, the floor area below shall be roped off and posted with a sign to read “Danger Work Overhead”.
6. No worker shall work under a suspended load unless it is securely blocked to prevent the load from falling.
7. Every hoisting hook must be equipped with a functioning safety latch before using.
8. A signal person will be used if the operators view is obstructed.

Forklift/Lift Trucks

1. Lift trucks shall be in good condition and equipped with an overhead guard and all necessary safety devices. The forklift shall be large enough for the work involved. Any person(s) who operates a lift truck shall be trained and licensed for the equipment they are intended to operate. Dielco shall maintain records of training and the training records shall be made available upon request for customers or MOL.

2. Lift truck training will be provided various ways. Through Local Union Halls, Online through Mentor Safety Consultants with practical examination completed by Dielco, or third party training provider.

3. Lift trucks **must** have a pre-use inspection sheet filled out daily to ensure lift truck is safe to use. These sheets can be made available by your supervisor or management upon request, if they do not exist on the machine already.

4. When travelling without a load, the forks of the lift truck shall be tilted back and raised at least 4 inches off the floor to avoid obstructions. When not in use, the forks of the lift truck shall be lowered to the floor. When not seated on the lift truck, the operator shall turn the lift truck OFF and engage the parking brake. All forklifts shall have its flashing light ON while the forklift is in any motion and an audible reverse alarm when reversing.
5. **The raising of personnel on the forks, or a platform on a lift truck, is strictly prohibited**!

6. Draining of gasoline, fuel oil, motor oil or other flammable liquids onto the ground or into an open sewer is strictly prohibited.

7. No person other than the operator shall ride on mobile equipment unless outfitted to do so by the manufacturer or an engineer.

General Hand, Power Tools, Powder Actuated Tool Safety

1. All hand tools such as chisels, punches, etc. which develop “mushroomed” heads must be taken out of service and reconditioned.

2. Handles on hammers, axes and similar equipment that are cracked or fractured should be replaced prior to use. Care should be taken to assure the head is properly and securely attached.

3. Wrenches whose handles are bent or whose gripping surfaces are worn should be replaced.

4. Screwdrivers that are bent or whose ends are chipped should be replaced.

5. Tools shall be stored in a secure, dry location.

6. Tools shall be stored in such a way that sharp edges do not present a danger when reaching into tool cribs and storage compartments.

7. Tool cutting edges should be sharp so the tool will move smoothly and not bind.

8. All tool handles shall be free of burs and splinters and shall be firmly attached to the working head of the tool.

9. All grinders, saws and similar equipment must be fitted with the appropriate machine guarding as specified by the manufacturer.

10. All corded electrically operated tools and equipment must be effectively grounded by either a grounding prong or an approved double-insulated case. Inspection of all prongs to ensure

they are not bent or otherwise damaged and all cases to ensure they are not cracked or damaged.

11. All electric cords must be in good condition and free from frays or other physical defects.

12. Any and all powder actuated tools shall be stored in their own locked container when not being used.

13. All powder actuated tools will be left unloaded until they are to be used.

14. **Only trained and authorized employees will use powder-actuated tools**.

15. All machine guards shall be clean, secure and so arranged so they do not offer a hazard in their use.

16. All moving chains, gears, pulleys, etc. will be properly guarded.

17. All emergency stop buttons will be colored red and easily accessible to the operator in an emergency.

18. All non-current-carrying metal parts of electric equipment will be properly grounded.

19. Sufficient clearance must be maintained around equipment to ensure safe operation, maintenance and waste removal.

20. During the use of any hand tools, proper PPE will be used. (example: safety glasses, face shield, hearing protection, etc.)

Pneumatic Tools

1. Eye and hearing protection must be worn at all times while operating any type of pneumatic tools.

2. Pneumatic tools must be checked to ensure that they are fastened securely to the air hose to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool must also be used and will serve as an added safeguard.

3. If an air hose is more than a ½" in diameter, a safety excess flow valve must be installed at the source of the air supply to shut off the air automatically in case the hose breaks.

4. A safety clip or retainer must be installed to prevent attachments such as chisels on a chipping hammer from being ejected during tool operations.

5. Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.

6. Compressed air guns must never be pointed toward anyone. Workers must never "dead-end" them against themselves or anyone else.

7. Pneumatic hoses must be free of damage or deterioration.

Excavations/Trenching

As Dielco Electric Ltd. is not a company whom generally works with excavation type equipment or is involved in operating this type of equipment, we are however not exempt from having to work within excavations or trenching on occasion.
Below will act as a guideline for any and all employees whom will be involved with working in excavations or trenches.
It is important to know the types of soil:

- Type 1 It is hard to drive a pick into Hence, it is often described as “hard ground to dig”.
- Type 2 A pick can be driven into Type 2 soil relatively easily. It can easily be excavated by a backhoe or hand-excavated with some difficulty.
- Type 3 is previously excavated material. Type 3 soil can be excavated without difficulty using a hydraulic backhoe.
- Type 4 soil can be excavated with no difficulty using a hydraulic backhoe. The material will flow very easily and must be supported and contained to be excavated to any significant depth.

1. For Type 1 and 2 soils, cut trench walls back at an angle of 1 to 1 (45 degrees). That's one meter back for each meter up. Walls should be sloped to within 1.2 metres (4 feet) of the trench bottom. For Type 3 soil, cut walls back at a gradient of 1 to 1 from the trench bottom. For Type 4 soil, slope the walls at 1 to 3. That’s 3 metres back for every 1 meter up from the trench bottom.

2. Where sloping or benching is not possible, the excavation or trench must be adequately supported. A professional engineer may have to be consulted to design an adequate support system.

3. All excavations or trenches will have suitable access and egress (ladders, scaffolds, stairs, ramps, etc.). Larger excavations or trenches will have two suitable means of access and egress. All ladders shall be properly positioned and when required adequately secured and extend 1 meter (3 feet) above the excavation or trench grade.

Note: You are not to enter a trench or excavation unless you fully understand the type of soil, sloping and shoring requirements. Stop and ask your supervisor if in doubt.

DIELCO ELECTRIC LTD.

LOCKING-OUT & TAGGING PROCEDURES FOR ELECTRICAL AND NON-ELECTRICAL SYSTEMS

IN-PLANT PROCEDURES

- In-plant procedures take precedence over the procedures outlined here, providing there is no contravention of existing codes or statutes.

TRAINING

- All workers that must perform lock and tag out operations must receive instruction on this procedure prior to the commencement of work.

- All workers must also receive generic lockout and tagging safety training available through consultants or C.S.A.O.

PROCEDURE

Plan

- Supervisor must do an assessment of the work area to determine what equipment that is being worked on, and/or what nearby equipment that may pose a hazard is required to be tagged and locked out of service.

- Supervisor must review drawings of the system to be de-energized/de-activated to determine and, where required, confirm with the client or owner the switches, power sources, controls, interlocks, pneumatics, hydraulics, computer-controlled sources, motor capacitors, robotics to isolate the system.

Lock and Tag

- All apparatus capable of being electrically energized or pneumatically/hydraulically activated must be de-energized or de-activated by locking out, physically disconnecting or otherwise rendering the apparatus inoperable. Switches, power sources, controls, motor capacitors, interlocks, pneumatics, hydraulics, computer-controlled sources, robotics etc. must be appropriately tagged and personally locked out by each person involved in the operation.

Test to Verify Zero Energy

- Test the system to ensure it is not operating (hit switch). In the case of electrical equipment test with a CSA-certified potential test indicator to ensure that all components are de-energized and de-activated, including interlocking or dependent systems that could feed onto the system being isolated. Note: Test amperage and voltage phase to phase and phase to ground. Test the “start up” to ensure that the equipment is off. (Done by licensed electrician.)

General Safety Requirements:

- Observe the following safeguards for locking out and tagging:
    - After the circuit or system has been de-energized and locked out by the person in charge, the worker must be protected by placing their own safety lock on the disconnect device. The key for the lock must be kept on the person while the lock is in place. The locks provided shall not be mastered.
    - Where several workers or trades are working on the circuit, provision for additional locks must be made through the use of a lock-out bar. This arrangement can accommodate any number of locks by placing another lock-out bar in the last hole of the previous bar.
    - Each worker must attach to their lock a durable tag (as provided by the employer or the client) containing the information required. A danger tag will be used only to supplement the lock and to identify the purpose of the lock. It will not be used as a substitute for a lock.
- The system must be de-energized and electricity temporarily grounded. All hydraulic and pneumatic systems must be depressurized and tested before work commences by pushing the start or on button. Do not rely on pressure gauges.
- For energy sources under 300 volts that do not have a locking device, provisions must be made to identify the correct circuit breaker and identify that it has been “locked out”.

REVIEW

- A review of all switches, power sources, controls, interlocks, pneumatics, hydraulics, computer-controlled sources, robotics etc. opened, locked off or otherwise rendered inoperable so that all of these can be reactivated once work is complete.

TAGS / SIGNS

- Signs must be places on the system indicating that it is not to be energized or operated and that guards, locks, temporary ground cables, chains, tags and other safeguards are not to be removed until work is complete.

TESTING ELECTRICAL EQUIPMENT

- Only qualified electricians with appropriate arc flash rated equipment and CSA rated test equipment will test live electrical circuits.

BASIC STEPS FOR SAFE RE-START

Communicate: Communicate with all affected workers.
Notify all affected workers that work is complete and energy to the equipment will be restored.
If equipment is to sit idle for a period of time, a separate pre-startup process should address the notification requirements

Verify Verify that equipment controls are in neutral.
Verify that all start buttons and other activating controls are in the "off" or neutral position.

Check Check the work area.
Make sure that all unnecessary tools, parts, and debris are removed from the work area. Re-install any guards or shields.
Check that all affected workers are safely positioned or removed from the area.

Remove Remove locks and tags.
Release equipment from lockout control. Let each worker remove his or her own lock. Remove any blocking that may be in place.
Remove blanks from lines.

Re-energize Re-energize the equipment.
Test the controls and make sure the equipment is operationally intact. Follow the manufacturer's instructions. Return control of the equipment to operating personnel.

Record Record the time and date of lockout and restart.
Valuable information may be lost if not recorded. Owners or operators may require this information to help plan future shutdowns.

GENERAL

- Look to make sure there are no hazards to personnel or workers. Restart the equipment.

Always Remember!!!

1. Only **ONE** lock on each energy source for each worker on the job.
2. Never lend the key to your lock(s) to anyone.
3. Protect others by barricading, roping off, posting signs etc.
4. When the power is on, never place yourself in a hazardous position in relation to a machine.
5. Use "**Extreme Caution!**" with possible stored energy sources usually found in forms of gravity, momentum and residual energy under tension.
6. Never stand in front of a disconnect when shutting off the energy source.
7. Never stand in front of a disconnect when restoring the power.

DIELCO ELECTRIC LTD.

MINIMUM TRAINING STANDARDS

Management shall

1. Train supervisors and workers to perform their duties in an efficient and safe manner.

2. Maintain records of all training courses completed and update annually.

3. Review training needs annually with the Joint Health and Safety Committee and provides further training as required.

4. Ensure that selected members of the Joint Health and Safety Committee will receive adequate training and that the required number of workers are trained in the W.S.I.B. "Certified members" course for J.H.S.C. members.

Supervisors shall

1. Complete the following suggested courses:
   - P.P.E. including fall Protection (Working at Heights)
   - MOL Basic Supervisors 5 Steps to Safety Awareness (mandatory before acting as a supervisor)
   - C.S.A.O. Basics of Supervising or an equivalent 3-day program includes O.H.S.A.,
   - Accident Reporting and Investigation, Safety Planning, New Worker Orientation,
   - Site Safety Training, Emergency Response Plans, Inspections
   - First Aid
   - W.H.M.I.S.
   - Confined spaces

2. Conduct weekly "Tool-Box Talks" with all workers.

3. Ensure that workers are trained in the content of the Dielco Electric Ltd. Health and Safety Policy and Program manual. This can be done at the required monthly Tool Box Talks meeting.

