Occupational Health and Safety Basics

Purpose of the Guide

This guide is designed to help employees and employers understand some of the key elements of their responsibilities for the creation and maintenance of a safe and healthy workplace. The requirements highlighted in this guide are not intended to be comprehensive, but rather to serve as a starting place for understanding how to ensure a safe and healthy workplace. Many of the elements highlighted here are drawn from the Occupational Health and Safety Act, and the specific regulations developed in support of that Act. The requirements of each workplace will vary, and employers are responsible for ensuring their workplace is in compliance with the Act and various regulations.

Employers should, as a part of their approach to ensuring a safe and healthy workplace, review all the relevant legislation, and determine which parts of the legislation and regulations relate to their workplace and operations. Working with an Occupational Health and Safety Committee, or an Occupational Health and Safety Representative to review the requirements and take necessary action will help ensure all aspects of the work environment are considered, and that the workers have an opportunity to participate effectively. Undertaking the actions outlined in this guide will only be a start. Ensuring you are in compliance with all the relevant legislation is an important beginning, creating a culture where people work

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co-operatively to identify and resolve health and safety issues is an important part of working effectively and efficiently, while ensuring no one is unnecessarily placed at risk.

The information provided is not intended to be a substitute for the *Act* and should not be considered an authoritative legal directive. The guide provides both a summary of the requirements of the *Act* and suggestions that serve as guidelines to what individuals and organizations could do as a matter of good practice. A complete reading of the *Act* and Regulations is necessary.

Other sources of information

For information about Regulations or enforcement, contact:

Occupational Health and Safety Division Nova Scotia Department of Environment and Labour P.O. Box 697 Halifax, NS B3J 2T8

Phone: 1-800-952-2687 (Toll free in Nova Scotia) or 424-5400

Homepage: www.gov.ns.ca/labr/ohs

E-mail: labrohs@gov.ns.ca

For information about preventing injuries and illnesses, contact us.

The Occupational Health and Safety (OHS) Act

The Occupational Health and Safety Act (OHS Act) applies to all employers under provincial jurisdiction (not federal or federally regulated). This legislation outlines the fundamental rights and responsibilities of workplace parties relative to occupational health and safety. Employers specific and general responsibilities, employee responsibilities, responsibilities of contractors and constructors, suppliers, engineers and architects are a few of the areas addressed by the Act. In addition it defines the requirement for, and role of the Joint Occupational Health and Safety (JOHS) Committee, the Occupational Health and Safety (OHS) Representative, and the requirement for, and components of, an Occupational Health and Safety Program.

The *Act* also defines the role of the Occupational Health and Safety Division of the Department of Environment and Labour, particularly as it relates to enforcement and education initiatives. The authority to conduct workplace inspections and accident investigations is an example of the authority contained in the *Act*. Also defined are the penalties for not complying with the *Act* or the Regulations associated with the *Act*. The *Act* establishes mandatory minimum standards for occupational health and safety in the workplace and provides the legal basis for specific regulations (Safety General, First Aid, Fall Protection, WHMIS, Health...), which outline requirements relative to specific topics in more detail.

The foundation upon which the *Act* is built is the Internal Responsibility System. The Internal Responsibility System (IRS) is based upon the principle that employees and employers share in the responsibility for creating and maintaining a safe and healthy workplace.

Occupational Health and Safety: Why should I be concerned?

Human Costs

Workplace injury and illness have far reaching impacts for workers, managers, employers and families. No one wants to be hurt on the job, or suffer a work related illness. One in 31 Nova Scotia employees will suffer a serious injury this year, and the statistics are much higher for young workers. Injuries often result in permanent disability, trauma or loss of abilities. Many injuries in the workplace can have life long impacts. Some other reasons for concern relative to workplace injury and illness include: lost work time; lost income; plus pain and suffering on the part of the victim and their family.

