JOB HAZARD ANALYSIS

11 Dansk Court
Etobicoke, ON
M9W 5N6

416-675-2280
416-675-2209
admin@mgicorp.ca

This page has intentionally been left blank.

Table of Contents

	Introduction	1
01.	Office Work	6
02.	Labour and Material Handling	12
03.	Forklift/Skid Steer Operations	25
04.	Driving to/from Site	30
05.	Working On-Site	35
06.	Supervision	42
07.	Site Set Up	47
08.	On-Site and Off-Site Traffic	52
09.	Large Vehicle Operations	59
10.	Asbestos Abatement	72
11.	Lead Abatement	76
12.	Demolition	80
13.	Ladder Use	88
14.	Elevating Work Platform Operations	92
15.	Working at Heights	97
16.	Excavation, Trenching and Backfilling	102
17.	Excavator Operations	112
18.	Loader Operations	118
19.	Moving Material On-Site	123
20.	Crawler Tractor Operations	127
21.	Grading/Gravelling	132
22.	Roller Compaction	138
23.	Place Pipe	142
24.	Placing Manholes	146
25.	Hoisting and Rigging	151
26.	General Spill Response	156
27.	Concrete Processing	161

28.	Site Cleanup	171
29.	Equipment and Maintenance	177
30.	Exposure to Occupational Health	185
31.	Mechanic: Heavy Equipment Maintenance	193
	Hazards Training Matrix	202
	Practice and Procedure Matrix	203
	Physical Demands Matrix	204
	Personal Protective Equipment Matrix Pre-Use	205
	Inspection Matrix	206

Job Hazard Analysis Index

Task Name	Task Description	Critical Task
01. Office Work	This section analyzes the hazards associated with office work. This task involves a variety of tasks such as: using electronics for a prolonged period of time, lifting and carrying material and organizing the work area.	
02. Labour and Material Handling	This section analyzes the hazards associated with manual handling and tool useage. This task is done throughout the project. This task involves lifting and carrying boxes, material, tools and equipment around site manually or with a pump cart. It also involves using power tools, parging and working with hot work tools on equipment that requires repairs.	
03. Forklift/Skid Steer Operations	This section analyzes the hazards associated with forklift/skid steer operations. This task involves using a forklift/skid steer for a variety of tasks throughout site work.	«CRITICAL TASK «
04. Driving to/from Site	This section analyzes the hazards associated with driving to and from site using MGI-owned/rented/leased vehicles only. This task involves driving in harsh weather conditions, as well as, other traffic conditions.	
05. Working On-Site	This section analyzes the hazards associated with working on-site, while being exposed directly or indirectly to hazards in different sub-trades such as: drywall, rebar, concrete/asphalt, flooring/tiling, electrical, demolition, painting, HVAC, plumbing, roofing, millwork, carpentry, framing, hoisting and rigging, abatement, hot work, window installation, glazing and thermal/moisture protection.	«CRITICAL TASK «
06. Supervision	This section analyzes the hazards associated with supervising/visiting the site. This task involves the hazards of taking responsibility of others on-site.	«CRITICAL TASK «
07. Site Set Up	This section analyzes the hazards associated with site set up. Site set up includes setting up temporary trailer/washrooms, temporary heating, signs/barriers, guardrails, and fencing in the work area.	
08. On-Site and Off-Site Traffic	This section analyzes the hazards associated with road closures. This task involves placing barriers to prevent vehicles or pedestrians from entering the work premises during construction. This task includes: traffic control, placing pylons, electrical signage, and tape around the work site.	«CRITICAL TASK «
09. Large Vehicle Operations	This section analyzes the hazards associated with operating and working around large vehicles. Large vehicles in this context refers to commercial motor vehicles (CMV) with a registered actual and gross weight of 4,500 kg and is used for a variety of tasks on the site for the profit of the business. Examples of large vehicles include but are not limited to dump trucks, open top dumpster (roll-offs), box truck, semi-trucks, concrete mixer trucks.	«CRITICAL TASK «