Workers shall

1. Complete the following mandatory programs in addition to equipment and tool training as specified in the O.H.S.A. and construction regulations:
   - W.H.M.I.S.
   - P.P.E. including fall protection (Working at Heights)
   - O.H.S.A. - including but not limited to duties, refusal to work

2. Attend weekly "Tool Box Talk" meetings.
3. At all times, carry proof of training completed with them. (Wallet Certification Cards)

DIELCO ELECTRIC LTD.

TRAINING NEEDS REVIEW

Dielco Electric Ltd. will conduct an annual training review to ensure that all employees have received the necessary training required to meet legislative requirements, workplace safety and job skill requirements.

In order to determine training needs, the “Training Needs Review” will consider:

- Legislative updates to ensure compliance with standards.
- Each worker's job responsibilities to determine if there have been significant changes to work requirements that may require additional training.
- New or modified processes or equipment to the workplace to ensure proper training has or will be provided to employees using the new or modified equipment/processes.
- Changes in our industry standards.
- Injury analysis will be reviewed to determine if there additional training requirements which need to be introduced to minimize reoccurrence of injuries.
- Review employee training to identify re-certification or update training needs

Training methods may occur in a variety of ways.

- On the job training through job shadowing and mentoring activity are appropriate for skill based training such as proper use of power tools and job-site procedures
- Train the trainer activities will be initiated for inspection/investigation responsibilities

First Aid certification and/or re-certification will be delivered via an external training agent. Example: St. John's Ambulance, Red Cross, etc.

Training reviews of Dielco Electric Ltd. Health and Safety Program includes legislated health and safety responsibilities, the Right to Refuse Work, Early and Safe Return to Work Obligations etc. Reviews will be delivered via an in-house program such as Weekly Meetings.

Basics of Supervising (includes - Elements of Supervising, Motivation and Communication, Legal Responsibilities, Health and Safety Programs, Site Emergencies and Injury/Accident Investigation, Construction Injuries and Fatalities) requirements for President, General Manager, and Supervisor will be completed through Construction Safety Association of Ontario (CSAO) or equivalent.

WHMIS training will be completed through an in-house review, through the local union hall or other as seen fit, and will be adapted to our work environment.

Specific job skill requirements will be delivered through the Trainer/Supervisor and/or a competent person.

DIELCO ELECTRIC LTD.

WHMIS
WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

WHMIS gives everyone the right to know about hazardous materials they work with and provides access to that information. The legislation involves:

1. Labels – Supplier and Workplace or Work Site
2. SDS (Safety Data Sheets)
3. Worker training

LABELS – Responsibilities – Supervisor/Employer

1. The supervisor and/or employer shall ensure that materials delivered to the workplace or work site have WHMIS supplier or workplace labels on the containers. They are responsible to ensure these labels are applied or if already attached, remain in legible order throughout the use of the product. If product is removed from its original container and placed into a secondary container, there shall be a label attached to this secondary container identifying the product and provides safe handling instruction with reference to the availability of the SDS.
2. The supervisor/employer shall ensure that blank workplace labels are available at the workplace and worksite. They shall be applied when applicable.
3. The supervisor shall maintain at all times a list of hazardous materials at the worksite as well the employer shall maintain a list of hazardous materials at the workplace.

SAFETY DATA SHEETS (SDS) Responsibilities – Supervisor/Employer

1. The supervisor/employer shall obtain and review SDS for materials to be used at the workplace and worksite and they shall ensure they are the most current SDS as provided by the supplier.
2. The supervisor/employer shall ensure that SDS are kept in a readily accessible binder at the workplace and worksite.

TRAINING – Responsibilities - Management

1. Management shall ensure that workers and supervisors have identification indicating completion of WHMIS training.
2. Management shall complete yearly evaluations of the training program as per requirements of the WHMIS. regulation.

DIELCO INDUSTRIAL CONTRACTORS LTD.

WHMIS PROGRAM

1. All workers at Dielco Electric Ltd. will receive generic and workplace specific WHMIS training annually.

2. Training will be provided prior to a worker performing any work at Dielco Electric Ltd., or any worksite they will be attending.

3. Any worker identified as requiring WHMIS training annually will participate in a WHMIS Review organized by the JHSC or through their local union hall.

4. A Trainer and or, the JHSC will deliver the WHMIS training.

5. The WHMIS training programs will be reviewed annually by the JHSC.

6. Prior to any person using a hazardous product the appropriate SDS and labels will be readily available.

7. The site supervisor will be responsible to receive clearance from and provide a copy of the SDS to their clients contact prior to brining a hazardous product onto a job site.

8. Any hazardous product found on a jobsite without the proper SDS or labels will be removed from use and quarantined until approved for use by the client or site supervisor.

9. The JHSC will audit at least annually the WHMIS program for compliance.

DIELCO ELECTRIC LTD.

RIGHT TO REFUSE UNSAFE WORK

Section 43 (3) of the Occupational Health and Safety Act states: "a worker may refuse to work or do particular work where he or she has reason to believe that,

a) any equipment machine, device or thing the worker is to use or operate is likely to endanger himself, herself or another worker;
b) the physical condition of the workplace or the part thereof in which he or she works or is to work is likely to endanger himself or herself; or
c) 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 works or is to wok is in contravention of this Act or the regulations and such contravention is likely to endanger himself, herself or another worker."

Procedure

1. Worker refuses to work and notifies Project Supervisor, or General Manager.

2. Project Supervisor or General Manager must contact the worker safety representative and investigates with the worker at the scene where the work is being refused.

3. Working condition is resolved and worker returns to work.

4. Should the worker believe the circumstances remain unsafe, the worker or Project Supervisor or General Manager will contact the Ministry of Labour to report a Work Refusal.

5. While awaiting the MOL inspector, the worker who is refusing the work may be assigned other work that is suitable and safe or will wait in a safe area.

6. Another worker may perform the work that is being refused if that worker is informed, in the presence of the worker refusing the work and/or the JHSC Worker Member involved in the Work Refusal, the reasons of the work refusal.

7. The MOL inspector investigates in consultation with the worker, Project Supervisor, or General Manager.

8. The MOL provides a written decision.

9. If work deemed unsafe the employer will apply whatever corrective action is required to eliminate or control the hazard causing the unsafe condition or act.

10. If the condition or act is deemed safe the worker who exercised the Work Refusal must return to performing that work activity.

11. Actions regarding the Work Refusal must be recorded on the Unsafe Work Refusal Form.

DIELCO ELECTRIC LTD.

SMOKE-FREE WORKPLACE POLICY & PROCEDURE

Policy

Dielco maintains a commitment to the health and safety of all its employees. Smoking has been scientifically proven to be harmful to the health of both smokers and non-smokers that come into contact with second-hand smoke.

Purpose

In the interest of promoting a safe and healthy work environment, Dielco has adopted a smoke-free workplace policy. This policy will:

1. Provide general definitions of smoking and its related by-products;
2. Prohibit the act of smoking in Dielco buildings and vehicles;
3. Set forth procedures in the event of a violation of this policy;

Scope

This policy and procedure applies to all employees, subcontractors, visitors, and customers.

Responsibility

Employees are responsible for:

- Reading and understanding this policy
- Report any violations of this policy to their supervisor

The employer is responsible for:

- Review of this policy with each employee
- Enforcing this policy

Definition

- The act of Smoking: The lighting of, inhalation, or carrying of a lighted or smoldering cigar, cigarette or pipe of any kind.
- Mainstream Smoke: The smoke directly inhaled by the smoker.
- Second hand Smoke: Smoke that is exhaled by the smoker.
- Sidestream Smoke: The smoke that is emitted from the burning tip of a cigarette, pipe or cigar.

Policy & Procedure

1. Smoking shall be prohibited inside all company buildings, company vehicles, and any hotel rooms or rental vehicles booked for company business purposes.
2. Dielco has no intention of influencing the actions of employees smoking habits outside of the workplace and will not pursue disciplinary action for those that smoke in designated or appropriate areas.
3. Dielco will not discharge employees or refuse to hire applicants on the grounds that they are smokers.
4. Dielco has a designated smoking area located out front the large bay door to the north end of the shop at 61 Enterprise Drive and out in front of shipping and receiving doors at 80 Enterprise area.
5. Employees must utilize their breaks and lunch hours for smoke breaks.

DIELCO ELECTRIC

ACCIDENT REPORTING AND INVESTIGATION

Management Shall

1. Ensure an investigation of all:

    a. fatalities
    b. critical injuries
    c. lost-time injuries
    d. medical aid injuries
    e. occupational illnesses
    f. major incidents/ near miss incidents
    g. any worker fall-arrested by a harness
    h. reportable occurrences as defined in the O.H.S.A.
    i. fire
    j. environmental release

2. Senior management will review the accident investigation reports after a period of 1 month to ensure that all recommended actions to prevent a recurrence have been implemented.

3. Senior management will ensure that all supervisors receive training in accident reporting and investigation procedures.

The Supervisor shall

1. Ensure that any accidents or incidents requiring investigation are reported via phone immediately to head office and to the J.H.S.C.

2. Conduct an accident investigation using the company "Accident Reporting and Investigation Form".

3. Submit all reports to senior management and the J.H.S.C. within 48 hours.
4. Report any incident or injury to a client while on a client's property. If required the supervisor will participate in a joint investigation with the client and follow their investigation protocol.

The Worker shall

1. Report all accidents and injuries regardless of severity immediately to the supervisor.
2. Complete the Worker Report of Injury/Incident Form.

Contractors/Subcontractors

1. Contractors and subcontractors will report all incidents and injuries to Dielco immediately upon occurrence and participate in an incident investigation if required.

DIELCO ELECTRIC LTD.

HEALTH AND SAFETY HAZARD REPORTING PROCEDURE

Purpose

- To identify the steps to be taken for reporting hazardous conditions that may arise in the workplace.

Responsibilities

1. All workers are responsible for reporting to their supervisor any hazardous conditions that may exist in the workplace.
2. The supervisor is responsible to respond to the worker's concerns and ensuring that the hazardous condition is resolved to everyone's satisfaction.

Procedure

1. The worker who identifies the health and safety hazard must report the concern to the immediate supervisor without delay.
2. The supervisor will respond to the matter promptly, consult with others as needed e.g.- certified member of J.H.S.C. or Health and Safety Rep. - than advise the worker of the plan of action to resolve the matter. Reasonable time would depend on the potential risk of the situation but should not exceed one week.
3. If the supervisor is unable to resolve the concern than the matter must be forwarded to senior management.
4. If the worker's concern is not satisfactorily resolved after a reasonable period of time-1 week - than the concern must be brought to the attention of the Health and Safety Rep. or J.H.S.C.
5. The worker must document the concern outlining all data and steps taken to date before submitting the issue to the J.H.S.C. using the Hazard Report Form.
6. The Health and Safety Rep. or J.H.S.C. if any will respond to the reported hazard at the next regularly scheduled meeting.
7. A written response will be forwarded to the worker who submitted the concern within 14 days of the meeting.
8. The written response will advise as to the date when the hazard will be corrected or the reasons why no action will be taken.
9. If the issue is still not resolved either the concerned worker or the J.H.S.C. may contact the M.O.L. inspector for assistance.

NOTE

THIS PROCEDURE DOES NOT PRECLUDE THE WORKER FROM EXERCISING THEIR RIGHT TO REFUSE TO PERFORM UNSAFE WORK AS OUTLINED IN THE O.H.S.A.

DIELCO ELECTRIC LTD.

JHA (JOB HAZARD ANALYSIS)

Job Hazard Analysis

The purpose of a job hazard analysis is to identify, control, or eliminate potential or actual dangers in a job or task.

