



## **2 Working Safely in Jobs & Tasks**

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## **2.1 Safe Work Practices and Procedures Policy**

### **(OH&S Code Part 2, Section 11)**

It is ASSURANCE CONSTRUCTION policy that all its workers are properly instructed in the safe performance of their duties.

ASSURANCE CONSTRUCTION will determine which safe work practices and procedures are needed for a job and whether they are being followed by reviewing inspection records, reviewing accident investigation records, observing jobs, evaluating worker suggestions, and evaluating Safety officer recommendations. Safe work procedures will be enforced in the same manner as rules and regulations.

Management, in conjunction with the Safety officer, is responsible for the revision and development of safe work practices and procedures.

Supervisors are responsible for ensuring all workers' understand and comply with safe work practices and procedures. Records of all training and site safety meetings must be maintained at the work place and on completion of the project must be submitted to the Safety Officer.

***Note:*** Much of the material presented in the Safe work practices and procedures section is general and brief. Specific situations may require specific practices and procedures outside the scope of this manual. For more detailed information about safe work practices and procedures, contact the Safety Officers, contact the authority having jurisdiction in the province in which the work is being done, or consult reference material.



## 2.2 Safe Work Practices

Safe work practices are guidelines established to help workers perform a task that may not need a step-by-step procedure.

ASSURANCE CONSTRUCTION strives to complete work safely, efficiently, and on time. To accomplish this, ASSURANCE CONSTRUCTION has developed specific safe work practices for common construction site activities.

To promote safe work practices, ASSURANCE CONSTRUCTION will do the following:

- Put our safe work practices in writing
- Make safe work practices available to all workers by keeping a copy at each work site
- Provide safe equipment and material to work with
- Provide Management support for safe work practices
- Require that Supervisors enforce use of, and compliance with, these safe work practices

**Note:** *Much of the material presented in the Safe work practices and procedures section is general and brief. Specific situations may require specific practices and procedures outside the scope of this manual. For more detailed information about safe work practices and procedures, contact the Safety Officers, contact the authority having jurisdiction in the province in which the work is being done, or consult reference material.*

In compiling these safe work practices, the following reference material was consulted:

- The regulating provincial authorities having jurisdiction regarding safety legislation
- Recognized safety procedures manuals
- Health hazard data books
- Worker input and contributions

All Supervisors are required to be familiar with safe work practices and procedures and understand the different hazard levels as detailed in section hazard levels.



## 2.3 Safe Work Procedures

Safe work procedures are a written step-by-step description of how to do jobs safely from start to finish.

They provide a reference for jobs not done very often, jobs requiring uniformity, and jobs that, due to their hazardous nature, require that those performing them receive guidance for safety.

ASSURANCE CONSTRUCTION has done the following with regard to safe work procedures to promote worker safety:

- Involve workers in the development of job procedures
- Put job procedures in writing
- Make job procedures available to all workers
- Provide safe equipment, tools, and materials
- Require Supervisors to enforce the use of, and compliance with, job procedures
- Provide Management support

Job procedures developed by ASSURANCE CONSTRUCTION will comply with or exceed legislated requirements and manufacturer's specifications.

Job procedures will change from time to time, so an annual review of selected job procedures will be carried out, and any necessary changes will be made.

Where work is performed using client-specified safe work procedure and/or subcontractor safe work procedure, this procedure will be used unless the procedure specified is of a lower standard than the ASSURANCE CONSTRUCTION procedure. When this situation occurs, the higher ASSURANCE CONSTRUCTION standard will be used.

In no case will work be carried out in contravention of the safety legislation of the authority having jurisdiction in the province in which the work is being done.

All Supervisors must be familiar with the safe work practices and procedures contained in *Section 16. Safe work practices and procedures* and understand the different hazard levels as detailed in *Section 16.4 Hazard levels*

**Note:** *Much of the material presented in the Safe work practices and procedures section is general and brief. Specific situations may require specific practices and procedures outside the scope of this manual. For more detailed information about safe work practices and procedures, contact the safety officers, contact the authority having jurisdiction in the province in which the work is being done, or consult reference material.*



## 2.4 Hazard Assessment Policy

### (OH&S Code Part 2, Sections 7-10)

*ASSURANCE CONSTRUCTION will maintain a comprehensive program of hazard assessment at all facilities and job sites.*

