



COLLEGE OF THE NORTH ATLANTIC

OPERATIONAL PROCEDURE

TOPIC: HAZARD RECOGNITION EVALUATION & CONTROL

Procedure No.	HR-405-PR-2	Division	Human Resources
Supersedes	n/a	Board Policy Ref.	n/a
Related Policy	HR-405	Effective Date:	October 5, 2010

PROCEDURE

1.0 Legislative Requirements

The Newfoundland and Labrador Occupational Health & Safety Act and its regulations give legislative requirements for hazard recognition, evaluation and control, specifically Section 12 (1) (g) of the regulations. This standard provides guidance for the recognition, evaluation, and control of hazards.

2.0 Standard

This procedure sets College of the North Atlantic's method of hazard recognition, evaluation and control, and supersedes all previous methods of hazard recognition, evaluation and control.

3.0 Purpose

The purpose of this procedure is to recognize, evaluate and control hazards at the College. Benefits include legislative compliance, lower associated costs for incidents, increased productivity, and reinforcement of the College's commitment to health & safety.

4.0 Definitions

Hazard	A hazard is a condition, substance, behavior, or practice with the potential to cause loss due to injury, illness or property damage. There are two major categories of hazards – health hazards and safety hazards.
Health Hazards	Health hazards can be physical, chemical, biological, ergonomic or psychosocial in nature.
Physical Hazards (Agents)	Physical hazards are processes in the workplace that due to the nature of the work, the material and/or equipment involved and the working environment they reside in create noise, vibration, temperature, and radiation.
Chemical Hazards	Chemical hazards are any potentially hazardous chemical used in the workplace or created by workplace processes such as gases, liquids and solids.
Biological Hazards	Biological hazards are substances produced by living things that can cause illness or disease in humans. Biological hazard sources may include people, people products, animals, animal products, food, and food products.
Ergonomic Hazards	Ergonomic hazards arise from the improper design of work or equipment that can place stress on parts of the body. Repetition, force and awkward body positions may contribute to the stress.
Psychosocial Hazards	Psychosocial hazards may arise from work overload and time pressure (demands, effort) and lack of influence over day-to-day work (control). Examples include lack of rewards or appreciation, work/life imbalance, lack of training or preparation, too little or too much responsibility, ambiguity in job responsibility, poor communication, fear of job loss, fear due to lack of health and safety controls, and discrimination or harassment.

Safety Hazards	Safety hazards include materials handling, machine, work practice, energy, falls same elevation (slips and trips), and working at heights hazards.
Material Handling	Material handling hazards refers to hazards caused by lifting, carrying, lowering, pushing, pulling, and/or shoveling which may cause injury to a learner or employee. Material handling also refers to mechanical material handling devices such as handcarts, forklifts, and conveyors which must be in good mechanical condition and operated by properly trained workers.
Machine Hazards	Machine hazards refers to hazards on machinery such as rotating shafts, belts, pulleys, presses, blades, and saws, etc. which could cause injury to employees or learners.
Work Practice Hazards	Work practice hazards can occur when safe work practices are not followed.
Energy Hazards	Energy hazards include hazards related to contact with energy sources such as electricity, steam, heat, pneumatic or hydraulic pressure, and gravity.
Falls Same Elevation (Slips and Trips)	Loss of balance, slips, and trips can be hazards of walking and working on hard surfaces. Poor housekeeping, oil/grease, ice and items left in walk areas, for example, have the potential to cause a fall or slip.
Working at Heights	Working at heights refers to working on items/machinery which are above or below ground such as ladders, stairs, elevated platforms, boom lifts/scissor lifts, fixed access ladders, pits, tanks, and/or basements.

5.0 Application & Scope

This procedure applies to all departments, schools and workplaces at the College of the North Atlantic, except those in the state of Qatar, and supersedes previous documents, policy, and procedure respecting hazard recognition, evaluation, and control. The College of the North Atlantic will consult with other stakeholders to ensure effective implementation of this procedure.