Dielco Electric Ltd. management and supervision are responsible for ensuring all work is safely planned. The job hazard analysis will assist in determining, firstly, what are the steps in the job, secondly, what are the potential hazards in the job, and finally, what are the protective measures for the safety of our worker(s) assigned to do the non-routine work.

Procedure for Completing a Job Hazard Analysis

Breakdown the job into steps. Job steps are defined as a segment of the operation necessary to advance the work. Ensure to keep the steps in the correct sequence. Once the basic steps have been recorded, potential hazards must be identified at each step. This is based on observation of the job, knowledge of accident and injury causes, and personal experience. When identifying potential hazards, the following questions could assist:

- Can anybody part get caught in or between objects?
- Do tools, machines, or equipment present any hazards?
- Can the worker make harmful contact with objects?
- Can the worker slip, trip, or fall?
- Can the worker suffer strain from lifting, pushing, or pulling?
- Is the worker exposed to extreme heat or cold?
- Is excessive noise or vibration a problem?
- Is there a danger from falling objects?
- Is lighting a problem?
- Can weather conditions affect safety?
- Is harmful radiation a possibility?
- Can contact be made with hot, toxic, or caustic substances?
- Are there dust, fumes, mists, or vapors in the air?

Once the hazards have been identified, it is crucial that they are controlled to protect the worker. There are many different ways to control workers' exposure to hazards.

Engineering Controls

- First try to eliminate the hazard completely. This could mean removing trip hazards on the floor or disposing of unwanted chemicals.
- If it is not practical to eliminate the hazard completely, try to substitute it with something safer, such as using smaller packages to reduce the weight of items that have to be manually handled or using a less toxic chemical.

- Isolate the hazard. For example, use soundproof barriers to reduce noise levels, use an enclosed spray booth for spray painting, or use remote control systems to operate machinery.
- Use trolleys or hoists to move heavy loads or place guard's around moving parts of machinery.
- Ventilation.

Administrative Controls

- Use and follow safe work procedures.
- Provide training and supervision for workers.
- Ensure regular maintenance of machinery and equipment.
- Limit exposure times by using job rotation.

Personal Protective Equipment (PPE)

- PPE is commonly viewed as the "last line of defense" as a control to protect a worker from hazards.
- Ensure that the right type of PPE is selected for the job and the hazard.
- PPE must fit properly and needs to be comfortable under working conditions.
- Workers must be trained in the need for PPE, its use, maintenance, and limitations.
- PPE must be stored in a clean environment and be fully operational.

Combination of the above

- Engineering
- Administrative
- PPE

Dielco Electric Ltd. emphasizes that the recognition and control of hazards in the workplace are essential in any successful Health & Safety Program. This requires continuous participation by everyone, including all Dielco Electric employees and subcontractors, every day. By recognizing, analyzing, and controlling hazards, we reduce the possibility, frequency, and severity of events.

A Pre- Job safety Assessment Form PSA is available and shall be used to assist workers in identifying hazards that may be present on the worksite prior to commencing work. Upon completion, these reports shall be reviewed by management to ensure that the necessary corrective actions have been taken care of to eliminate or reduce the hazard(s).

Pre-Job Safety Assessment Form (PSA)

Hazards are unique and can vary from job site to job site. It is important that a Pre-Job Safety assessment be completed at the beginning of a shift or at least daily before work begins. The purpose of the Pre-Job Safety Assessment is to identify hazards and implement appropriate controls to prevent injury. Task creep can occur while a task is being completed. If the original scope has changed or task creep has occurred, stop work and revise the Pre-job safety assessment.

DIELCO ELECTRIC LTD.

FALL RESCUE PROCEDURE

If a worker falls and their fall is arrested by fall protection equipment the following procedure will be used to rescue the worker:

1. If you see a suspended worker call for help immediately via voice, whistle or phone.

2. If the worker is suspended at a height of less than 5 meters [15 feet] is conscious, appears to be alert and has control over arms and legs and there is an accessible ground surface, place a ladder securely fastened or scaffold [rolling or portable] under the suspended worker to allow the suspended worker access to it in a safe controlled manner. If possible, use a second worker on the scaffold platform to ensure that the suspended worker positions himself safely on the scaffold platform. Always check to ensure that the scaffold platform is not being overloaded.

3. Instruct or assist the worker down the securely fastened ladder or scaffold. If the lifeline restricts movement assist the worker as required. If possible position a securely fastened second ladder so that assistance may be offered.

4. If an elevating work platform [scissors lift] is available position the elevating work platform underneath the suspended worker. Ensure that the elevating work platform has enough lifting capacity to safely support all workers likely to be on the platform.

5. Bring the elevating work platform up until the suspended worker safely touches the floor of the platform.

6. Once the suspended worker is safely on the floor of the elevating work platform release the fall protection harness assembly from the lanyard or lifeline. Before workers attempt a rescue using an elevating work platform ensure that all the required personal protective equipment [fall body harness attached to the designated tie off point on the platform} for themselves are being used.

7. After releasing the suspended worker from the lifeline connect the casualty's full body harness to the elevating work platform for the descent of the platform. It may be necessary to have a new lanyard available for the casualty - the old shock absorbing lanyard may have been destroyed during the fall arrest action.

8. If the suspended worker cannot be accessed by using a ladder, scaffold or elevating work platform due to height the workers will abort the rescue and call 911 and ask for the fire department to assist in the rescue.

9. UNDER NO CIRCUMSTANCES WILL THE SUSPENDED WORKER'S HARNESS BE DISCONNECTED FROM THEIR LIFELINE OR ANCHOR POINT UNTIL THE CASUALTY IS SAFELY ON AN ACCESSSIBLE SURFACE.

10. When the casualty reaches the ground, the first aid attendant will attend and if back or neck injuries are suspected, suitable arrangements will be made to transport the casualty to medical attention and also to ensure no internal organ or body damage has occurred.

11. The entire fall arrest system shall not be re-used. The discarded fall–arrest system shall be returned to head office.

12. As this is a reportable occurrence under the O.H.S.A., the nearest office of the M.O.L. must be immediately notified.

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PROCEDURE FOR HOT WORK PERMIT

A hot work permit is required to be completed under the following conditions:

- Client or constructor request
- When performing hot work in a confined space and near covered processes.

For all other daily soldering, welding, brazing, the hot work permit will serve as a guide for safe work practices – a hot work permit is not required to be completed under these typical daily situations.

Supervisor shall

1. Before a hot work permit is issued -under the required circumstances above- conduct an inspection of the area and equipment to be used.
2. Only after all the hazards have been corrected and corrected sign the hot work permit.
3. Ensure that all the safe work practices on the hot work permit are followed.
4. Inspect the work area and adjacent areas 30 minutes after the work has been completed to ensure that all is fire safe.
5. Keep all completed hot work permits for the duration of the project.

Workers shall

1. Follow all procedures and precautions as outlined on the hot work permit.

DIELCO ELECTRICAL LTD.

CRITICAL LIFT PROCEDURES

Critical Lift Criteria

What Constitutes A Critical Lift?

- When the gross load value exceeds 75% of the total crane's capacity.
- When the load replacement time exceeds 10 days.
- When the loss of the load during installation will cause a loss of production exceeding 10 days or a cost of $100,000.
- When the loss of the load constitutes a risk to the public or to the environment, i.e. chlorine, acid, or radiation.
- When the lift requires 2 or more cranes. **Note:** Never exceed 75% of each crane capacity during any multi-crane lift.
- When the load has to be swung over an unprotected plant, equipment or service.
- When the lift is performed in proximity of live electrical conductors.
- Load is of unusual shape and centre of gravity is not determined.
- Lifting personnel.

Procedures

- Prior to the lift(s) to be made, a pre-lift meeting with all parties included is required. This includes the operator, rigger, signal persons, supervisor, client representatives and any other personnel involved.
- The Dielco Electric Ltd. Supervisor must complete the Critical Lift Check Form.
- The supervisor and crane operator must jointly complete the Critical Lift Operator's checklist immediately prior to the lift.
- All completed forms must be kept available at the project.

DIELCO ELECTRIC LTD.

OBJECTIVES OF CONFINED SPACES ENTRY PROGRAM

Dielco Electric Ltd. Confined Space Entry Program supports Dielco Electric Ltd. Health and Safety Policy and Program and recognizes the potential confined space hazards on each job site. The Program allows for the following:

- Identification of locations or situations where confined space entry and work is required.
- A method of assessing the hazards to which workers may be exposed.
- A plan for safe installation, inspection, maintenance, and repair of equipment and facilities where the assessment indicates a hazardous atmosphere may be caused by the construction, location, contents, or work activity within it.
- Use of an entry and work permit system to ensure that only authorized and trained workers are sent into a confined space.
- Training and education of workers who supervise or perform work in a confined space.
- Compliance with the requirements of the *Occupational Health and Safety Act* of Ontario and the relevant regulations and industry standards.
- Preparation and use of a coordination document when Dielco Electric Ltd. is the constructor of the project.
- Assigning responsibilities to all workplace parties.

ROLES AND DUTIES - ALL WORKPLACE PARTIES

This section outlines the responsibilities of Dielco Electric Ltd. for the implementation of the Confined Space Entry Program.

Management

Dielco Electric Ltd. Management has the primary responsibility for controlling access to and authorizing work in confined spaces. This responsibility applies to work performed by Dielco Electric Ltd. workers or contractors/employers hired by Dielco Electric Ltd. Management is also responsible for ensuring that all workers who are required to work in a confined space are trained as per regulation 632/05.

Supervisors

Dielco Electric Ltd. supervisors must be familiar with the requirements of this Program and ensure those workers or contractors/employers under their supervision understand the general and specific procedures and know-how to conduct their confined space tasks in accordance with this Program.

Supervisors must follow Dielco Electric Ltd. Confined Space Coordination Procedure when Dielco Electric Ltd. is the constructor of the project, and other employers/contractors need to enter confined spaces on the project.

Supervisors must complete the Confined Spaces Inventory & Hazard Assessment form for each project.

Supervisors must complete the Confined Space Coordination Document Checklist for each project if Dielco Electric Ltd. is the constructor of the project.

Supervisors must review and sign the Confined Spaces Entry Permit before any Dieclo Electric worker enters a confined space.

Workers

Dielco Electric Ltd. workers who are required to enter and perform work in confined spaces shall work in accordance with this Program.

All workers shall

1. Enter or re-enter a confined space only if the entry permit has been completed and signed by the supervisor.

2. Be aware of the symptoms of exposure to hazardous atmospheres. This will be addressed in the training program.

3. Know how to use all equipment. If in doubt, do not enter and ask the supervisor for directions.

4. Maintain communication with the attendant using a pre-arranged method as specified on the Confined Space Work Permit form.

5. Alert the attendant whenever you feel any adverse health effects when in the confined space.

6. Adhere to directions given by the attendant.

7. Report any hazards immediately to the supervisor.

Employers/Sub-Contractors

Employers/contractors contracted to enter and perform work in confined spaces shall comply with legislative requirements and shall work in a manner that is consistent with Dielco Electric Ltd. Health and Safety Policy and Program and Dielco Electric Ltd. Confined Space Entry Program.

All employers and Sub-Contractors shall cooperate in the preparation of the required coordination document.

All contractors/employers must provide proof of worker training before performing work in confined spaces on Dielco Electric Ltd. projects.

Training Providers

Consultants, manufacture representatives, or designated organizations will provide appropriate confined space training to Dielco Electric Ltd.

IDENTIFICATION AND INVENTORY OF CONFINED SPACES

All confined spaces on Dielco Electric Ltd. projects must be identified. The project supervisor in conjunction with the relevant Joint Health and Safety Committees/Representative if any must develop this inventory. A copy of the Confined Spaces Identification/Hazard Assessment form must be posted in the site trailer. – [Form attached]

EDUCATION AND TRAINING

All Dielco Electric Ltd. workers required to work in confined spaces as well as those Dielco Electric Ltd. supervisors who authorize work in confined spaces, shall receive appropriate training as per Ont. Rec.213/91.