*Project Managers are responsible for ensuring that the proper environmental site assessments have been completed. These assessments will identify any hazardous conditions that exist on the site from previous uses.*

*Superintendents are responsible for directing formal hazard assessments on the job sites that they control and for involving Construction Safety Officers (CSO), First Aid Attendants, Site Safety Representatives, and workers in those hazard assessments.*

*Supervisors and Foremen are responsible for conducting ongoing informal hazard assessments of areas where their crews are working or will be working.*

*Workers are responsible for participating in, and contributing to, the Hazard assessment program.*

## 2.5 Hazard Assessments

ASSURANCE CONSTRUCTION's health and safety program is designed to identify, assess, and control hazards in order to reduce the risk of harm to workers, equipment, and property. A hazard is a thing or condition that may expose a person to a risk of injury or occupational disease.

A risk is the likelihood that the hazard will lead to injury or the probability of harm actually occurring.

A hazard assessment is an examination of an operation, (job site, shop, office, etc.) done to identify the hazards and potential hazards that are present or could occur during the operational activity and the risks to workers. It examines the potential for loss inherent in a dangerous workplace condition or a health and safety program failure.

Management has the responsibility to assess the risk that hazards pose to the health and safety of all workers and to identify, evaluate, and eliminate or control all hazards in the workplace.

**Note:** *A project hazard assessment should be done before a project starts. This assessment should use the Hazard assessment form.*

Each worker has a duty to report, as soon as possible, any hazardous conditions. If possible, ASSURANCE CONSTRUCTION will eliminate hazards and thereby eliminate the need for personal protective equipment (PPE). If hazard elimination is not possible, where there is a need for PPE, workers will be required to use PPE such as clothing, devices, and materials.

Hazard assessments are an ongoing component of the ASSURANCE CONSTRUCTION health and safety program. At certain times throughout a project, certain tasks may increase the risk to workers or property and a job/task hazard assessment will be required to identify these hazards.



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As work site conditions change, new hazard assessments will be required, particularly at project milestones. A thorough examination of the tasks involved in an existing function often requires a new hazard assessment.

Hazard assessments should precede the design of a new job procedure because they are helpful in developing or modifying safe work procedures.

Only people trained to perform a hazard assessment should do so. If possible, a team consisting of the Safety Officer and/or a member of the Work Site Supervisor, and a worker representative involved in the process being assessed should do a hazard assessment.

Anyone doing a hazard assessment should use the *Hazard assessment* form.

### *THREE TYPES OF HAZARD ASSESSMENTS*

- 1. FIELD LEVEL: Performed daily as construction work sites can vary depending on location and by weather. It accounts for changes in the condition of the soil, weather, slope, etc.***
- 2. FORMAL LEVEL: Update at least once per year together with safe work practices will form the basis of our safety manual and describes common hazards regardless of the site.***
- 3. SPECIAL LEVEL: Updated at least once per year is a specific hazard and describes the various sources regardless of the site or the tasks.***

Job hazards are prioritized according to severity determined by a system of probability & worst case scenario measured on a five point system for health (occupational health issues) and safety (more immediate injury). The numbers are totaled out of a maximum of 20 points.

**There are three levels of hazard assessments:**

**FIELD LEVEL (I-1) – daily usually by the site foreman to address current issues.** As the construction site evolves, the Superintendents and Foremen or their designates must do job/task hazard assessments as required on specific tasks on an ongoing basis.

When a high-risk task or job will be performed for which there are no relevant safe work practices or procedures available for the crew to review, a job/task hazard assessment must be performed.

A Field Level hazard assessment and analysis worksheet form must be used to perform this type of assessment.

Upon completion of the job/task hazard risk assessment, hazard controls must be developed, and safe work practices and procedures may have to be developed.

The Superintendents must review these safe work practices and procedures with their crews prior to starting the job/task.

The hazard assessments and safe work practices and procedures must be formally documented and kept on file in the Job site health and safety program record binder and copies must be sent to the Safety Officer.