Employer Costs

As an employer, costs resulting from workplace injury and illness can be considered as *Direct*:

those where the cost is obvious, and *Indirect*: those where the impact may not be quite as obvious. Direct costs of an accident or injury include: lost work time by the victim; damage to equipment; associated medical, or compensation costs. Less obvious, but often more significant, are costs such as:

- hiring of additional temporary staff to replace the victim;
- retraining staff to take on the role of the victim;
- repair / replace equipment damaged in the incident;
- injury or illness can be devastating to employee morale;
- lost productivity due to residual concerns regarding worker health or safety;
- shut down time while an investigation is conducted internally or by agencies such as the Occupational Health and Safety Division of the Department of Environment and Labour;
- time and staff required to complete necessary paper work claims, reports.

In addition to these human and financial costs, there may also be legal costs associated with injuries or illness in the workplace. The above impacts may result in missed contract deadlines, with potential costs or legal implications. Legal liabilities may be an issue, as well as possible prosecution where the investigation indicates a failure on the part of a workplace party to fulfill their obligations to ensuring a safe and healthy workplace. Prosecution under the *Occupational Health and Safety Act* can result in both fines up to \$250,000 and imprisonment up to two years.

Creating a safe and healthy workplace is not only an investment in the well being of employees and managers, but also a wise business decision.

Internal Responsibility System (IRS)

The Internal Responsibility System (IRS) is the foundation of the *Occupational Health and Safety Act* and the basis of occupational health and safety in the workplace.

Central to the IRS is the concept that all workplace parties share responsibility for the health and safety of persons at the workplace. Employers, constructors, contractors, employees, unions, suppliers, engineers, and architects all share responsibility for ensuring a healthy and safe workplace.

Since people don't always agree, duties or requirements defined in the *Act* are imposed primarily on the person with the greatest degree of control in the workplace. This means that the person with the authority to act has the responsibility to act to prevent injury or illness. The OHS Division of the Department of Environment and Labour supports IRS and intervenes when parties fail to meet their commitments. Normally, however, it is expected that the workplace parties will be able to work together to take the steps necessary to prevent injury and illness.

Employer Responsibilities

Employers must take <u>every reasonable precaution</u> to ensure the health and safety of persons at the workplace. This means they are responsible for ensuring the workplace is safe and

workers are not exposed to processes or substances that could result in a workplace illness. The *Act* identifies some specific responsibilities, which include ensuring that:

- equipment has proper safety devices. This means all safety devices must be in place and functional and that, where equipment may pose a hazard, safety devices must be fitted.
- employees know the proper use of safety equipment. Where safety equipment is available or in place, it is critical that employees know how to use the equipment properly. A respirator, for example, is of little value if not used properly. Safety equipment may be as simple as a "push stick" for a table saw, but if not used properly, it will not prevent injury or illness.
- people have the necessary information, training, supervision and facilities. This requires that employees, supervisors and managers must have the necessary information to be able to be safe. This means knowing about hazards associated with the work they are doing, and how to do it safely. If handling hazardous materials or using toxic cleaners, for example, they must know how to use them safely, what the hazards are and what to do in an emergency. Training also is a requirement to ensure people know how to do the work safely. Adequate supervision is required to ensure people don't place themselves at risk by doing work they cannot do safely. The facilities, such as the work area, must also be sufficient so as not to create a hazard. An unsafe building, or hazardous walkways, might be examples of not having the necessary facilities to ensure health and safety.
- hazards are identified and both employees and supervisors are made familiar
 with hazards and how to avoid injury or illness. Hazards must be clearly identified,
 the employees and supervisors made familiar with the hazards, and how to do the work
 safely. It is not sufficient to simply not know what the hazards are. Employers are
 responsible for ensuring they are familiar with the hazards associated with all aspects of
 the work, and that a safe means of doing the work is identified and shared with the
 employees and supervisors.
- work is done in a manner that does not expose employees to hazards. Building on the last point, employers are responsible for ensuring that the work is done in a manner that does not expose workers to hazards, or that every reasonable precaution has been taken.