6.0 Hazard Recognition

Hazard recognition, section (1) - page 1, is the formal, documented process of identifying the various hazards found in a workplace, using the form found in Appendix “A”. The two main categories of hazards are:

1. Health Hazards; and
2. Safety Hazards.

7.0 Hazard Evaluation (Risk Assessment)

Hazard evaluation, section (2) – page 1, (Appendix A), is the process of determining the significance of a hazard with respect to the hazards potential probability to occur, level of consequence, and frequency of occurrence.

Table 1.0 gives a numerical rating system for determining the probability of occurrence.

Table 1.0 Probability

Rating:	Description:
-1	Less than average chance of loss
0	Average chance of loss
1	Greater than average chance of loss

Table 2.0 gives a numerical rating system to quantify the severity of a hazardous occurrence.

Table 2.0 – Severity of occurrence (consequence)

Rating:	Description:
0	No injury or illness; or quality, production, or other loss of less than \$100.00
2	Minor injury or illness without lost time; non-disruptive property damage or a quality, production, or other loss of \$100.00 to \$1,000.00
4	A lost-time injury or illness without permanent disability; or disruptive property damage; or quality, production, or other loss of more than \$1000.00 but not exceeding \$5,000.00
6	Permanent disability or loss of life or body part; and/or extensive loss

	of structure, equipment, or material; quality, production, or other losses exceeding \$5,000.00
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Table 3.0 gives a numerical rating for frequency of occurrence.

Table 3.0 Frequency

Frequency			
Number of workers that may be exposed to/have contact with the hazard in question	Number of times workers may be exposed to/have contact with that hazard		
Few (1-3)	1	1	2
Moderate (4-9)	1	2	3
Many (10+)	2	3	3

8.0 Hazard Control (Risk Reduction)

Hazard control, section (3) and (4) – page 1, (Appendix A), is the process of developing and implementing measures to mitigate the potential effects of the hazards on People, Equipment, Materials, and Environment (PEME).

The three main levels of control are:

1. Engineering (includes elimination, substitution, and isolation);
2. Administrative; and
3. Personal Protective Equipment (PPE).

Engineering controls are the engineered mechanisms to protect PEME from the hazards potential harmful effect. They form the first line of defense against the hazard and are the preferred method of hazard control. Elimination, substitution, and isolation are three main types of engineering controls.

- *Elimination* completely removes the hazard. This is the optimal means of control. It is the most effective way of protecting workers and should always be considered as the first option in controlling a hazard.
- *Substitution* replaces the hazard with a less hazardous one; for example, replacing a toxic/flammable liquid with a less toxic/flammable one. Substitution should be used only if elimination is not possible.
- *Isolation* separates hazards from workers; for example, installing screens to protect workers from dust, using distance to separate noisy machines from workers or building soundproof enclosures around noisy machines, building an enclosure for the hazard, installing exhaust

ventilation, building barriers and fences around dangerous machines, and providing guarding to equipment.

Administrative controls encourage safe work practices. They include controlling a workers exposure by job rotation, work assignments, and limited duration in hazardous area or performing hazardous tasks. Providing standard operating procedures to ensure a job process is done safely, and providing systematic and formal training.

Personal protective equipment (PPE) is equipment worn by workers to protect them from their environment. It is used as a barrier between the person and the hazard. PPE is used a last resort.

9.0 Action Plan

Action Plan – complete the Action section, page 2, of the HREC form, (Appendix A). Submit completed form to the appropriate authority for processing. Mail one completed copy to the Occupational Health & Safety Manager for permanent College records.

To report a hazard complete the form found in Appendix “B.” Submit form to your respective supervisor and send one copy the OHS Manager for permanent College records. Use the notation “Health” or “Safety” hazard when describing the hazard in the form.

10.0 Evaluation

Enactment of a resolution process ensures any extraordinary challenges are resolved.

11.0 Communication & Training

Informational sessions are the chosen method of training and communication.

Approval History	
Approved by President	October 5, 2010
Next Review	October 2013