Results of the hazard assessments must be communicated to all workers and subcontractors



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1-1 FIELD LEVEL HAZARD ASSESSMENT		TOOLBOX MEETING	
<p><b>DATE:</b> _____ <b>LOCATION:</b> _____</p> <p><b>Prepared By:</b> _____ <b>Reviewed By:</b> _____</p> <p><b>Weather Conditions:</b> _____</p> <p><b>HAZARD IDENTIFICATION:</b></p> <p>1. Falling Object _____</p> <p>2. Near Worker _____</p> <p>3. Equipment _____</p> <p>4. Other _____</p> <p><b>ALL CONTROLS AGREEMENTS PRIOR TO STARTING WORK:</b> YES / NO _____</p> <p><b>HAZARD RATING:</b></p> <p>1. LOW PROBABILITY (EXTREMELY RARE)</p> <p>2. LOW PROBABILITY (RARE)</p> <p>3. MEDIUM PROBABILITY (MAY OCCUR)</p> <p>4. HIGH PROBABILITY (WILL OCCUR)</p> <p><b>HAZARDS:</b> _____ <b>RANK:</b> _____ <b>ELIMINATION/CONTROL:</b> _____</p> <p><b>WORKER NAME:</b> _____ <b>SIGNATURE:</b> _____</p> <p><b>REVIEWED BY:</b> _____ <b>SIGNATURE:</b> _____</p>		<p><b>DATE:</b> _____ <b>LOCATION:</b> _____</p> <p><b>SUPERVISOR/INSTRUCTOR:</b> _____</p> <p><b>AGENDA:</b></p> <p>1. _____ 2. _____</p> <p>3. _____ 4. _____</p> <p>5. _____ 6. _____</p> <p><b>NOTES:</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><b>ATTENDED:</b></p> <p><b>PRINT NAME:</b> _____ <b>SIGNATURE:</b> _____</p> <p><b>PRINT NAME:</b> _____ <b>SIGNATURE:</b> _____</p>	

FORMAL LEVEL (R-15) - reviewed at least once a year and is basis for other types of hazard levels.

ASSURANCE CONSTRUCT & SERV.		HAZARD ASSESSMENT & ANALYSIS WORKSHEET				R-15 FORMAL HAA				
JOB/TASK		DESIGNATED TRAFFIC CONTROLLER				TYPE/REASON				
ANALYST/REVIEWER		DATE				REASON FOR THIS REVIEW (ANALYST REVIEW, CHANGE IN PROCEDURE, CHANGE OR REV. EQUIP., OR INCIDENT)				
DATE		REASON FOR THIS REVIEW (ANALYST REVIEW, CHANGE IN PROCEDURE, CHANGE OR REV. EQUIP., OR INCIDENT)				REASON FOR THIS REVIEW (ANALYST REVIEW, CHANGE IN PROCEDURE, CHANGE OR REV. EQUIP., OR INCIDENT)				
ORIGINAL ASSESSMENT DATE		REASON FOR THIS REVIEW (ANALYST REVIEW, CHANGE IN PROCEDURE, CHANGE OR REV. EQUIP., OR INCIDENT)				REASON FOR THIS REVIEW (ANALYST REVIEW, CHANGE IN PROCEDURE, CHANGE OR REV. EQUIP., OR INCIDENT)				
YOUR EQUIPMENT USED:		MATERIALS REQUIRED:				PPE REQUIRED:				
STOP/SLOW PADDLE, RED FLAG		DRINKING WATER				HARD HAT, 16-18 VEST, SAFETY FOOTWEAR, DRESS FOR WEATHER				
HAZARDOUS STEPS & TASKS	#	GUIDELINE/TASKS	WHAT COULD HAPPEN	HEALTH RISK	SAFETY RISK	PROPERTY DAMAGE RISK	WHAT PROTECTS YOU	ENR. CONTROL	ADDITIONAL CONTROL	P.P. EQUIP.
	B	FACE TRAFFIC SO YOU CAN SEE EMERGENCY VEHICLES	STRIKED BY VEHICLE - MINOR TO SERIOUS INJURY & FATALITY	H	H	H	HAZARD CONTROLS PPE & SWP			
	C	STAND AWAY FROM PEDESTRIANS, WORKERS, PARKED VEHICLES SO AS TO BE CONSPICUOUS TO DRIVERS	DRIVERS WILL NOT SEE SIGNAL - INJURY OR PROPERTY DAMAGE	H	H	H				
	D	DIRECT TRAFFIC - AVOID AMBIGUOUS SIGNALS, BE CLEAR	DRIVERS WILL MISUNDERSTAND - INJURY OR PROPERTY DAMAGE	H	H	H				
	E	AVOID ANY KIND OF COMMENTS OR GESTURE THAT PROVIDES ROAD BLOCK	DRIVERS ENRAGED - INJURY OR PROPERTY DAMAGE	H	H	H				
	F	DIRECT CONSTRUCTION EQUIPMENT ESPECIALLY IF BACKING UP OR VERY VISIBLE TO THEM EVEN IF IN THEIR MIRRORS	PROPERTY DAMAGE, INJURY OR FATALITY	H	H	H				
	G	ONE TRAFFIC CONTROLLER FOR EACH DIRECTION OF TRAFFIC	TOO MUCH FOR ONE PERSON - DRIVERS PROBLEMS AS ABOVE	H	H	H				
	H	DRINKING WATER AVAILABLE IN HOT WEATHER	HEAT STROKE, DEHYDRATION	H	H	H				
PROVIDE SUFFICIENT LIGHTING WITHOUT CONTINGING PROTECTION		SEVERITY/INCIDENT RATING				TOTALS				
1. LOW PROBABILITY (EXTREMELY RARE)		1. FIRST AND ONLY MINOR PROPERTY DAMAGE				1		11		
2. LOW PROBABILITY (RARE)		2. MEDICAL ATTENTION/PROPERTY DAMAGE - SPECIALIZED TECH SUPPORT				2		11		
3. MEDIUM PROBABILITY (MAY OCCUR)		3. COSTLY INJURY/MAJOR PROPERTY DAMAGE - SPECIALIZED TECH SUPPORT				3		11		
4. HIGH PROBABILITY (WILL OCCUR EVENTUALLY)		4. PERMANENT DISABILITY/MAJOR PROPERTY DAMAGE - OSHA CONTACT				4		11		
5. HIGH PROBABILITY (WILL OCCUR)		5. FATAL/CATASTROPHIC PROPERTY DAMAGE - OSHA CONTACT				5		11		
HEALTH RISK		HEALTH RISK				HEALTH RISK		HEALTH RISK		