Constructors and contractors have an additional responsibility to ensure health and safety information is communicated to all parties in the workplace. For example, a number of employers may be working on a construction site. In this case, the constructor is responsible for ensuring all the various trades or employers are aware of hazards.

Employee Responsibilities

Employees have responsibilities too. Employees must take every reasonable precaution to protect their own health and safety, and that of others. So, where they have the ability to make a situation safe, they have an obligation to do it. In addition, they must:

- co-operate with the employer and other employees in matters relating to health and safety;
- ensure the use of protective devices, equipment and clothing. Each employee is
 responsible for ensuring they use proper protective devices, equipment or clothing. This
 means that, where equipment such as fall arrest is required, the employee is
 responsible for ensuring they use it.
- report any hazard to a supervisor, and if not resolved, to the JOHSC or the OHS
 Division of the Department of Environment and Labour. Where an employee
 identifies a hazard, unsafe act or unsafe condition that they are not able to resolve, they
 have an obligation under the Act to report the hazard, condition or act to their
 supervisor. If the supervisor does not resolve the situation, the employee's responsibility
 is to report it to the JOHS Committee. If there isn't one, or it fails to act, it must be
 reported to the OHS Division of the Department of Environment and Labour. This is an
 obligation under the Act, and failure to report a hazard, condition or act could result in
 prosecution.

Occupational Health and Safety Policy

Another key element to ensuring health and safety in the workplace is the preparation of an occupational health and safety policy. The OHS policy is a statement of the employer's commitment to OHS. Like a mission statement, it is an opportunity for the employer to define their commitment to health and safety, make it a company policy and ensure employees and managers are aware of what the company policy is relative to OHS. In this way, everyone will understand that health and safety is an important value within the company.

In a company with **5 or more employees**, an OHS policy is required by the *Act*. In addition to expressing the company's commitment to health and safety, the policy must include:

- the reasons for commitment (such as concern for employees, recognition that safety and health are important business management issues, etc.);
- its commitment to co-operate with employees; and
- a definition of the responsibilities of the employer, supervisors and employees (what part each is expected to play).

For further information, read A How-to Guide for an Occupational Health and Safety Policy & Program.

Occupational Health and Safety Program

A written occupational health and safety program is a means of bringing all the various elements of occupational health and safety together. In this way, the various components of an effective approach to managing health and safety in the workplace can be integrated so the elements support each other, without overlapping. The written program also makes it easier to manage the various components, and to demonstrate that you have an active program in place

should an OHS Officer conduct an inspection, or an incident occur in the workplace. Of course it's not enough to simply have a written program, the elements of the program must be in place and active in the workplace.

While any employer may develop and implement an OHS program to ensure the health and safety of workers and managers, all employers with 20 or more employees in the organization are required to have a written program in place. This means all companies with 20 or more employees, regardless of their location within the province, are required to have a program in place. An employer with 5 employees at each of four locations, for example, would require a program. The program must be developed in consultation with the Joint Occupational Health and Safety Committee or an OHS Representative, if they are required in the organization. The purpose of the OHS program is to implement the OHS policy and the elements of the OHS Act as appropriate to the size and complexity of the employer.

The program must include provision for the following required elements, many of which are familiar as employer responsibilities otherwise required under the *Act*:

- **training and supervision.** Adequate training to ensure health and safety and adequate supervision to ensure the work is done safely are required;
- written work procedures. Written ways to do work safely are required where hazards exist in the workplace;
- establishment of a Joint Occupational Health and Safety Committee (JOHSC).
 Required where an employer meets the criteria. See the section on JOHSC;
- a selection process for an employee representative. Required where an employer meets the criteria. See the section on OHS Representatives;
- hazard identification system. A formal means of identifying hazards in the workplace,
 which will typically include a planned program of workplace inspections by the JOHSC and
 manager to identify hazards; Job Task Analysis to identify hazards within work processes
 and procedures, or with people, equipment, materials or the environment; planned
 observations where people are observed at work to identify any hazards; and consultation
 with the workers. A system for ensuring the reporting of hazards must also be included;
- health and safety monitoring. Includes a process for identifying when and where hazards exist, and ensuring there is prompt follow up and control of any hazards;
- investigation of hazardous occurrences. Required to ensure that incidents resulting in injury or illness, or "near misses", those incidents that might have resulted in injury or illness, are investigated, the cause identified and actions taken to ensure there is not a recurrence;
- maintenance of records. Records of inspections, investigations, and statistics relative to occupational health and safety must be maintained;
- program effectiveness monitoring. An important aspect of a program. This requires that
 the program be evaluated to ensure it is effective in managing risk and eliminating injury