A Hazard Awareness Assessment Review will be performed for all Participants.

Training in the Dielco Electric Ltd. Confined Spaces Plan specific to the project will be provided by the supervisor of Dielco Electric Ltd. This will be completed at the project before entry is permitted.

An attendant who remains outside of the confined space shall be trained in attendant duties and standard first aid and cardiopulmonary resuscitation (CPR)

All workers assigned to the rescue team will be trained in confined spaces rescue procedures appropriate to Dielco Electric Ltd.

All workers required to use air testing and air monitoring equipment must be trained by a competent person prior to use.

All workers assigned to the rescue team must be trained in the proper use of all equipment for rescue purposes by a competent person prior to use.

DIELCO ELECTRIC LTD.

CONFINED SPACES ENTRY PLAN

This section outlines the general procedures to be followed for entry into a confined space.

Hazard Identification – Pre Entry

- Workers will perform a confined space hazard assessment of the confined space to determine whether there are physical hazards of which the entrants should be aware (i.e., rusty or missing ladder rungs, deep water, slippery surfaces, trip hazards, etc.).
- If there is a possibility of a fall greater than 3 m, an appropriate fall arrest device must be used.
- Once the potential hazards in the space have been identified, and the workers take all necessary steps to protect themselves, the supervisor or designate sign the confined space hazard assessment form and entry permit.

Lockout and Tag-out Procedures – If Applicable

- Disconnect all power for all mechanical equipment in the confined space.
- Lockout and tag the main disconnect switch and controls to prevent accidental start up using the Dielco Electric Ltd. Lockout and Tag procedures.
- Neutralize and lockout other power sources, including steam, mechanical, gravity, compressed air, etc.
- Double-isolate valves.
- Blank-off all lines and systems that let hazardous materials into the confined space. Simply closing out a valve does not provide adequate isolation. Unless the valve is locked out, it could be opened and/or may leak.
- For high-pressure steam, natural gas, compressed air, high and low-pressure condensate, propane, and treated cold water, use a double-block and bleed the system.
- Block equipment parts that might move.
- If Lockout and Tag procedures are necessary, all workers will be required to attend and successfully complete a Lockout and Tag training program.

Air Testing and Constant Air Monitoring

It is the policy of Dielco Electric Ltd. that all workers will wear a personal air monitor at all times when in a confined space. Personal air monitoring gives information about the concentration of hazardous substances surrounding the worker at all times.

Because the majority of the atmospheric hazards which may be encountered in a confined space are not visible and because reliance on the sense of smell is far too risky, it is important to conduct air testing prior to entry into and while working in a confined space. Air testing for oxygen, flammables, and toxics must be performed by a competent worker as defined in Ont. Reg. 632/05. This competent worker should fully understand the applications and limitations of air testing equipment and must be trained in the proper operation, calibration, bump testing and maintenance of such equipment by the manufacture representative. The following procedures shall be followed:

- The air testing monitor must be regularly calibrated & "bump" tested prior to entry. Follow all manufacture instructions re-instrument calibration and bump testing. All calibrations & bump testing shall be documented in a designated logbook or as per manufacturer's instructions.

- The air must be tested prior to entry into the confined space and the test results must be recorded on the entry permit.

- Follow all manufactures' instructions when performing air testing. Normally oxygen levels must be tested first, then flammables/combustibles since many flammability meters won't work if the atmosphere is oxygen deficient. Lastly, test for toxics such as carbon monoxide and hydrogen sulphide.

- Test all vertical levels of the space (i.e., the top, middle and bottom). Also, check as much of the space's horizontal area as possible. Contaminants that are heavier than air (e.g., hydrogen sulphide) will settle near the bottom of the space.

Testing for Oxygen and Flammable/Combustible Materials

When testing for oxygen, the concentration must be between 19.5 and 23%. A space is considered oxygen-deficient if the oxygen concentration is below 19.5% and a space is considered oxygen-enriched if the concentration exceeds 23%.

When testing for flammable and combustible gases and vapours [e.g.- methane, propane, gasoline], the concentrations should not exceed 0-5% of LEL for hot work or 5-10% of LEL for cold work. For concentrations between 10%-25% of LEL inspections only may occur. For concentrations above 25% of the L.E.L. no entry is permitted.

Testing for Toxics

Testing for toxics should be performed next according to the manufacturer instructions for the air monitor being used. If there is reason to believe that another toxic material may be present, contact the supervisor and management. Do not enter the space until the problem is identified and controlled.

Ventilation Procedures

Ventilating is the process of continuously moving fresh air through the space. Ventilating helps maintain an adequate level of oxygen in the space, dilutes or removes toxic air contaminants that may be found or generated in the space, and improves comfort levels by controlling temperature, humidity and nuisance odors.

Tips for ventilating a confined space safely:

- Always ventilate with fresh air - never with pure oxygen.
- All electrical equipment shall be grounded.
- In a flammable atmosphere, ventilation equipment shall be electrically bonded to the confined space.
- Ensure that the intake for the air supply is located far away from any flammable or toxic materials.
- Position the exhaust outlet such that contaminants cannot be drawn back into the confined space.
- Place the outlet where air currents will disperse the exhaust quickly, without endangering nearby people.
- If the exhaust is potentially flammable, remove all ignition sources from the area.
- As a general rule, ensure a supply of fresh air to the worker by positioning the end of the ventilation duct as close as possible to the worker.
- An alarm should be activated by a pressure switch at the fan rather than by electrical failure. This ensures that the alarm is activated if the fan belt fails- on models so equipped.

If air testing indicates that the confined space has unacceptable concentrations of oxygen, flammables and/or toxics, ventilate the area using a blower or similar ventilating unit for a period of 15 minutes. **Ensure a minimum of four volume changes of fresh air within the 15-minute period (i.e., 16 air changes per hour).** This can be calculated as follows:

$$\frac{\text{Flow rate of air blower (in L/hr or L/min, m3/hr or m3/min, or ft3/hr or ft3/min)}}{\text{Approximate volume of room (in L, m3 or ft3)}} = \text{Number of air changes per hr or per min.}$$

Ensure the proper placement of the intake of the ventilation unit so that only fresh, uncontaminated air is introduced into the space (i.e., ensure nearby vehicle or equipment exhaust is not entrained).

After this ventilating period, the competent worker shall then retest the air and record the results. If the atmosphere is acceptable, the confined space entry may proceed. If not, ventilate the space for another period of 15 minutes, as above, and retest until the atmosphere is acceptable. Continue to ventilate for the duration of work in the confined space.

Workers entering the confined space shall wear or carry an air-monitoring device with alarm to provide early warning of changing conditions.

After leaving the confined space (e.g., for breaks, lunch, to get tools, etc.), it is necessary to retest the air prior to re-entry into the space. Note that there are extra columns in the air monitoring section of the confined space entry permit for inputting the re-test results. If conditions have changed and rendered the space unsuitable for human occupancy, the space must be ventilated and re-tested until the atmosphere is acceptable.

Fire and Electrical Safety

Safety measures to follow are outlined below:

- Eliminate all ignition sources from the confined space.
- Eliminate gas cylinders from the confined space (except for breathing air cylinders).
- Ensure that fire-fighting equipment is nearby.
- Use ground-fault circuit interrupters on electrical equipment for added protection.
- Use properly guarded lighting, explosion proof equipment and low voltage electrical equipment.

Work Permit Practices and Procedures

Under Ontario law, the workplace must have a permanent record that authorizes safe confined space entry. A confined space entry permit system ensures that the potential hazards of a particular confined space have been identified and assessed, that necessary preventive measures are in place, and that workers are aware of and/or reminded of the correct safety procedures (general and specific) prior to entry. Supervisors must ensure that the Confined Spaces Entry Permit is used at all times.

Posting and Record Keeping

The Dielco Electric Ltd. Confined Space Entry Permit is dated and is valid only for the work to be performed during that time period. It must be posted outside the space while the work is being conducted. Upon completion of the work, the expired permits should be returned to the relevant area supervisor and kept on record for a minimum of one year.

The following records must be kept at the project:

- the confined spaces program
- the confined spaces plan
- all confined spaces inventories
- all confined spaces hazard assessments
- all constructor confined spaces coordination documents
- all training documents
- all entry permits
- all records of rescue testing equipment
- all records or air- testing results.

Protective Clothing/Personal Protective Equipment

All required equipment and supplies must be readily available at the confined space site and must be in good working condition. [See entry permit requirements]. Considerations include, but are not limited to the following:

- Appropriate personal protective equipment depending on the situation. This could include items such as hardhats, safety glasses, boots, hearing protection, gloves, etc.
- Properly calibrated and maintained air monitoring equipment that should be calibrated as per manufacturer's instructions. A calibration and maintenance log must be kept and recorded on the Confined Spaces Entry Permit
- Appropriate rescue/emergency equipment such as a tripod, safety harness, lifeline, fall arrest device (i.e., the prearranged method of extraction), emergency escape breathing device, and appropriate communication device.
- Equipment such as barricades, ventilator/exhaust unit, flashlight, and tools appropriate for the confined space work.

Access and Egress from Confined Space

Particular care is required to ensure that the means of access and egress from the confined space will not prevent or adversely affect the proper use of any personal protective equipment, rescue equipment.
Ladders must be well secured and complete.

Attendant

- An attendant must be stationed outside of the confined space at all times and gives their undivided attention to the worker inside the confined space.
- The attendant must be in constant communication with the worker using the method specified on the entry permit.
- The attendant prevents unauthorized entry into the confined space.
- The attendant must be trained in standard first aid and CPR
- The attendants as well the entry personnel shall both have fall protection training
- The attendant must be provided with a device for summoning help in case of an emergency.
- The attendant must not leave their position until a replacement has arrived.
- The attendant is not allowed to enter the confined space to perform a rescue even after help has arrived unless another attendant replaces him or her.
- The attendant must be trained in rescue procedures if part of the rescue team.

Communication

A means of communication must be established between the entrant(s) and the attendant while work is being performed in the confined space (e.g., visual, verbal, portable radio or other). The agreed method of communication must be specified on the Entry Permit.

Time of Entry

A confined space entry permit can be valid for periods longer than one shift, provided the pre-entry procedures supervisor.

Post the permit at the entry to the confined space.

Evacuation Procedures

Workers **MUST LEAVE** the confined space **IMMEDIATELY** in the case of any of the following:

1. If they feel ill, light-headed, dizzy, or any pain.
2. If the alarm sounds on the air monitoring equipment.
3. If conditions in the confined space change such that re-evaluation of the potential hazards would be required.
4. When the attendant is present but is unable to perform the duties of an attendant.
5. When notified to evacuate by the attendant or entry supervisor or by evacuation alarm.
6. When communication with the attendant is disrupted.

Rescue and Emergency Procedures

In the case of an emergency, **THE ATTENDANT DOES NOT ENTER THE CONFINED SPACE**. Too many confined space rescue attempts claim the lives of unprepared rescuers.

All workers assigned to the Rescue Team must receive the appropriate training in the use of rescue equipment from the manufactures' representative.

Dielco Electric will be responsible for vertical none entry rescue operations with the use of a Davit Arm or Tripod system when the attendant can maintain a direct line of site at all times with the entrant. All other rescue operations will be provided by an outside rescue contractor that will arranged prior the confined space entry.

At the first indication of an emergency:

The attendant must summon the help of the supervisor and all rescue team members by using the provided device or method of communication as recorded on the Entry Permit.

1. While the rescue team is assembling, the attendant may attempt to remove the victim using an external rescue only, with the attached safety line and harness, winch etc., if possible. The attendant shall perform any required first aid (including artificial resuscitation or CPR) until emergency services arrive.
2. The supervisor will contact Emergency Services, dial 911, ask for the appropriate emergency service (i.e., paramedic, fire, or police) then provide the details of the emergency and any other information that is asked.
3. While awaiting the arrival of emergency services, the rescue team will carry out rescue as per assignments

4. Contact Dielco Electric Ltd. head office and inform them that emergency services are en route and provide any additional information that is asked.