SPECIAL LEVEL - generic in the sense that it is true in many situations and companies but draws attention to hazards and common reasons why incidents take place.



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AUTHORIZATION & RELEVANCY		HAZARD ASSESSMENT & ANALYSIS WORKSHEET				
ASSURANCE CONSTRUCTION & SERVICES		EYE INJURIES				
JOB/TASK		ANALYSIS BY: HARLEY WINBORN		SENIOR ADMINISTRATOR: JASON DEBOER		
SIGN DATE		REASON FOR THIS REVISION (ANN. REVIEW, CHANGE IN ACCESS/USE, CHANGE OR NEW EQUIP., OR INJURY)				
ORIGINAL ASSESSMENT DATE: APRIL 29, 2013		REASON FOR THIS REVISION: REVIEW				
TOOL/EQUIPMENT USED: VARIOUS		MATERIALS REQUIRED:		PPE REQUIRED: SAFETY GLASSES, GOGGLES, FACESHIELDS		
HAZARDOUS STEPS & TASKS	SOURCES OF INJURIES		WHAT COULD HAPPEN		HAZARD CONTROLS	
	A. FROM POWER TOOLS (ELECTRIC & PNEUMATIC)	STUCK BY FLYING OBJECTS, EYE IRRITATION, BLINDNESS		X	SAFETY GLASSES, GUARDS	
	B. HAND TOOLS				SAFETY GLASSES	
	C. NATURAL CAUSES (WIND)				SAFETY GLASSES, WEATHER FORECAST	
	D. FALLING DEBRIS FROM WORK ABOVE	STUCK BY FALLING DEBRIS, EYE IRRITATION, BLINDNESS	X	X	SAFETY GLASSES, HOODS/KEEPCAP	
	E. FALLING DEBRIS FROM "COLLAPSE" OF WALLS ETC.				SAFETY GLASSES	
	F. FROM EXPLOSIVE MATERIAL, EXPLOSIVE/POWDER ACTIVATED EQUIPMENT	STUCK BY FLYING OBJECTS, EYE IRRITATION, BLINDNESS		X	MDS, SAFETY GLASSES, CONSULT SWP	
	G. CHEMICAL SPLASH	CHEMICAL BURN, BLINDNESS		X	MDS, EYE WASH, SAFETY GLASSES	
	NOTE: PROTECT YOUR EYES		EYE INJURIES VARY FROM TEMPORARY IRRITATION TO BLINDNESS CAUSED BY FLYING MATERIAL OR CHEMICAL			GOGGLES, GLASSES, FACESHIELDS, KNOW WHERE AN EYE WASH STATION IS OR SOURCES OF WATER
	PROBABILITY RATING (RATING WITHOUT CONTROLS OR PROTECTION)		SEVERITY/CONSEQUENCE RATING		TOTALS	
1 LOW PROBABILITY (EXTREMELY REMOTE)		1 FIRST AID ONLY/MINOR PROPERTY DAMAGE				
2 LOW/MEDIUM PROBABILITY (REMOTE)		2 MEDICAL ATTENTION/PROPERTY DAMAGE				
3 MEDIUM PROBABILITY (MIGHT OCCUR)		3 LOST TIME INJURY/MAJOR PROPERTY DAMAGE				
4 MEDIUM/HIGH PROBABILITY (LIKELY WILL OCCUR EVENTUALLY)		4 PERMANENT DISABILITY/MAJOR PROPERTY DAMAGE				
5 HIGH PROBABILITY (WILL OCCUR)		5 FATAL/CATASTROPHIC PROPERTY DAMAGE				
HEALTH SAFETY		HEALTH SAFETY		PRIORITY RATING (20)		
				11		