and illness to the extent possible. This is normally undertaken with the JOHS Committee or OHS Representative, and can include things such as analysis of injury or illness rates, corrective actions taken, surveys of employees, etc.

For further information, read A How-to Guide for an Occupational Health and Safety Policy & Program.

Employee Rights

You have the Right to:

- **Participate** in the creation of a safe workplace; and on any Joint Occupational Health and Safety Committee, or as an OHS Representative;
- Know about workplace hazards; and
- Refuse unsafe work.

These are the three fundamental rights of employees in the workplace, which are created by the *Occupational Health and Safety Act*.

Right to Participate: Joint Occupational Health and Safety Committees (JOHSC)

The right to participate ensures workers the opportunity to participate with the employer in the management of health and safety in the workplace. The way this is put into place is either through an JOHS Committee or an OHS Representative. Both as a member of the JOHSC and as the OHS Representative, employees have a direct way to participate in the management of health and safety, as well as a representative voice they can go to with any concerns relative to health and safety in the workplace.

A JOHS Committee is a group formed by the employer, working together with the employees, to improve health and safety at the workplace.

A JOHSC is required where 20 or more persons are employed at a workplace or construction project. Unlike the requirement for an occupational health and safety program in which the employees in the total organization are counted to determine if a program is required, the requirement for an JOHSC is based on the *number of employees at a specific workplace*. If there are 20 employees at the store, outlet, plant, etc., then a committee is required. If, however, the company has 5 employees at each of four locations, they will not require a committee at any of the locations, although they may choose to establish one to assist in the management of safety. Where the workplace is a construction project, and there are at least 20 employees on the project (need not be from the same employer), a Project Committee will be required.

Where a JOHSC is required, it must be composed of at least 50% non-management employees, selected by the employees themselves or their union. The role of the JOHSC includes:

- Identifying hazards;
- Providing effective systems to respond to hazards:

- Auditing of compliance with OHS requirements;
- Addressing OHS complaints and concerns from workers;
- Participating in inquiries, inspections and investigations;
- Providing advice about protective devices and clothing;
- Advising about OHS policy and program; and
- Investigating and making decisions about work refusals (see section on work refusals).

For further information, read Joint Occupational Health and Safety Committees: A Practical Guide for Single Employer Workplaces, or Construction Project Joint Occupational Health and Safety Committees: A Practical Guide.

Right to Participate: Occupational Health and Safety (OHS) Representative

The OHS Representative is an individual selected by the employees to bring health and safety concerns before management. An OHS Representative is normally required where there are five (5) or more employees in the workplace but less than 20 regularly employed employees.

The function of the OHS Representative is similar to that of the JOHS Committee, apart from the fact that the OHS Representative does not have a role in the investigation of work refusals. Some typical activities include:

- · participating in workplace inspections;
- · identifying hazards;
- making recommendations about ways to address the hazards;
- making recommendations about necessary safety equipment or personal protective equipment; and
- investigating employee complaints and recommending action to management.

