Corporate Policy and Procedure



POLICY Job Safety Analysis (Job Hazard Analysis)

CATEGORY Corporate

AUTHORITY All Departments

RELATED POLICES Standard Operating Procedure;

Workplace Violence Policy

APPROVED BY Executive Team

EFFECTIVE DATE 2009

REVISION DATE August 19, 2019

Policy Statement

Guided by our corporate values, conducting a Job Safety Analysis (also known as a Job Hazard Analysis, Job Task Analysis, Job Safety Assessment etc.) on jobs increases the knowledge of hazards in the workplace. It helps integrate accepted safety and health principles and practices into a particular operation by identifying potential hazards, applicable controls and precautions and determining the safest way to do the job.

Scope

This policy applies to all City of Guelph departments

Purpose

To identify and assess potential hazard(s) and risk(s) of a job so that precautions or control measures can be implemented to create a safer and healthier workplace for workers.

A Job Safety Analysis can assist in:

- Identifying hazards and risks
- Identifying who may be at risk, e.g., workers, visitors, contractors, public, etc.
- Determining if existing control measures are adequate
- Preventing injuries when done, especially in the design or planning stages
- Prioritizing hazards and control measures
- Serving as a teaching aid for initial job training
- Providing a briefing guide for infrequently performed tasks
- Initiating communication between workers and supervisors
- Providing a standard for health and safety inspections or observations
- Completing comprehensive incident investigations

Definitions

Critical Task

For the purpose of this procedure a critical task is a task that, if not accomplished to the specified standard could result in a serious adverse effect (i.e. loss to people equipment, materials, environment or process.

Hazard

A hazard is any practice, behavior or condition or combination of these that can cause injury or illness to people or damage to property. Common way to classify hazards is by category:

- **i.** Biological living things or substance produced by living things that can cause illness to humans, e.g., bacteria, viruses, fungi, parasites, and plants.
- **ii.** Chemical in the form of solids, liquids, vapours, gases, dusts, fumes or mists, e.g., paints, solvents, cleaners, degreasers, acids, etc.
- **iii.** Physical forms of energy that can harm the body if exposed, e.g., noise, vibration, temperature extremes and radiation.
- **iv.** Ergonomic arise from the design and organization of work causing strain on muscles, tendons, joints, nerves and blood vessels.
- **v.** Safety leads to traumatic types of injuries such as sprains, bruises, fractures and cuts, i.e., from slipping/tripping, inappropriate machine guarding, equipment malfunctions or breakdowns.
- **vi.** Psychosocial sources of stress in the workplace such as violence, harassment, job conditions that may lead to stress. These may include the design of tasks, management style, interpersonal relationships and job roles, career concerns, and environmental conditions

Job Safety Analysis (JSA)

JSA is a process to identify hazards and its level of risk so that precautions and controls can be implemented to eliminate or minimize exposure of hazard(s) to workers.

Risk

Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. It may also apply to situations with property or equipment loss. Factors that influence the degree of risk include:

- How much the person is exposed to a hazardous thing or condition,
- How the person is exposed (e.g., breathing in a vapour, skin contact), and
- How severe are the effects under the conditions of exposure.

Worker

Means any of the following, but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program:

- 1. A person who performs work or supplies services for monetary compensation.
- 2. A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized

- by the school board that operates the school in which the student is enrolled.
- 3. A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university, private career college or other post-secondary institution.
- 4. Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation;

Workplace

Any land, premises, location or thing at, upon, in or near which a worker works

Roles and Responsibilities

Executive Team

• Ensure that service area leaders are aware of the need for, and importance of JSAs in the areas of responsibility.

General Manager

- Ensure required JSA are completed and communicated
- Ensure division managers are communicating the need for JSA to be performed and/or updated on an annual basis.

Division Manager (where applicable)

- Ensure staff are trained and assigned to develop JSA
- Ensure required JSA are completed
- Ensure all documentation of the JSA and training is maintained

Manager/Supervisor

- Develop an inventory of critical tasks
- Prioritize and lead the development of JSA
- Train applicable staff on the JSA and document the training
- Ensure JSA are completed
- Maintain all documentation of the JSA and training
- Ensure workers have been trained on the applicable JSA and there is a record of training.
- Ensure workers follow the recommended or suitable alternate control measures to mitigate the risk identified in the JSA.

Joint Health & Safety Committee

- Assist in developing JSA as requested
- Receives copies of completed JSA for review and input

Workers

- Assist supervisors in the development of JSA
- Ensure all identified controls are in place before starting the work
- Work in the manner outlined in the JSA.

Health & Safety

- Act as a resource and/or provide assistance as required
- Review all JSA and provide feedback
- Conduct audits annually on selected JSA.