## 2.6 Project Hazard Assessment

When a project is being estimated, the Project Manager, and Safety Officer should anticipate hazards that may be encountered during construction and make allowances for actions that must be taken to minimize those hazards.

A hazard assessment must be conducted before the start of a project and documented on the *Hazard assessment* form.

The following should be considered when conducting a hazard assessment:

- Engineered plans, drawings, and specifications
- Complexity of the project
- Initial site tour by the project team
- Site photographs
- Regional weather conditions, both normal and extreme (temperature, high winds, hurricanes, flooding, etc.)
- Geographic location
- Distance to nearest medical facility
- Population density
- Access to project
- Remoteness of the project location





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- Availability of skilled labour
- Environmental risk, such as the proximity to waterways
- Existing services in the area of the project
- Expertise of available Subcontractor/Trade Contractor services
- Remember to document the hazards on the *Hazard assessment* form.

### 2.7 Pre-Job Safety Instruction (PSI)

ASSURANCE CONSTRUCTION requires its workers to complete a ***Pre-job safety instruction (PSI)*** form before starting new tasks or moving into different work site conditions.

Working together, **foremen supervisors and the project manager** and their crews complete the ***Pre-job safety instruction*** form by outlining job tasks, identifying hazards and controls, and creating safe work procedures for the tasks or work site conditions.

The following questions must be answered before starting a new task or moving to different work site conditions:

1. Is the area safe to work in?
2. Will the activities of other crews interfere with safe operations?
3. Has a job hazard analysis been completed and do workers understand their work assignments?
4. Have the proper tools and equipment been provided?
5. Are tools and equipment in safe operating condition?
6. Has the proper personal protective equipment (PPE) been provided?
7. Does the crew understand how to properly use all PPE?
8. Can the crew communicate effectively with each other, or are there restrictions due to high noise, restricted vision, or language barriers?
9. If chemical products or compounds are being used, is the crew aware of the hazards and safety controls required to safely complete work assignments?
10. Is the crew aware that the ***Pre-job safety instruction (PSI)*** is there to assist them in getting the job done safely?
11. Have workers been encouraged to make suggestions to assist in completing job assignments safely?
12. Has the crew been advised to report any unsafe acts or unsafe conditions to their supervisors?

The ***Pre-job safety instruction*** form allows the hazards at a site to be detailed and must be filled in before work starts.

### FACTORS TO CONSIDER IN JOB/TASK HAZARD ASSESSMENTS

The following factors must be considered in job/task hazard assessments:

- Skills needed to perform the job and the expertise available
- Health monitoring results (noise, chemical/biological, air quality, etc.)



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- Corporate and industry incident statistics
- Government regulations
- Co-ordination with other crews
- Communication barriers (blind spots, noise, etc.)
- Physical workloads imposed by the job
- Schedules and time constraints
- Frequency a task is performed (daily, weekly, monthly, yearly, or another frequency)
- Environmental factors (weather, soil conditions, hazardous materials, etc.)

### **JOB/TASK HAZARD ASSESSMENT STEPS**

The steps for a job/task hazard assessment are the following:

1. Assemble the workers involved in the job or task.
2. Review the scope of work to be performed.
3. Break the job or task into individual steps.
4. Identify both the actual and the potential hazards.
5. Develop the appropriate controls for each hazard.
6. Review the assessment.
7. Communicate the assessment and the controls to all workers on the project.