Right to Know

A fundamental principle of occupational health and safety, and an employee right established by the *Occupational Health and Safety Act*, is the employee's right to know about hazards in their jobs and the workplace, and how to work safely around these hazards. Obviously, this requires the identification of hazards, and the communication of the hazards to both supervisors and employees. While the systematic identification of hazards is necessary where a requirement exists for an OHS program, all employers share an obligation to identify hazards in the workplace whether they be associated with chemicals, work processes, machinery, or even other people in the case of the potential for workplace violence. Information about these hazards must be shared with employees and their supervisors, a means of working safely must be identified and employees must be instructed in how to accomplish the work safely. In the case of working at height, for example, the employer must ensure employees and supervisors understand the hazards and how to work safely. This could include the use of fall arrest harnesses, in which case the employer must ensure the employees know how to use the harness and, in fact, actually use it when exposed to the hazard of working at height such as on a roof.

In addition to ensuring employees and supervisors are aware of hazards and how to work safely, there are also a number of requirements for sharing information. Recommendations or

requests for information relative to health and safety from a JOHSC or OHS Representative must be responded to by the employer within 21 days. The names of the JOHSC members or OHS Representative and how to contact them must be posted, along with a copy of the *Occupational Health and Safety Act* and the phone number for the OHS Division of the Department of Environment and Labour. JOHSC minutes must be posted, and any orders issued by an OHS Officer must also be posted.

Right to Refuse

Any employee may refuse to do any act where he/she has reasonable grounds to believe that it is likely to endanger him/her or the health or safety of any other person. The employee may continue to refuse until:

- the employee is satisfied the concern has been addressed; or
- the JOHSC has investigated and unanimously advises the employee to return to work;
- an OHS Officer from the Department of Environment and Labour has investigated and advised the employee to return to work.

For more information, read Your Rights, Responsibilities and the Occupational Health and Safety Act.

Occupational Health and Safety (OHS) Officers and their Role

The Occupational Health and Safety Division of the Department of Environment and Labour is responsible for ensuring compliance with the *Occupational Health and Safety Act*, intervening when the Internal Responsibility System is not working effectively, and providing education. OHS Officers are the field-based staff who work directly with employers, employees and their representatives to ensure workplaces meet the requirements of the *Occupational Health and Safety Act* and various OHS Regulations. Some typical activities for an OHS Officer include:

- inspecting workplaces to ensure the IRS is working effectively and that the employer is in compliance with the OHS Act and Regulations;
- investigating accidents and complaints;
- advising workplace parties about responsibilities, results of investigations;
- obtaining expert advice about conditions or situations;
- providing education and awareness sessions;
- issuing orders to achieve compliance; and
- initiating prosecutions for lack of compliance or failure to obey an order.

To achieve the objective of safe and healthy workplaces, OHS Officers are permitted to enter a workplace at any reasonable time of the day or night. The have all the powers of a peace officer under the Criminal Code. It is also unlawful to obstruct or interfere with an OHS Officer, and managers and employees are obliged to co-operate with the OHS Officer. To ensure compliance with the OHS Act and Regulations, OHS Officers have the power to issue orders. Orders are directives based on the Act or Regulations and must be complied with, subject to appeal to the Director at the Department of Environment and Labour. OHS Officers may issue

orders:

- to a person requiring actions to achieve compliance;
- to employers and others to conduct tests, assessments or obtain reports; and
- to a person to stop work where a source of danger or hazard is present.

A compliance notice must be submitted to the OHS Officer confirming the order has been carried out within the time frame allocated by the OHS Officer.

Accident Notification

When an incident occurs in the workplace resulting in serious injury, or if a fire occurs in the workplace, written notice must be sent to the Director, OHS at the Department of Environment and Labour, within seven (7) days. Notice of an accidental explosion, regardless whether there are injuries or not, must be provided within 24 hours. Any incident resulting in a person being killed, or receiving injuries that may be fatal, must be reported to the Director within 24 hours.

Accident Scene

When an incident occurs that results in serious injury or death, the accident scene cannot be disturbed except to:

- attend to persons injured or killed;
- prevent further injuries; or
- protect property that is endangered.

OHS Officers will either respond and investigate, or release the scene.

Provision of First Aid in the Workplace

Every employer must have a First Aid Attendant available in case of emergency. The person identified as the Attendant must hold a valid and appropriate First Aid Certificate. Where there are fewer than 20 employees, the Attendant must hold at least an Emergency First Aid Certificate. Where there are 20 - 100 employees, the Attendant must hold a Standard First Aid Certificate. In addition, any employee working alone for significant periods of time requires an Emergency First Aid Certificate.