Working in Combustible, Explosive or Flammable Atmospheres

It is the policy of Dielco Electric Ltd. that no work be performed in a combustible, explosive or flammable atmosphere or where any combustible dust. mist, gas or vapours is even detected.

If after the original air testing and during the constant air monitoring being worn by all workers a combustible, explosive or flammable atmosphere sufficient for explosion or any airborne combustible dust, mist, vapours or gas is even detected the following procedures must be strictly adhered to:

1. Attempt to remove all combustibles, explosives, and flammable atmospheres by venting.

2. If after several attempts the hazardous atmospheres cannot be removed by direct venting all work will stop and arrangements will be for a qualified employer to perform the work or Dielco Electric Ltd. will develop safe work procedures in consultation with a qualified consultant.

DIELCO ELECTRICAL LTD.

ASBESTOS

Asbestos

1. Management will consult with all clients/customers to determine if asbestos is present at the project. If asbestos is present, an "Asbestos Report" and/or a "Designated Substances Report" will be obtained from the client/owner.

2. The contents of these reports will be discussed with all workers likely to be involved with the project.

3. All workers who un expectantly discover asbestos must immediately report the occurrence to management/supervision.

4. If asbestos is un expectantly discovered, all work will cease until testing of the product in question is verified.

5. If work must proceed and workers of Dielco Electric are to be in the work area, the following steps will be followed:

    a. Dielco Electric shall develop an Asbestos Work Plan in consultation with a "competent person/consultant".
    b. All workers will be trained in the Dielco Electric Limited Asbestos Work Plan and the requirements of Ontario Reg. 833/90 or
    c. A qualified sub-contractor will be employed.

6. Workers must participate in training programs. All asbestos training programs must be delivered by a "competent person". A minimum of a 3 hours training program will be provided.

7. Any newly hired worker who has not received valid asbestos training must be trained prior to working with asbestos products.

8. After receiving initial training, all workers will receive updated training as determined by management and the J.H.S.C.

No workers of Dielco Electric will enter or attempt to enter an area containing asbestos contaminant unless all of the above is completed.

DIELCO ELECTRIC LTD.

MUSCULOSKELETAL DISORDER (MSD) PREVENTION STATEMENT

Dielco Electric Ltd. is committed to providing a safe and healthy working environment for all employees. Dielco will demonstrate its commitment by ensuring that all employees understand and are aware of the risk factors associated with MSD and will implement preventative measures to reduce the number of musculoskeletal injuries in the workplace.

Our objectives are to ensure all employees are educated about MSD risk factors and prevention. We will control MSD risks through the application of procedures and integrate MSD prevention strategies.

Musculoskeletal injuries are injuries or disorders of the muscles, tendons, ligaments, joints, nerves, blood vessels or related soft tissue including a sprain, strain, or inflammation that may occur and that is caused or aggravated by any of the following:

- Repetitive motion
- Forceful exertion
- Vibration
- Mechanical compression
- Sustained or awkward posture
- Limitation on motion or action
- Any other facture that causes a risk of musculoskeletal injury

Musculoskeletal injuries occur primarily as a result of improper lifting procedures. Injuries have occurred not only by attempting to lift excessive weights but by simply lifting or carrying objects in an awkward manner and in some cases, where slip or trip hazards are present.

Safe manual lifting procedures and good housekeeping practices are to be implemented and followed at all times. Supervisors will use toolbox talks to ensure that all workers are made aware of and are to follow safe work practices and procedures at all times, as well as how to recognize the symptoms of musculoskeletal injuries.

A process of identifying the risk, implementing safe work practices and procedures, and training will contribute to a safe work environment and aid in reducing the number of musculoskeletal injuries that may occur in the workplace.

DIELCO ELECTRIC LTD.

FIRE PREVENTION PROGRAM

Purpose

Fire prevention/protection policy is intended to provide compliance and guidance with all related regulations and standard safe work practices. The purpose of the policy is to prevent fires and to provide guidelines for action in the event that a fire does occur.

Policy

Dielco Electric Ltd. employees shall be informed of the proper actions to take in the event of a fire. This includes, but 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 job site, in accordance with the company and client policy.

Procedure

- All Dielco Electric Ltd. employees are responsible for good housekeeping practices to enhance fire prevention methods. Supervisors will be held accountable for the housekeeping of their job sites.
- Only approved containers will be used during fueling operations.
- The quantity of flammable/combustible material shall be kept to a minimum on the job site.
- Welding, cutting and grinding sparks shall be contained.
- Hot work areas shall be kept wetted down and fire extinguisher and water hose maintained on each job site.
- Oily rags shall be immediately disposed of in designated hazardous waste containers.
- No hot work is to be performed without a "Hot Work Permit".
- Use bonding straps to discharge and prevent static charges during the transfer of flammable liquids from one container to another.
- Report all spills or suspicious odors immediately.
- Fire extinguishers are to be kept in areas easily accessible to employees. Only approved fire extinguishers are to be used (4A-40BC recommended). They must have an inspection tag attached. Fire extinguishers are to be maintained in a fully charged, ready to use state. Fire extinguishers are to be inspected before use and documented annually. Training shall be provided to all employees who use or may use fire extinguishers.
- NEVER put yourself or others at risk while attempting to extinguish a fire.
- DO NOT USE any fire hoses larger than 1 ¾", unless fully trained as an industrial firefighter.
- NEVER attempt to extinguish a pressurized-fuel fed fire.

- DO NOT direct a fire nozzle with a straight stream at any type of LPG fire. This action could extinguish the fire, producing an LPG vapor cloud capable of detonation.
- DO NOT APPLY water to any acid or caustic release as it can cause a violent reaction. Additionally, low concentration acids or caustics become extremely corrosive causing an increasing leak condition.

IN THE EVENT OF A FIRE

- Remain calm.
- Only extinguish a fire when it is clearly within your abilities and 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 supervisor/foreman or designated responsible personnel.

CLASSES OF FIRES

- Class A – Ordinary combustibles (wood/paper/textiles)
- Class B – Flammable liquids (gasoline/oils/grease)
- Class C – Live electric (wiring/generators/motors)
- Class D – Combustible metals (finely divided form/chips, turnings)

TYPES OF FIRE EXTINGUISHERS

- Water – extinguisher for ordinary combustible fires.
- Dry Chemical or CO2 – extinguisher for electrical equipment fires and for flammable liquid fires.
- Multipurpose Dry Chemical – extinguisher for ordinary combustible fires, liquid fires, and electrical equipment fires.
- Foam – extinguishing agent for hydrocarbon fires.

DIELCO ELECTRIC LTD.

HEAT AND COLD STRESS

Heat Stress

Heat stress takes place when your body's cooling system is overwhelmed. It can happen when heat combines with other factors such as:

- Hard physical work.
- Fatigue (not enough sleep).
- Dehydration (loss of fluids).
- Certain medical conditions.

Heat stress can lead to illness or even death. Dielco Electric Ltd. has a duty to take every precaution reasonable in the circumstances to protect their workers.

Heat Stress Symptoms

- Heat rash (itchy red skin)
- Heat cramps (painful muscle cramps)
- Heat exhaustion (high body temperature, weakness or feeling faint, headache, confusion or irrational behavior, nausea or vomiting)
- Heat stroke (no sweating, hot, dry skin, high body temperature, confusion or convulsions. Get immediate medical attention)

Precautions when working in hot, humid conditions

- Increase the frequency and length of rest breaks.
- Provide cool drinking water near workers and remind them to drink a cup every ½ hour.
- Caution workers about working in direct sunlight.
- Train workers to recognize the signs and symptoms of heat stress. Start a "buddy system" because it's unlikely people will notice their own symptoms.
- Tell workers to wear light summer clothing to allow air to move freely and sweat to evaporate. They should always wear shirts to protect themselves from direct sunlight.

Cold Stress

When you're cold, blood vessels in your skin, arms and legs constrict, decreasing the blood flow to your extremities. This helps your critical organs stay warm, but your extremities are at risk for frostbite.

Frostbite

Means that your flesh freezes. Blood vessels are damaged and the reduced blood flow can lead to gangrene. The first sign of frostbite is skin that looks waxy and feels numb. Once tissues become hard, it's a severe medical emergency.

Wind Chill

Accelerates heat loss, sometimes to a dramatic extent. For example, when the air temperature is -30 degrees Celsius,

- with no wind, there is little danger of skin freezing.
- with 16 km/h wind (a flag will be fully extended), your skin can freeze in about a minute
- and, with 32 km/h wind (capable of blowing snow), your skin can freeze in 30 seconds.

When your core temperature drops, you're at risk for hypothermia. Early signs of hypothermia are shivering, blue lips and fingers and poor coordination. Soon your breathing and heart rate slow down and you become disoriented and confused.

Precautions to prevent cold stress

- Wear several layers of clothing rather than one thick layer.
- Wear gloves if the temperature is below 16 degrees Celsius for sedentary work, below 4 degrees Celsius for light work and below -7 degrees Celsius for moderate work.
- Take warm, high calorie drinks and food.
- If your clothing gets wet at 2 degrees Celsius or less, change into dry clothes immediately to prevent hypothermia.
- If you feel hot, open your jacket but keep your hat and gloves on.
- Give workers warm up and rest breaks in a heated shelter. Ensure work is not conducted only within allowable exposure limits, as per provincial OHS regulations.

DIELCO ELECTRIC LTD.

PERSONAL DEVICES/CELL PHONE POLICY

The use of personal cell phones and hand held communication devices while at work shall be limited to use during breaks and lunch periods. Should an urgent or emergency matter arise where the use of a personal communication device is required, first discuss the situation with your supervisor and obtain permission. Under no circumstances shall a personal communication device be used while operating any equipment, machine, device or mobile equipment.

Personal devices and cell phones provided by Dielco Electric to Managers and Supervisors are permitted for communication and photos for the purposes of estimating, troubleshooting and communication between the management team. Any photos will remain the property of Dielco Electric. Managers and Supervisors should remain aware of the company or corporate policy for cell phones or mobile devices when using them on a customer's property.

Posting any company information/pictures what so ever on any social media is, without written approval and consent from Dielco Electric Limited, to be strictly prohibited. Company information includes but is not limited to any photos of projects, customer sites, use of equipment or other work being completed while working at a Dielco workplace. Any person who violates this policy can be disciplined up to and including dismissal.

While operating Dielco company vehicles the law makes it illegal for drivers to talk, text, type, dial or email using hand-held cell phones and other hand-held communications and entertainment devices. The law also prohibits drivers from viewing display screens unrelated to the driving task, such as laptops or DVD players, while driving. This applies while driving a vehicle or operating equipment. Any person who violates this law or is reported to be in violating the law can be disciplined up to and including dismissal.

DIELCO

ELECTRIC LTD.

Electrical Safety – Arc Flash

Purpose

To define the requirements and establish procedures for workplace electrical safety.

Scope

The procedure applies to all Dielco Electric Ltd. employees who are required to conduct live electrical work as required by the task they were assigned.

Definitions

Approach Boundaries to Live Parts

Observing a safe approach distance from exposed energized parts is an effective means of maintaining electrical safety. As the distance between an individual and live parts increases, the potential for an electrical injury decreases.

- Limited Approach Boundary: Distance from an exposed live part within which a shock hazard exists. An unqualified person may not cross this boundary unless they are continuously escorted by a qualified person
- Restricted Approach Boundary: Distance from an exposed live part within which there is an increased risk of shock (due to electrical arc over combined with inadvertent movement) for personnel working in close proximity to the live part. This boundary may only be crossed by a qualified person who is safety insulated or guarded from the live parts.
- Arc Flash Boundary: The arc flash boundary shall be the distance at which the incident of energy equals 5J/ (1.2 cal/cm^2).