## **2.8 Various Work Environments**

### **OFFICE ENVIRONMENTS**

Offices are generally a fairly static work environment and considered to be a low hazard area. As such all of our company's controlled office environments are to be assessed using the following criteria:

- ❑ A hazard assessment is to be conducted on an annual basis and after significant alterations to the office.
- ❑ The completed hazard assessment document will be distributed to all office staff via email, and postings on office safety/communication boards.
- ❑ Specific hazards that may affect visitors coming into the office environment should be posted at the main entry.
- ❑ All staff are encouraged to bring forward any concerns regarding hazards in the workplace regardless of when the next scheduled hazard assessment may be.



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### **SHOP & YARD ENVIRONMENTS**

These operations and work areas are generally fairly static work environments; however, due to the nature of the work conducted in them they are rated as a moderate hazard area. As such all of our company's controlled warehouse, manufacturing, and fabrication shop environments are to be assessed using the following criteria:

- ❑ A hazard assessment is to be conducted on a weekly basis on the first working day of that week prior to any work commencing.
- ❑ If a unique task is to be done a separate hazard assessment must be conducted for that task.
- ❑ The FLHA must be clearly posted in the shop office, or other appropriate location for the duration of the week it is valid for.
- ❑ Any visitors to these areas must be informed of any hazards they may encounter prior to entering the shop areas.

### **CONSTRUCTION SITE ENVIRONMENTS**

Construction sites are very dynamic work environments involving varying levels of hazard based on the tasks being performed by our employees, other trade employees, and work conditions. They are rated at a moderate to high hazard area. As such construction site environments are to be assessed using the following criteria:

- ❑ A hazard assessment must be conducted at the start of each working day (before any work is started), prior to a new task starting during the day, and if conditions in a given work area change.
- ❑ Hazard assessments are to be conducted by each crew working on a particular task in a given work area.
- ❑ Note – At particular stages of these operations, works areas become more static and become medium risk areas. In these situations, it will be at the discretion of the supervisor whether daily or weekly FLHA's are required by the trades involved (painters, finishing carpenters, etc.).

### **GENERAL HAZARD ASSESSMENT REVIEW REQUIREMENTS**

Foreman/Supervisors – Must review completed Field Level Hazard Assessments on a daily basis.

Site Management / Project Manager – Must review 1 in 50 completed Field Level Hazard Assessments.



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Department Manager – Must review 1 in 100 completed Field Level Hazard Assessments completed in their department.

Safety Department – Must review 1 in 100 completed Field Level Hazard Assessments completed for the company.

### 2.9 Conducting a Hazard Assessment

When conducting a hazard assessment, keep in mind that every workplace consists of four major components:

- The people at the work site, such as workers, subcontractors, suppliers, client, and visitors
- The environment the people work in
- The materials the people work with
- The equipment and tools the people use

When conducting a hazard assessment, focus on the following:

- **Identification**

What are the hazards of the task?

- **Consequences**

What are the worst possible consequences of an accident due to the hazard?

- **Exposure**

How often will the workers be exposed to the hazard that could cause an accident?

- **Probability**

What is the likelihood that the hazard will lead to an undesired consequence?

After the hazard assessment is done, do the following:

1. Rank the hazards identified according to the level of danger.
2. Give priority to the most dangerous.
3. Document a plan of action that deals with all of the hazards.
4. Develop written work procedures that deal with all of the hazards.

Supervisory Staff on a project are responsible for following up to ensure that all hazards have been eliminated, minimized, or controlled.



## 2.10 Reducing Hazard Risk - Hazard Controls

After a hazard assessment has been completed, ASSURANCE CONSTRUCTION will develop practicable procedures to eliminate, minimize, or control the risk to its workers.

A number of hazard control measures can be considered to reduce or eliminate hazard risk:

- **Elimination**

Is the task redundant? Does it duplicate work? Can it be avoided? Does it have to be done to achieve the desired result? Can it be done in a way that workers are not exposed to the hazard?

- **Substitution**

If the task cannot be avoided, can it employ less hazardous methods? Can less hazardous materials be substituted to reduce the risk? Can different work practices be developed to reduce exposure to risk?