First aid kits must also be available in the workplace, as follows:

- from 2 to 19 employees, a # 2 First Aid kit;
- from 20 to 49 employees, a # 3 First Aid kit. Supplementary supplies are required for 50+ employees.

Kits must be:

kept clean and dry;

- · made visible and accessible; and
- checked for expiry, ensuring that all used materials are replaced.

Hazardous Materials in the Workplace

Controlled products pose special hazards in the workplace and are subject to the Workplace Hazardous Material Information System (WHMIS) Regulation. This Regulation requires that employers ensure:

- all controlled products in the workplace have a supplier label that meets the requirements for necessary information, or a workplace label;
- all controlled products in the workplace have a Material Safety Data Sheet, which is less than three years old; and
- all employees who handle or are exposed to controlled products have generic WHMIS training and specific training in the handling, storage, use and disposal of controlled products.

For further information, read A Guide to WHMIS: The Workplace Hazardous Materials Information System.

Persons Working at Height or over a Hazard

Where persons are working 3m or more above a surface, or over a hazard, adequate fall protection must be in place. This can include barriers, railings, scaffolding, fall arrest harnesses, etc., or use of specialized equipment such as movable stairs, or scissor lifts. The Fall Protection and Scaffolding Regulations set out the specific requirements for working at height and safe use of scaffolding and lifts. Working on roofs is also specifically addressed in the Regulation, and the requirements vary depending on the slope of the roof. Persons whose work involves working at height, whether that might be in a warehouse stocking high shelves or in construction, should obtain a copy of the Fall Protection and Scaffolding Regulation to determine how it applies to their workplace.

General Safety Management

The Occupational Safety General Regulation (OSGR) addresses a broad range of activities relating to workplace health and safety. Included in the OSGR are a number of sections:

- 1. Definitions;
- General:
- 3. Personal Protective Equipment;
- 4. Ventilation, Lighting, Sanitation and Accommodation:
- 5. Handling and Storage of Material;
- 6. Lock-Out:
- 7. Hoists and Mobile Equipment;
- 8. Mechanical Safety;
- 9. Tools:
- 10. Welding, Cutting, Burning and Soldering;

- 11. Electrical Safety;
- 12. Confined Space Entry;
- 13. Premises and Building Safety, Construction and Demolition;
- 14. Excavations and Trenches:
- 15. Surface Mine Workings; and
- 16. Equipment for Firefighters.

The following sections represent a very few of the topics addressed by the OSGR, but reflect some of the areas which have been identified as frequent concerns that relate to a broad range of workplaces. Since this Regulation is very specific, employers should review the regulation itself to determine if there are sections that apply to them. Persons engaged in construction, or industries such as manufacturing, will find the Regulation has significant references to activities in their workplaces. The Regulation applies to all workplaces.

Use of Personal Protective Equipment (PPE)

Based on an assessment of the hazards in the workplace, employers must ensure appropriate selection and use of personal protective equipment considering:

- the nature of the task;
- the location and condition of the workplace; and
- other hazards that may affect health and safety.

Where personal protective equipment is required, the employer must ensure:

- employees are trained in the use and care of the PPE;
- employees wear PPE according to instruction and training;
- PPE is maintained, tested and inspected before use in accordance with manufacturer specifications; and
- defective equipment is not worn until repaired.

PPE is generally considered a last line of defense, and employers should consider other protective measures such as elimination of the hazard, or engineering solutions to protect employees from the hazard before, or in addition to, considering PPE. Some examples of PPE in the workplace might be acid resistant aprons, face shields, safety glasses, respirators, gloves, safety boots, fall arrest harnesses and face masks.