Electrical Work

a) connecting electricity supply wiring to electrical equipment or disconnecting electricity supply wiring from electrical equipment; or
b) installing, removing, adding, replacing, repairing, altering or maintaining electrical equipment or an electrical installation

Electrical work does NOT include the following:

a) Work that involves connecting electrical equipment to an electricity supply by means of a flexible cord plug and socket outlet.

b) Work on a non-electrical component of electrical equipment, if the person carrying out the work is not exposed to an electrical risk; EXAMPLE: painting electrical equipment covers and repairing hydraulic components of an electrical/hydraulic system.
c) Replacing electrical equipment of a component of electrical equipment if that task can be safely performed by a person who does not have expertise in carrying out electrical work. EXAMPLE: replacing a fuse or a light bulb.

Qualified Person

One who has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has received safety training to identify and avoid the hazards involved.

Limited approach Boundary

The National Fire Protection Association defines the limited approach boundary as "a shock protection boundary to be crossed by only qualified persons (at a distance from a live part) which is not to be crossed by unqualified persons unless escorted by a qualified person".

Responsibilities

Employer

- Provide and demonstrate a safety program with defined responsibilities
- Provide and document employee training covering Lockout/Tag out procedures, Energized work permit and the hazards of arc flash.
- Provide personal protective equipment (PPE) for workers
- Provide appropriate tools for safe work.
- Have qualified personnel determine the degree of arc flash hazards
- Affix warning labels on equipment.
- Review the risk assessment, job briefing, planning checklist and energized electrical work permit, completed by the Qualified Electrician, prior to the commencement of work.
- Site Specific procedures and rescue plan for live electrical work to be reviewed and approved by the Employer prior to the initiation of work.

Supervisor/ Foreman

- Review the risk assessment, job briefing, planning checklist and energized electrical work permit, completed by the Qualified Electrician, prior to the commencement of work.

- Foreman must complete and thorough risk assessment and complete a detailed Daily Task Hazard Analysis specific to the job and discuss with the workers partaking in the work. This must also be approved by Senior Management.

Qualified Electrical Worker

- Attend and successfully complete all applicable training.
- Conduct a visual hazard assessment prior to all tasks. All hazards must be identified and control measures in place prior to beginning any task.
- Check all PPE to ensure it is in good working condition.
- Conduct air test and visual inspections for damage and adequacy of rubber gloves immediately before each use.
- Submit gloves for testing when the glove is suspected to be faulty and/or for semi-annual inspections
- Complete the risk assessment, job briefing and planning checklist as well as the energized electrical work permit prior to the commencement of work.
- Site Specific procedures and rescue plans for live electrical work will be written out and reviewed by qualified electrician prior to work being initiated. Procedure and rescue plan to be approved by the Employer.

Health and Safety Coordinator

- Track the assignment of all electrical gloves.
- Send out gloves for testing on a semi-annual basis.
- Review the risk assessment, job briefing, planning checklist and energized electrical work permit, completed by the Qualified Electrician, prior to the commencement of work.

Procedure

General Electrical Safety

- Only qualified electrical workers/other qualified individuals and personnel authorized by the Supervisor in charge of work shall enter a room or other enclosure containing exposed energized parts.
- The entrance of a room or other enclosure containing exposed energized electrical parts shall be

marked by conspicuous signs stating that entry by unauthorized persons is prohibited. The room/enclosure shall also be secured.

- Qualified electrical workers shall follow all lock out procedures required to complete a task.
- Dielco Electric Ltd. policy is to not perform any live work unless absolutely necessary.
- Energized electrical work must only be performed by a qualified, licensed electrician; apprentices under the trades qualification act may NOT perform such task. Apprentices may observe from a safe distance deemed by the qualified electrician and must be at least outside the limited approach boundary.
- Trades and personnel onsite must be made aware of any live test or live work being done, so that they will be less likely exposed to the hazard and as well so they have an understanding as to where the boundaries are.
- Unless the work consists only of testing or involves diagnostic voltage fewer than 300 nominal volts, a spotter (Safety Monitor) **must be in place.** A spotter's job consists of watching the workers that are within the limited approach boundary and ensure that no unqualified persons enter the work area and endanger themselves. The spotter must be competent in electrical rescue, have read and understood the site specific electrical rescue plan and have obtained first aid and CPR training.

$$D_B = 610 * \left[4.184 C_f E_n \left(\frac{t}{0.2}\right)\left(\frac{1}{E_B}\right)\right]^{\frac{1}{x}}$$

Risk Assessment

- Before any work is initiated, the authorized electrician must complete the risk assessment on the daily task hazard analysis form, job briefing and planning checklist as well as the energized electrical work permit. These documents are to be reviewed by the Employer, Health and Safety Coordinator and the jobsite Foreman.
- The Energized Electrical Work Permit must be posted in the area where the energized work is taking place for the duration of the task so as to provide information to unqualified workers that may be working near the area should be taken to ensure that both technical and behavioral failures are taken into account during the risk reduction stage of the risk assessment.
- Once those risks have been discovered, a risk assessment must be completed. The simplest way to ensure that all risks have been accounted and thoroughly thought out is through the charts from Z462-15; Figure F.1 and Figure F.3 (Appendix A).

Approach Boundaries to Live Parts

- Safe approach distances will be determined for all tasks in which approaching personnel are exposed to live parts.
- Safe approach distances to fixed live parts can be determined by referring to the formula illustrated below or by referring to Table 1A and 1B in CSA Z462- 15 (Appendix B).
- Arc Flash Protection Boundary Formula

Where…

D_B = distance of the boundary from the arcing point (mm)
C_f = calculation factor (=1.0 if voltage >1 kV; =1.5 if voltage < 1kV)
E_n = normalized incident energy
E_B = incident energy at the boundary distance (J/cm^2); E_B can be set at 5.0 J/cm^2 (1.2 cal/cm^2) for bare skin
t = arcing time (seconds)
x = the distance factor from Table D.3 (Z462-15)
I_{bf} = bolted fault current (kA)

Safe Work Practices

- The following work practices are part of all live electrical work procedures:
- When normally enclosed live parts are exposed for maintenance or repair, they must be guarded to protect people from making accidental contact. Barricades can be used.
- Safety signs and tags must be used to warn employees of electrical hazards.
- Never approach, or take any conductive object without an approved insulating handle, closer than 1 meter to any exposed energized parts. Approved electrical gloves, sleeves and/or tools must be utilized if approaching closer than 1 meter.
- Conductive items must not be worn in the vicinity or while working on exposed energized parts. Examples of items to avoid - jewelry, body jewelry, watch bands, bracelets, rings, key chains, necklaces, hair bands, conductive buttons, metal zippers or zipper parts, coins, etc…
- Always use non-conducting ladders intended for electrical work when working around electricity. Ensure the ladder is clear of oils, grease or spilled liquids which could conduct electricity.
- Do not work on circuits in wet locations or on outside outlets which don't have GFCI's (ground fault circuit interrupters) to prevent the worker's body from becoming the path to ground for 'leaking' current.
- Ensure that all electrical boxes remain accessible at all times and never place equipment, etc. in front of them. Flammable and combustible materials should not be stored in electrical equipment rooms at any time.
- Use instructions, signs, or barriers to protect people from electrical hazards. Always consider electrical equipment energized unless proven otherwise.
- Never modify electrical devices beyond the intent of their design.
- Never reach blindly into areas that might contain exposed live parts.
- Skills and Techniques to determine the following;
- Hazards associated with the specific task
- Distinguish exposed live parts from other parts of electric equipment
- Determine the nominal voltage of exposed live parts
- Understand how read to use the Ontario Electrical Safety Code book and the CSA Z462-15 Workplace Electrical Safety Code book
- Determine the approach distances corresponding to the voltages specified in the following tables from the CSRA Z462-15

- Table 1A: Approach boundaries to energized electrical conductors or circuit parts for shock protection for AC systems (distance from energized electrical conductors or circuit parts to worker)
- Table 1B: Approach boundaries to energized conductors or circuit parts for shock protection for DC systems (distance from energized electrical conductors or circuit part to worker)
- Avoid the electrical hazards associated with work inside shock approach and arc flash boundaries of exposed energized parts
- Use arc flash analysis labels or the following CSA Z462-15 tables to determine hazards, risks and appropriate protective clothing and equipment requirements.
    - Table 4C Arc Flash PPE Categories for Direct Current (DC) Systems Table 4A Arc Flash Hazard Identification for Alternating Current and Direct Current Systems
    - Table 4B Arc Flash PPE categories for Alternating (AC) Currents Systems
    - Table 5 Personal Protective Equipment (PPE)
    - Recognize the signs and symptoms of electric shock, heart fibrillation, electric burns and contacting emergency personnel at 911
    - If de-energizing equipment, after the source of power is de-energized, verify that the source is indeed de-energized.
    - Workers shall be instructed not to reach blindly into electrical equipment or into areas that might contain exposed electrical conductors or circuit parts where an electrical hazard exists.
    - Additional illumination may be needed when using tinted face shields
    - Double insulated hand tools must be used while working inside the restricted approach boundary of exposed energized electrical conductors of circuit parts and tools or handling equipment might make accidently contact. Worker is responsible for the proper care, maintenance and protection of the insulated tools. Never exceed the tool's electrical rating, and always inspect before each use.

Personal Protective Equipment

- Employees working in areas where electrical hazards are present shall be provided with and shall use protective equipment that is designed and constructed for the specific body part to be protected and for the work to be performed.
- The minimum PPE required for electrical tasks is:
    - Long sleeve shirt (natural fiber)
    - Long pants (natural fiber)
    - Safety glasses or googles
    - Hearing protection (foam inserts)
    - Leather Gloves
- Employees shall wear at least the following:
    - Rated Arc Flash apparel
    - Eye protection whenever there is a danger of injury from electric arcs, flashes or from flying objects.
    - Face Protection
- Employees shall wear nonconductive protection for the face, neck and chin whenever there is danger of injury from exposure to electric arcs or flashes or from flying objects resulting from and electrical explosion.
- Face shields without an arc rating will not be used for electrical work. Safety glasses or goggles must always be worn underneath face shields.

- Head protection- nonconductive whenever there is a danger of head injury from electric shock or burns due to contact with live parts of from flying objects resulting from an electrical explosion.
- Hand protection
- Rubber insulated gloves are to be worn when there is a danger of hand or harm contact with live parts of possible exposure to arc flash burn.
- Voltage rated gloves with leather protectors are to be used when electrical testing meters are used on exposed energized electrical conductor or circuit parts 50 volts and above.
- Gloves must be calibrated before first use and every 6 months thereafter.
- The Class 4 gloves in the category 4 kits, HVK-1 and HVK-2 must be tested every 3 months as per the Occupational Health and Safety Act.
- Employees are responsible for visually inspecting the rubber insulating gloves before each use to ensure that the gloves are in proper working order.
- Hearing protection
- Insulated footwear
- Dielectric overshoes shall be worn when insulated footwear is used as protection against step and touch potential. Insulated soles shall not be used as primary electrical protection.
- Face shields where necessary
- PPE must be put on prior to starting work on an electrical task.
- PPE must be maintained in a safe, reliable condition.
- PPE is to be inspected by the qualified wearer for damage daily before each use and immediately following any incident that is suspected to have caused any damage at all to the PPE.
- PPE that becomes damaged or contaminated with grease, oil, flammable or combustible liquids shall not be used and must be tagged as defective equipment and returned to Dielco Electric Ltd. head office for disposal and replacement.
- There are four arc flash categories is listed in the Z642-15 Table 5 “Personal Protective Equipment (PPE)” (Appendix C). Table 5 specifies the different PPE required as related to the Arc Flash categories and the minimum calorie rating. This table is to be used once the arc rating is determined using Appendix B.
- If the arc rating or arc flash boundary is not clearly labelled as required and there is no available record for maintenance of the equipment then extreme caution and the most intensive category of PPE, category 4 must be implemented to protect the worker from the unknown of working on an unmaintained piece of electrical equipment.