### ENGINEERING CONTROL MEASURES

#### BUILT INTO THE SYSTEM

Engineering controls are physical arrangements, designs, or alterations of workstations, equipment, materials, production facilities, or other aspects of the physical work environment.

Engineering controls can be used to reduce hazards in the following way:

- **Redesign**

Can workstations/processes be redesigned to reduce exposure to the hazard using such measures as barriers, shields, scrubbers, area fans, or local exhausts? **Can they be fool proofed?**

### ADMINISTRATIVE CONTROL MEASURES

#### WRITTEN GUIDANCE

Administrative controls are the provision, use, and scheduling of work activities and resources, including planning, organizing, staffing, and coordinating.

Administrative control measures can be used to reduce hazards:

- **Work activities and resources**

Can the work be scheduled to provide regular breaks away from the hazard? Can the job be expanded to provide greater range of duties in order to allow time away from the hazard? Can the task be planned and organized to reduce the risk by, for example, working shifts? **If it can be written from signs to procedures it is an administrative control.**

### PERSONAL PROTECTIVE EQUIPMENT MEASURES

#### WHAT YOU WEAR

Personal protective equipment (PPE) includes physical equipment that protects workers and the instruction in its use. PPE should only be used when all other methods of eliminating, reducing, or controlling risk are not practicable or effective. PPE can be used to reduce the threat of hazards to workers:

- **As a substitute**



If engineering or administrative controls are not practicable, PPE must be used.

## **HAZARDOUS ENVIRONMENTS**

Where noise, heat, dangerous substances, lack of oxygen, or any other factor creates a hazardous environment at a work area, the hazardous environment must be monitored.

When workers are in situations that could result in heat stress or cold stress, ASSURANCE CONSTRUCTION will monitor the temperature and provide written procedures for removing or minimizing the risk of heat stress or cold stress.

Workers must not enter environments contaminated beyond regulated limits or be permitted to work in them unless **all the following** are true:

- The workers have been trained for the situation
- A Supervisor gives prior approval
- The proper PPE is worn
- The workers follow established procedures

## **ENVIRONMENTAL CONTROLS**

Environmental Controls include, but are not limited to, the WHMIS program. Regarding environmental controls, ASSURANCE CONSTRUCTION will ensure the following:

- Controlled products at a work site are identified with proper supplier or workplace labels
- Material Safety Data Sheets (MSDS) for the controlled products at a work site are made available to workers
- Tanks, piping systems, or other storage containers are labelled or identified as to contents, hazards, and precautions for handling and disposal of controlled materials
- Workers receive education and training to safely store, handle, use, and properly dispose of controlled materials

## **RECOGNITION, EVALUATION, AND CONTROL**

The key elements of workplace environmental control are recognition, evaluation, and control of hazards:

- **Recognition**

Workers exposed to hazardous material or conditions must be trained to recognize hazards in the following areas:

- Waste products
- Maintenance operations
- Storage practices



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- Work processes that involve noise or hazardous materials
- **Evaluation**

A recognized hazard must be regularly monitored to ensure proper procedures and/or protective equipment is used to reduce it to an acceptable level.
- **Control**

Hazard control must include the following:

  - Good housekeeping
  - Adequate supply of required protective equipment
  - Education and training to ensure workers are aware of, and able to respond to, hazardous materials and conditions

### **2.11 “CODES OF PRACTICE”?**

#### **OH&S CODE SCHEDULE 1 & PART 4, SECTION 26**

A code of practice is a document that describes the procedures to be followed to protect workers when they may be exposed to a chemical hazard. Section 33 of the Alberta OHS Act requires a code of practice to include “practical guidance on the requirements of the regulations or the adopted code applicable to the work site, safe working procedures in respect of the work site and other matters as required by a Director, the regulations or the adopted code”. A code of practice must be in writing and available to workers at the work site who are affected by it.

A code of practice is intended to provide safe work procedures that address issues specific to the hazard to which it applies. For example the code of practice can address procedures for safely handling a chemical, actions to take when there is a spill as well as personal protective equipment that must be worn when handling the product. The employer must ensure that workers to whom the code of practice applies receive appropriate education, instruction or training on the content of the code of practice.

Workers should be involved when developing the code of practice as they often have the best understanding of the hazards involved in their work. The help of health and safety professionals such as occupational hygienists or professional engineers is also useful when preparing the code of practice-e, especially for complex situations.