Job Hazard Analysis Index

10. Asbestos Abatement	This section analyses the risks associated with being exposed to asbestos during asbestos abatement. This task analyses the potential to be exposed to asbestos while performing the abatement process.	«CRITICAL TASK «
11. Lead Abatement	This section analyses the risks associated with being exposed to lead during lead abatement. This task analyses the potential to be exposed to lead while performing the abatement process.	«CRITICAL TASK «
12. Demolition	This section analyzes the hazards associated with demolition.	«CRITICAL TASK «
13. Ladder Use	This section analyzes the hazards associated with ladder use. This task involves using a ladder for a variety of uses such as storage management and reaching material at a height.	
14. Elevating Work Platform Operations	This section analyzes the hazards associated with using an elevating work platform (EWP) in the work area. This task involves reaching at a height for work such as plywood blocking. This task also involves using fall protection.	«CRITICAL TASK «
15. Working at Heights	This section analyzes the hazards associated with working at heights. This task involves working at heights when working on elevating work platforms or scaffolding.	«CRITICAL TASK «
16. Excavation, Trenching and Backfilling	This section analyzes the hazards associated with excavation, trenching, and backfilling. This task involves excavating, balancing and sloping the site with the excavator and using different attachments throughout site work for a variety of tasks.	«CRITICAL TASK «
17. Excavator Operations	This task builds upon Task 16 and analyzes the hazards associated with operating an excavator. This task involves startup, operations and maintenance of the excavator.	«CRITICAL TASK «
18. Loader Operations	This section analyzes the hazards associated with loader operations. This task involves using a loader to move material, moving snow and for general housekeeping purposes.	«CRITICAL TASK «
19. Moving Material On-Site	This section analyzes the hazards associated with transporting material. This task involves moving material to and from the site.	«CRITICAL TASK «
20. Crawler Tractor Operations	This section analyzes the hazards associated with bulldozing operations. This task involves using a crawler tractor (bulldozer) to push material on the site.	«CRITICAL TASK «
21. Grading/Gravelling	This section analyzes the hazards associated with grading/gravelling. This task involves levelling out the surface excavated by taking soil from high spots to low spots. This can be done with a grader or by hand.	«CRITICAL TASK «
22. Roller Compaction	This section analyzes the hazards associated with rolling operations. This task involves using a roller to compact earth, soil and gravel. It includes after grading and asphalt after asphalt application.	«CRITICAL TASK «
23. Place Pipe	This section analyzes the hazards associated with placing pipe in excavated areas. This task involves manually placing pipe.	
24. Placing Manholes	This section analyzes the hazards associated with placing manholes. This task involves using an excavator or loader to create an excavated area, and using chains to place the manhole.	«CRITICAL TASK «

Job Hazard Analysis Index

25. Hoisting and Rigging	This section analyzes the hazards associated with hoisting and rigging. This task involves using a crane, or mobile equipment with an attachment to lift and move light fixtures and poles into place.	«CRITICAL TASK «
26. General Spill Response	This section analyzes the hazards associated with containing spilled oils. This task involves the hazards of occassionally cleaning oil on-site.	«CRITICAL TASK «
27. Concrete Processing	This section analyzes hazards associated with processing concrete. This task involves using an attachment on an excavator to crush concrete, manual crushing, seperation from rebar and concrete recycling.	«CRITICAL TASK «
28. Site Cleanup	This section analyzes the hazards associated with site cleanup.	
29. Equipment Maintenance	This section analyzes the hazards associated with external maintenance on equipment. This task involves sanding, power washing, working around and painting the exterior of equipment and other structures.	
30. Exposure to Occupational Health Hazards	This section analyzes the hazards associated with occupational health exposures. This task involves workers being exposed to: lead, silica, asbestos, chemicals, hazardous material, chemical spills, physical agents and biological agents.	«CRITICAL TASK «

This page has intentionally been left blank.