Provision for Personal Hygiene

The Occupational Safety General Regulation (OSGR) contains a number of sections dealing with personal hygiene and, specifically, provision of toilet facilities and hand washing. The Regulation specifies the number of toilets to be provided for each gender by way of a counting formula. Where there are nine or fewer employees, a single toilet facility for all staff is acceptable, provided it has a locking door. If there are 10-23 employees, two separate toilet facilities must be provided, one for each gender. For staff numbers over 23, please refer to Part 4 of the OSGR.

In addition to toilets, hand-cleaning facilities must be provided where reasonably practicable. Again, the Regulation addresses specific situations. An eye-wash fountain, or equivalent, must also be provided where a hazard to the eye exists.

Fire Protection

Fire protection is a significant concern in workplaces and this is addressed by the Occupational Safety General Regulation (OSGR). The Regulation requires "adequate" fire protection, so the degree of fire protection must take into account the nature of the work being performed, materials in the workplace, potential for a fire, and so on. All fire equipment in the workplace must be maintained in accordance with manufacturer specifications, and a safe means of exit must be provided. Exit doors cannot be locked unless everyone has a key.

Electrical Hazards

Electrical hazards are another significant area of concern. The Occupational Safety General Regulation (OSGR) addresses a broad range of topics relative to electrical safety from defining who can work on electrical equipment to what can be stored in an electrical room. Those with employees working on or near electrical lines or equipment should refer to Part 11 of the Regulation.

One of the major areas of concern relative to electricity is contact with power lines. Constructors working near electrical entrances on buildings and houses, or with heavy equipment such as excavators and cranes, or on concrete pump trucks working near live power lines are examples of past situations resulting in injury or death. The following table sets out limits for working near energized power lines:

- If voltage of overhead energized power line is unknown no work within 6m
- If voltage is less than 750v work at an adequate distance to ensure safety
- If voltage between 750 and 69,000v no work within 3 m
- If voltage is between 69,000 138,000v no work within 5m
- If voltage greater than 138,000v no work within 6m

No work may be undertaken at distances less than those specified, unless the power authority has insulated or guarded the lines, or an equivalent means of protection is provided.

Handling and Storage of Material

Part 5 of the Occupational Safety General Regulation (OSGR) devotes a good deal of attention to the storage and movement of material, ranging from moving debris on a construction site to lifting people in a health-care facility. The following are a few areas of common concern:

- The employer must provide appropriate equipment for lifting or moving people or things;
- Training must be provided on appropriate method of lifting or moving; and
- Material must be stored in a safe manner and not interfere with lighting, ventilation, safe movement, etc.

Tools and Equipment

Many workplaces use a variety of tools and equipment in their work. Parts 8 and 9 of the Occupational Safety General Regulation (OSGR) set out standards that apply to equipment and tools in a dentist's office, to manufacturing equipment, or to a carpenter's table saw. Again the following are just a few areas of significant concern:

- Tools and equipment must be safe and appropriate for the work;
- Tools and equipment must be installed, used, inspected and maintained in accordance with manufacturer specifications; and
- Tools and equipment should be assessed for any specific hazards or safe-use requirements (e.g., tire repair cage requirement).

Occupational Health

Maintaining a healthy workplace means ensuring employees are not exposed to materials, vapours, gases, etc., that could result in occupational illnesses. Some key considerations in this area include:

- Employers must ensure an adequate supply of fresh air;
- Harmful gas, vapour, dust or impurity produced in the workplace must be removed; and
- Standards relating to gases, vapours, mists, fumes, smoke, dust, other chemical substances and physical agents in the workplace are not to exceed <u>Threshold Limit</u> Values (ACGIH).

Facility Safety

Maintaining a safe workplace extends to the structure or building in which people work, including structures under construction. The Occupational Safety General Regulation (OSGR) specifies particular requirements that must be met in existing structures, as well as to buildings under construction. It also specifies conditions that apply to all workplaces from office buildings to industrial facilities. The following are some highlights:

- Walking surfaces, including floors and stairways, must be designed, constructed and maintained so as not to create a hazard;
- Slippery conditions must be eliminated, or action taken to prevent slipping (such as salting or sanding of ice, use of non-slip footwear, or grating on slippery floors);
- Ladders used in any workplace must be grade 1 or 2 only (not grade 3);
- Lighting must be adequate, and emergency lighting provided as necessary;
 and
- A safe means of access to, and exit from, all workplaces must be provided.