Procedure

- 1. The Manager or Supervisor shall develop an inventory of all job/tasks within the department and identify critical job/tasks.
- 2. For each critical job/task, process, and/or equipment within a department, the Manager or Supervisor shall consult with selected workers to develop a JSA. The assessment must be done by a competent team of individual(s) who have good working knowledge of the workplace, the job or task and/or have JSA training. The team can consist of workers familiar with the work area, as well as those who are not, i.e., both the "experienced" and "fresh eye" to conduct the assessment.
- 3. The team shall conduct the JSA using <u>Appendix B Job Safety Analysis</u> <u>Form</u>, or similar (refer to <u>Appendix A</u> for instructions on how to complete a JSA). The JSA will identify hazards, assess the level of risk, and identify the controls to eliminate or manage the hazards or risk.
- 4. The results must be communicated to team members by the Manager or Supervisor. Copies of the JSA should be given to the JHSC for review and input. The JSA should form the basis of training for workers who are, or will be, performing that job.
- 5. The Manager/Supervisor shall review the JSA annually to ensure that nothing has changed and the control methods are effective. Triggers for a review can also include:
 - New or transferred workers.
 - The start of a new project,
 - Introduction of new work process,
 - A change or addition to tools, equipment, machinery (including locations or the way they are used),
 - Introduction of new chemicals, substances, or change in process
 - When new information becomes available about a current product,
 - When a potentially serious incident occurs.
- 6. The Manager/Supervisor shall keep any documentation or records related to the JSA.

Training

- The Manager/Supervisor shall ensure an adequate number of workers are trained in Job Safety Analysis.
- The assigned workers and Joint Health & Safety Committee members must be trained at least once on Job Safety Analysis, and as needed thereafter.
- Training can be coordinated through Human Resources.

Reference Documents

Occupational Health & Safety Act, R.S.O. 1990, CHAPTER O.1

Appendices

Appendix A – How to conduct a Job Safety Analysis (JSA) Appendix B – Job Safety Analysis (JSA) Form

Revision History

Document Owner	Issue / Revised Date	Reason For Changes
Health & Safety	2009	Initial draft
Health & Safety	August 2017	Rewrite of the entire document including addition of new JSA Form (Appendix B)
Health & Safety	January 2019	Rewording of certain bullet points. Added definitions for Worker and Workplace. Amended the JSA Form. No changes made to content of policy.
Health & Safety	August 2019	Renamed policy Job Safety Analysis Added Word version of the JSA Form to this policy

Appendix B – Job Safety Analysis Form

					PPE Re	quirements
Area / Position:				Item	Yes/No	Notes
Area / Position:				Safety Glasses		
				Hearing Protection		
Job:	Supervisor:	Supervisoru		Gloves		
		Respiratory Protection				
Review Date:	Si-matum.		Safety Footwear			
	Signature:		Specify Other:			

Required Job-Tasks I	Hazards Identified	Hazard Category (Safety, Physical, Chemical,	Assessment				Rating after	_	
		Biological, Ergonomic, Psychosocial)	Severity (0-5)	Frequency (0-5)	Probability (0-5)	Rating (SxFxP)	Existing Controls	Control s	Recommendations

	Significance (Severity x Frequency x Probability)					
0 - 6	Low	Green	Continue to monitor, but additional controls may not be required			
7 - 24	Medium	Yellow	Additional controls must be considered			
25 - 125	High	Red	Implement additional controls as soon as possible (the higher the number the sooner controls must be put in place)			

SEVERITY OF EXPOSURE	Rating
No Injury or Loss	0
Minor Injury or Loss (<\$1,000)	1
Medical Aid or Significant Loss (\$1,000 - \$5,000)	2
Lost Time or Major Loss (\$5,000 - \$10,000)	3
Critical Injury or Serious Loss (>\$10,000)	4
Fatality or Catastrophic Loss	5

X

pe	FREQUENCY OF EXPOSURE								
sod									
EX.									
Staff			Regularly		High				
Š #	Rare (<1/week)	Occassional (Once/Day)	(2-5 times/Day)	Frequent (Hourly)	Frequency (>Once/Hour)	Very High (Constant)			
		(Ulice/Dav)							
1	1	1	2	3	4	5			
1 2-	1	1	2	3	4	5			
1 2- 5	1 1	1 2	2	3	4	5			

X

PRO	Rating	
Not Possible	(Could not happen under any circumstances)	0
Possible, but Unlikely	(Other factors may be necessary)	1
Possible	(Has happened before, but not often)	2
Possible to Probable	(Has happened before several times)	3
High Likely	(As things stand an incident will happen)	4
Certain		5