Rescue Procedures

- A person working on live power voltage should never be working alone. A “Spotter/ Safety Monitor” who can assist the worker, but not in the hazardous zones, should be present as required by CSA Z642-15.
- If a worker has come into contact with electricity, the worker may not be able to remove themselves from the electrical source

NOTE: DO NOT attempt to pull the person from the electrical source with your bare hands, you may be electrocuted.

1. Attempt to turn off the source of the electricity (disconnect).
2. If the electrical source cannot be turned off, use a **non-conducting** object, such as fiberglass object or a dry wooden pole, to remove the person from the electrical source.

3. Emergency medical services should be called as soon as possible

4. When the victim has been removed from the electrical source, check to see if the person is breathing and if they have a pulse. If necessary, administer CPR (if you are trained) or use an (Automated External Defibrillator (if you are trained) until emergency personnel arrive at the scene.

5. Never go near the victim that has been electrocuted by a high voltage transformer or line, even if they are no longer in direct contact with the power source, because electricity from the line or other source can arc several feet through the arc and you could be electrocuted.

NOTE: Onsite procedures specified by the owner or client may take precedence over the procedures outlined here, please consult with Dielco employer and one of Dielco's qualified electrical foremen, before conforming to their procedure, as there may be a contravention of existing codes or statutes.

Communication and Training

- Electrical safe work practices training is required for anyone working near energized or potentially energized electrical circuits of fifty (50) or more volts to ground to become Qualified Electrical worker.
- Training shall be provided when an employee is initially assigned to the job and prior to performing energized electrical work.
- Trained personnel must demonstrate a working knowledge of the Ontario Electrical Safety Code
- Training shall also be provided to employees who are not exposed to energized parts, but operate electrical equipment.
- Lockout tag out training that is required as per Schedule D of the Dielco Electric Ltd.'s Comprehensive Training Policy.
- Arc Flash High Voltage PPE Training that is required of all Dielco Electric Ltd.'s electrical foreman and lead hands. All journey persons are encouraged to complete this course as well.
- First Aid and CPR Training required for individuals who are deemed the spotter. Standard First Aid and CPR is also required by Schedule D of the Dielco Electric Ltd.'s Comprehensive Training Policy.
- Mandatory retraining is required at minimum of every 3 years or when conditions change.
- An employee must receive additional training (or retraining) when any of the following conditions are met:
    - Supervision or annual inspections indicate that the employee is not complying with Dielco's established safety related work practices
    - Safety-related work practices are not normally used during regular job duties are employed

- New technology, new types of equipment of changes in procedures require using safety-related work practices that differ from those normally used.

Documentation and Records

Training records and all documents associated with conducting live work will be filed and maintained at Dielco Electric Ltd. head office.

NOTE: It is the requirement of the employees to keep a copy of their training certificates on their persons.

Associated Documents

- Risk Assessments
- Job briefing and planning checklist
- Energized Electrical Work Permit
- Daily Task Hazard Analysis Form

Evaluation and Continuous Improvement

The procedure will be reviewed on an annual basis or as required if changes need to be made due to legislative or company changes.

Legal and Other Requirements

- Occupational Health and Safety Act, OHSA
- CSA Z642-15

Appendix A: Risk Assessment Process and Risk Assessment as Indicated in CSA Z462-15

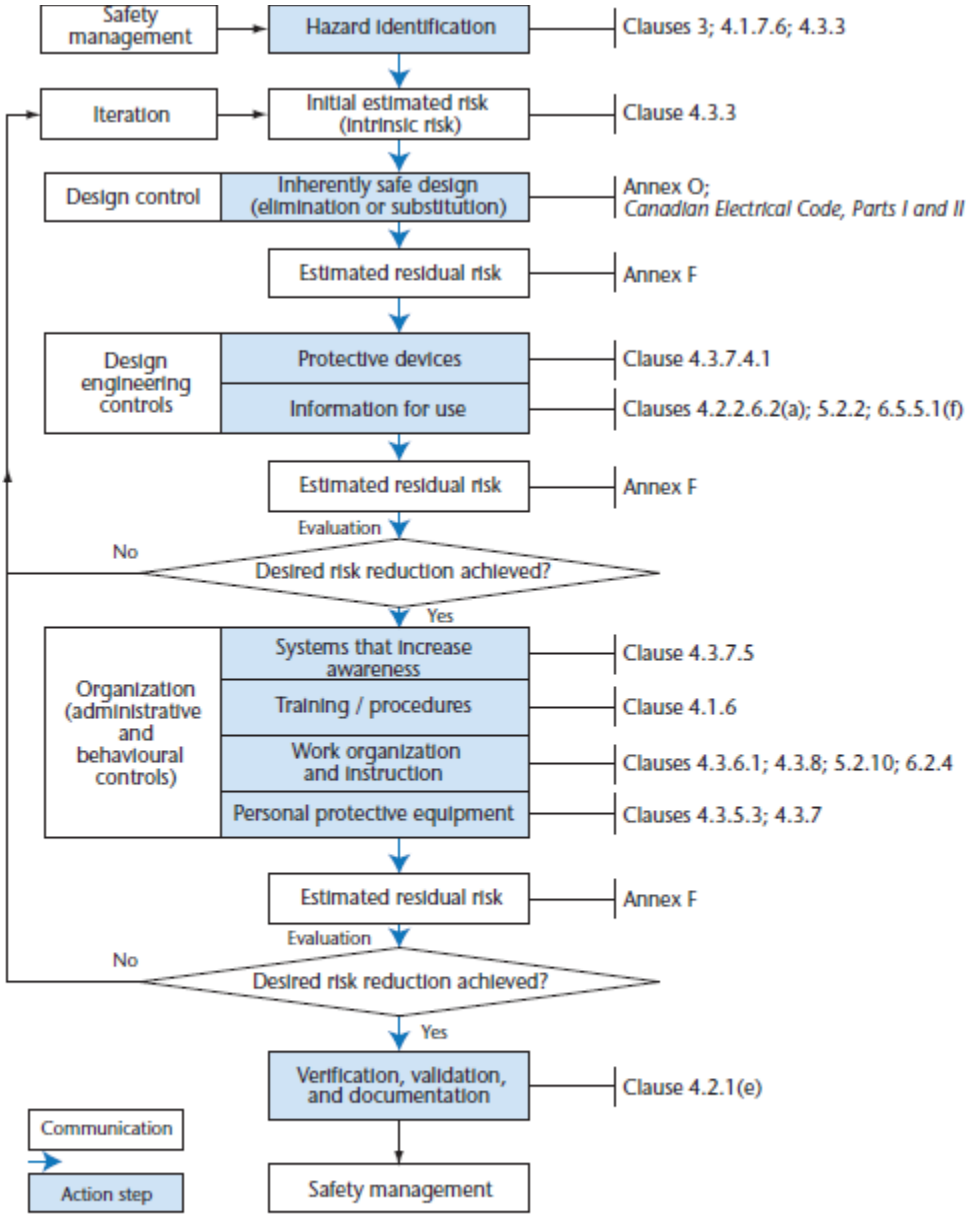

Figure F.1
Risk assessment process
(See Clause F.1.1 and F.2.5.)

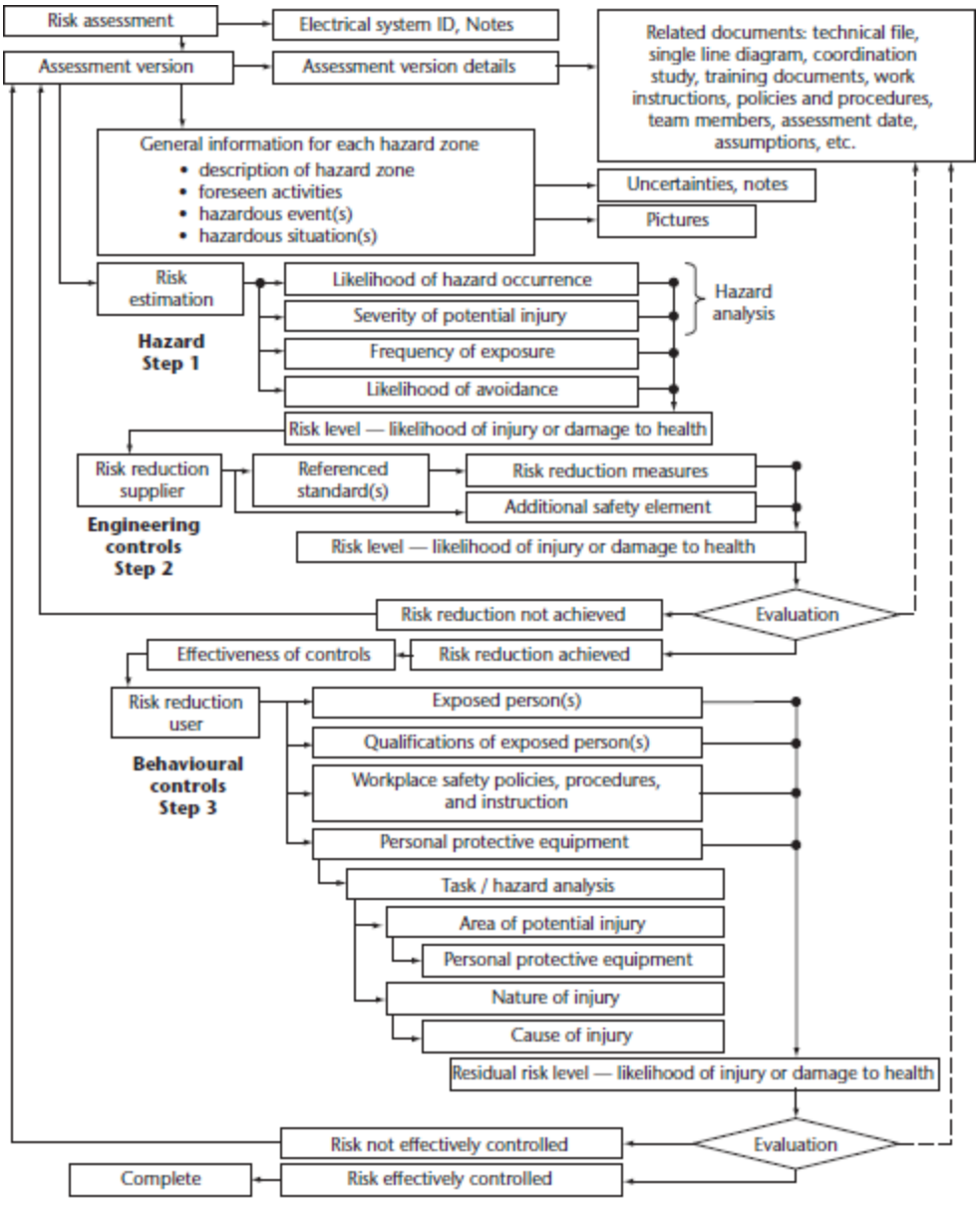

Figure F.3
Risk assessment
(See Clause F.1.1.)

Appendix B: Table 1A and Table 1B of CSA Z642-15

Table 1A
Approach boundaries to energized electrical conductors or circuit parts for shock protection for ac systems (distance from energized electrical conductors or circuit part to worker)*

(See Clauses 4.1.6.4.1, 4.3.4.2, 4.3.4.4, 4.3.7.4.11, 4.3.7.5.2, 4.3.8.5, 4.3.8.6.1, 6.2.4.1, A.1, C.2, C.2.1, and R.2.2.)