Workplace Ergonomics

Ergonomics is the science that aims to design work and the workplace to fit the needs of people in order to optimize health, safety and human performance. It can be applied in EVERY workplace!

Signs that your workplace may be lacking in ergonomic design:

- workers with soft tissue injuries, such as back injuries, joint injuries, ill-defined muscular aches and pains, etc.;
- high rates of absenteeism;
- high turnover of employees; and
- lots of mistakes, rework, scrap, or other sign of poor quality.

These problems may exist in one or more work areas (i.e., certain jobs), or across the workplace.

What can you do?

- **1. Review** your injury records, WCB claims, absenteeism and turnover rates. Clearly define any problem(s) you identify;
- 2. Isolate the problem work area or task(s) as specifically as you can;
- **3. Collect information** about the problem job/task(s):
 - What steps are required?
 - How often is the task repeated?
 - Who performs the job/task?
 - What tools and equipment are required?
 - Under what conditions is the job/task performed?
 - What are expected levels of productivity, quality, other workplace indicators?

Note: Supervisors and workers are a valuable source of information.

If you think you have an ergonomics-type problem, you may require assistance to properly identify the root of the problem and to help you develop appropriate solutions. Further information is available on the Internet, in books, and from consultants. The OHS Division of the Department of Environment and Labour's Ergonomics Specialist may be able to provide direction on where to go next.

4. Develop corrective measures: tools, procedures, systems, etc., to address the issue.

By-stander Safety

Employers must take adequate precautions to ensure the safety of pedestrians or other persons at or near the workplace.

Due Diligence

"Due diligence" is a legal defense in the case of a strict liability offence such as a prosecution under the *Occupational Health and Safety Act* or Regulations. In the event of a charge, it is levied against the person in the company who is responsible to establish "due diligence." They must have done everything a reasonable person would do to prevent a "bad thing" from happening. In the event of a trench caving in resulting in injury, for example, it would fall to the employer to demonstrate that they had done everything reasonable to prevent an injury. The court will establish a reasonable standard of care based on what could have been done to prevent injury, regulatory requirements and industry practices. The amount of care established by the person charged is then compared to the court-determined standard to determine if it has been met, or if it fell short.

The same activities that will help an employer ensure a safe and healthy workplace are also critical in establishing "due diligence" should an incident resulting in injury or illness take place. Some key actions include:

- Comply with the OHS Act and Regulations;
- Implement a JOHSC or train an OHS Representative, have meetings and maintain minutes:
- Provide adequate training and supervision;
- Conduct hazard assessments and workplace inspections;
- Develop safe work procedures for hazardous work;
- Establish and maintain records for meetings, inspections, hazards;
- Establish a safety culture: communicate safety values, and enforce requirements;
- Implement an OHS policy and, where required, an OHS program (may be mandatory);
 and
- Resolve identified hazards.

Due diligence always depends on the facts of the situation, but it's too late to build a defense **after** an incident.

Penalties

Ensuring the safety of workers and managers should always be the reason to effectively manage occupational health and safety in the workplace. However, where enforcement is necessary, the *OHS Act* establishes a scale of penalties on conviction:

- maximum fines of \$250,000 or 2 years in jail;
- additional fines (set by the court) of up to \$25,000 per day;
- additional fines (set by the court) for recovery of benefits (such as early completion bonus); and/or
- additional penalties (set by the court) involving publicly advertising the facts of the case.

Acts or omissions by managers are deemed to be that of the employer. Strict liability offences: employer must demonstrate every reasonable precaution had been taken – that due diligence

has been met.

Remember: Our primary objective is that you, and the people you work with, make it home safely every day. Our vision is a healthy, working Nova Scotia.