(1) Nominal system voltage range, phase to phase†	(2) Limited approach boundary	(3) Limited approach boundary	(4) Restricted approach boundary (includes inadvertent movement adder)
	Exposed movable conductor‡	Exposed fixed circuit part	
Less than 50 V	Not specified	Not specified	Not specified
50 V–150 V §	3.0 m (10 ft 0 in)	1.0 m (3 ft 6 in)	Avoid contact
151 V–750 V	3.0 m (10 ft 0 in)	1.0 m (3 ft 6 in)	0.3 m (1 ft 0 in)
751 V–15 kV	3.0 m (10 ft 0 in)	1.5 m (5 ft 0 in)	0.7 m (2 ft 2 in)
15.1–36 kV	3.0 m (10 ft 0 in)	1.8 m (6 ft 0 in)	0.8 m (2 ft 7 in)
36.1–46 kV	3.0 m (10 ft 0 in)	2.5 m (8 ft 0 in)	0.8 m (2 ft 9 in)
46.1–72.5 kV	3.0 m (10 ft 0 in)	2.5 m (8 ft 0 in)	1.0 m (3 ft 3 in)
72.6–121 kV	3.3 m (10 ft 8 in)	2.5 m (8 ft 0 in)	1.0 m (3 ft 4 in)
138–145 kV	3.4 m (11 ft 0 in)	3.0 m (10 ft 0 in)	1.3 m (3 ft 10 in)
161–169 kV	3.6 m (11 ft 8 in)	3.6 m (11 ft 8 in)	1.3 m (4 ft 3 in)
230–242 kV	4.0 m (13 ft 0 in)	4.0 m (13 ft 0 in)	1.7 m (5 ft 8 in)
345–362 kV	4.7 m (15 ft 4 in)	4.7 (15 ft 4 in)	2.8 m (9 ft 2 in)
500–550 kV	5.8 m (19 ft 0 in)	5.8 m (19 ft 0 in)	3.6 m (11 ft 10 in)
765–800 kV	7.2 m (23 ft 9 in)	7.2 m (23 ft 9 in)	4.9 m (15 ft 11 in)

**See the "Boundary" definitions in Clause 3. See also Clause 4.3.4 and Annex C.*
†For single phase systems above 250 V, select the range that is equal to the system's maximum phase-to-ground voltage times 1.732.
‡A condition in which the distance between the conductor and a person is not under the control of the person. The term is normally applied to overhead line conductors supported by poles.
§ This includes circuits where the exposure does not exceed 120 V.
Note: *For the arc flash boundary, see Clause 4.3.5.3.*

Table 1B
Approach boundaries to energized electrical conductors or circuit parts for shock protection for dc systems (distance from energized electrical conductors or circuit part to worker)*

(See Clauses 4.1.6.4.1, 4.3.4.2, 4.3.4.4, 4.3.7.4.11, 4.3.7.5.2, 4.3.8.5, 4.3.8.6.1, and R.2.2.)

(1) Nominal voltage conductor to ground	(2) Limited approach boundary	(3) Limited approach boundary	(4) Restricted approach boundary (includes inadvertent movement adder)
	Exposed movable conductor†	Exposed fixed circuit part	
Less than 100 V	Not specified	Not specified	Not specified
100 V–300 V	3.0 m (10 ft 0 in)	1.0 m (3 ft 6 in)	Avoid contact
301 V–1 kV	3.0 m (10 ft 0 in)	1.0 m (3 ft 6 in)	0.3 m (1 ft 0 in)
1.1 kV–5 kV	3.0 m (10 ft 0 in)	1.5 m (5 ft 0 in)	0.4 m (1 ft 5 in)
5.1 kV–15 kV	3.0 m (10 ft 0 in)	1.5 m (5 ft 0 in)	0.7 m (2 ft 2 in)
15.1 kV–45 kV	3.0 m (10 ft 0 in)	2.5 m (8 ft 0 in)	0.8 m (2 ft 9 in)
45.1 kV–75 kV	3.0 m (10 ft 0 in)	2.5 m (8 ft 0 in)	1.0 m (3 ft 6 in)
75.1 kV–150 kV	3.4 m (10 ft 8 in)	3.0 m (10 ft 0 in)	1.2 m (4 ft 0 in)
150.1 kV–250 kV	4.0 m (11 ft 8 in)	4.0 m (11 ft 8 in)	1.6 m (5 ft 3 in)
250.1 kV–500 kV	6.0 m (20 ft 0 in)	6.0 m (20 ft 0 in)	3.5 m (11 ft 6 in)
500.1 kV–800 kV	8.0 m (26 ft 0 in)	8.0 m (26 ft 0 in)	5.0 m (16 ft 5 in)

*See the "Boundary" definitions in Clause 3. See also Clause 4.3.4 and Annex C.
†A condition in which the distance between the conductor and a person is not under the control of the person. The term is normally applied to overhead line conductors supported by poles.
Note: *For the arc flash boundary, see Clause 4.3.5.3.*

Appendix C: Personal Protective Equipment (PPE)

Table 5
Personal protective equipment (PPE)
(See Clauses 4.3.1, 4.3.7.3.12, and 4.3.7.3.16, Tables 4A and 4B, and Annex H.)

Arc flash PPE category	PPE
1	Arc-rated clothing, minimum arc rating of 4 cal/cm^2 (Note 3): Arc-rated long-sleeve shirt and pants or arc-rated coverall Arc-rated faceshield or arc flash suit hood (Note 2) Arc-rated jacket, parka, rainwear, or hard hat liner (AN) Protective equipment: Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Heavy duty leather gloves (AN) (Note 1) Leather footwear (AN)
2	Arc-rated clothing, minimum arc rating of 8 cal/cm^2 (Note 3): Arc-rated long-sleeve shirt and pants or arc-rated coverall Arc-rated arc flash suit hood; or arc-rated faceshield (Note 2) and arc-rated balaclava Arc-rated jacket, parka, rainwear, or hard hat liner (AN) Protective equipment: Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Heavy duty leather gloves (AN) (Note 1) Leather footwear
3	Arc-rated clothing, selected so that the system arc rating meets the required minimum arc rating of 25 cal/cm^2 (Note 3): Arc-rated long-sleeve shirt (AR) Arc-rated pants (AR) Arc-rated coverall (AR) Arc-rated arc flash suit jacket (AR) Arc-rated arc flash suit pants (AR) Arc-rated arc flash suit hood Arc-rated gloves (Note 1) Arc-rated jacket, parka, rainwear, or hard hat liner (AN) Protective equipment: Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Leather footwear

(Continued)

Table 5 (Concluded)

Arc flash PPE category	PPE
4	Arc-rated clothing, selected so that the system arc rating meets the required minimum arc rating of 40 cal/cm^2 (Note 3): Arc-rated long-sleeve shirt (AR) Arc-rated pants (AR) Arc-rated coverall (AR) Arc-rated arc flash suit jacket (AR) Arc-rated arc flash suit pants (AR) Arc-rated arc flash suit hood Arc-rated gloves (Note 1) Arc-rated jacket, parka, rainwear, or hard hat liner (AN) Protective equipment: Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Leather footwear

Legend: AN = as needed (optional); AR = as required; SR = selection required

Notes:

(1) *Arc rating is defined in Clause 3.*

(2) *Faceshields shall meet the requirements of Clause 4.3.7.3.10 (c). An arc flash suit hood may be worn in lieu of a face shield.*

(3) *If rubber insulating gloves with leather protectors are used, additional leather or arc-rated gloves shall not be required. The combination of rubber insulating gloves with leather protectors satisfies the arc flash protection requirement.*

PRE-JOB HAZARD ASSESSMENT

DIELCO ELECTRIC LTD.

JOB SITE/#:		
COMPLETED BY:	DATE:	SUPERVISOR:
WORK PLAN/PLANNED ACTIVITY:		WEATHER:

Hazard Risk Level – S2 Serious such as a critical injury, S1 Slight Injury such as a first aid injury, S0 Not likely to cause an injury

TASKS	HAZARDS AND RISK LEVEL	PLANS TO ELIMINATE/CONTROL HAZARDS

Potential Hazards Checklist

ERGONOMIC HAZARDS	ACCESS/EGRESS HAZARDS			
☐ Repetitive Motion	☐ Proper Signage	☐ Hot Work/Electrical Permit	☐ Housekeeping	☐ Dust/Mist/Fumes
☐ Heavy Lifting	☐ Slips/Trips Possible	☐ Electrical Tools/Cords	☐ Public Protection	☐ Mobile Equipment
☐ Awkward Postures	☐ Falling From Heights	☐ Explosive Hazard	☐ Asbestos (Potential)	☐ Driving/Operating
☐ Overexertion	☐ Aerial Lift/Man Basket	☐ Lockout/Tag-out	☐ Crowded Work Area	☐ Walking/Climbing
☐ Pinch Points	☐ Scaffold (Inspected)	☐ Overhead Power Lines	☐ Other	☐ Traffic Control
☐ Body in Line of Fire	☐ Ladders (Tied-off)	☐ Temporary Power	**PPE REQUIREMENTS**	☐ Noise (Extreme)
☐ Working Above Head	☐ Hoisting (Tools/Equip)	☐ Voltage 600V	☐ Foot Protection	**REVIEWED TODAY**
☐ Congested Areas	☐ Excavation/Trenching	☐ Voltage above 600V	☐ Eye/Face Protection	☐ Fire Protection
☐ Vibration	☐ Other	☐ General limits of approach (Arc Flash) reviewed	☐ Head Protection	☐ First Aid Room
☐ Unleveled Surfaces	**PERSONAL HAZARDS**	☐ Other	☐ Hand Protection	☐ Eyewash/Shower
☐ Other	☐ Clear Instruction Provided	**PROCEDURES REQUIRED**	☐ Hearing Protection	☐ Muster Point
WORK AT HEIGHT HAZARDS	☐ Trained for Task/Tools	☐ Confined Space	☐ Respiratory PPE	☐ Emergency Plan
☐ Barricading/Flagging	☐ First Time Perform. Task	☐ Fall Protection	☐ Arc Rated PPE	☐ Incident Reporting
☐ Hole (Coverings in Place)	☐ Distractions in Area	☐ Craning & Rigging	☐ High Visibility Apparel	☐ Nearest Phone
☐ Falling Objects	☐ Physical Limitations	☐ Excavation	☐ Protective Clothing	☐ Signage/Barricades
☐ Elevating Work Platform	☐ Mod. Work Limitations	☐ JSA Reviewed	☐ Multi-Gas Monitor	☐ Required Permits
☐ Working overhead/below	☐ Teamwork Required	**SITE CONDITIONS**	☐ Other	☐ Tools/Equipment
☐ Fall (100% tie-off)	☐ Working Alone (Call In)	☐ Lighting Levels	**ACTIVITY HAZARDS**	☐ Work Around Others/
☐ Anchor Points Inspected	☐ Other	☐ Weather Conditions	☐ Welding/Grind/Cutting	
☐ Ladders (Inspected)	**ELECTRICAL HAZARDS**	☐ Heat/Cold Exposure	☐ Coring (permit required)	
☐ Rescue Plan	☐ Shock Hazard/GFCIs	☐ Air Quality	☐ Compressed Gases	
☐ Fall Arrest/Restraint	☐ Working On/Near Energized Conductors/Bus	☐ SDS Reviewed	☐ Hoisting/Lifting	
		☐ Spill Potential	☐ Burn/Heat Sources	

Print Name	Signature Reviewed PJHA	I am fit for my duties? Yes	No

Rescue/Emergency Plan

☐ Emergency #_____

☐ Ladder Assist ☐ EWP Assist ☐ Tri Pod ☐ Davit Arm
☐ First Aider ☐ Other_____
☐ PPE_____

Details:_____
_____
_____

BY SIGNING THIS DOCUMENT, I HAVE READ, UNDERSTOOD AND PARTICIPATED IN THE PRE-JOB HAZARD ASSESSMENT AND I AM REPORTING FIT FOR MY DUTIES. I MUST REPORT ANY INCIDENT/INJURY/NEAR MISS TO MY SUPERVISOR BEFORE LEAVING THE SITE. I UNDERSTAND IF TASK CREEP OCCURS OR THE JOB CHANGES SIGNIFICANTLY I AM TO STOP AND REAFFIRM THIS PJHA OR COMPLETE AN ADDITION PJHA.