Introduction

The purpose of the Job Hazard Analysis is to provide workplaces with a step-by-step approach to recognize, assess, and control hazards, as well as monitoring the ongoing effectiveness of controls. This Job Hazard Analysis guide uses the Recognize, Assess, Control, and Evaluate method (RACE method).

Recognize Hazards

Column: Step and Description
The step and description column looks at activities of a given task that can cause injuries or illnesses.

Column: Hazard Group
A hazard is any source (condition, practice or substance) with the potential to cause loss, injury or harm to a worker or property. Hazards can be grouped as:

- Physical (Phy)
- Chemical (Chm)
- Biological (Bio)
- Musculoskeletal (MSD)
- Psychosocial (Psy)
- Safety (Sft)

Column: Potential Hazards
This column describes the hazard and the consequence or result of exposure to the hazard.

Assess Hazards

Column: How Likely – How likely is the hazard to cause an injury or illness?
Probability is measured on a scale of 1 to 4 (see matrix).

Column: Severity – How serious could the injury or illness be?
Severity is measured on a scale of 1 to 4 (see matrix).

Column: Risk Level
This helps determine the level of risk for each hazard. The Probability and Severity are multiplied to find the Risk Level. Hazards with a risk level of 12 or higher, are considered “Critical Tasks.”

			Probability			
			Frequent	Likely	Occasionally	Unlikely
Severity			4	3	2	1
	Severe injury/death	4	16	12	8	4
	Critical/lost time injury	3	12	9	6	3
	Minor – first aid/medical treatment	2	8	6	4	2
	Extremely minor	1	4	3	2	1

Based on the risk matrix, risks are identified in the Job Hazard Assessment and prioritized as below:

Risks	Colour	Value	Action Needed
High risk	Red	12 and above	Immediate action needed
Moderate risk	Yellow	6-9	Some action needed
Low risk	Green	4 and less	No changes or minimum changes needed

Control Hazards

Column: Legal Requirements
The legal requirements and/or standards apply to the identified hazards, work processes, work activities.

Column: What Needs to be Done?
The controls that need to be implemented to mitigate the hazard. The following are types of controls:

- Elimination: Using a new process/procedure that eliminates the hazard.
- Substitution: Using an alternative product, material or equipment that is less hazardous.
- Engineering: Preventing or limiting worker access or exposure to hazards.
- Administrative: Altering the way the work is done, and reviewing policies, work practices and procedures.
- Personal Protective Equipment: Wearing PPE that provides protection against the hazards by reducing the severity of the harm.

Evaluate Hazards

Column: How Likely
How likely is the hazard to cause an injury or illness after the controls are implemented?

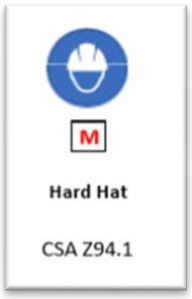
Column: How Serious
How serious could the injury or illness be after the controls are implemented?

Column Risk Level
Using the same matrix, re-evaluate the risk level with the new Probability and Severity levels.

Personal Protective Equipment (PPE)

The job hazard analysis specifies the type of PPE the worker is required to wear by task. Wearing the right PPE and knowing how to properly use and maintain it is essential to the safety of the workers and injury prevention in the workplace. According the hierarchies of control, personal protective equipment commonly considered the last line of defense. The control is at the level of the receiver and the worker could be potentially exposed to the hazard, if the PPE is not appropriately selected or due to non- or partial compliance.

Symbol



As indicated under the PPE symbols, PPE has been classified as either **M** indicating mandatory use or **R** for recommended use according to the specific task.

Appropriate selection of PPE ensures worker's exposure to the hazard is eliminated or at least controlled according to its intended design. The Occupational Health and Safety Act and the Regulations for Construction (O. Reg. 213/91) outlines the legal requirements for PPE.

Companies should have clear requirements regarding the its provision and use. The Canadian Standards Association (CSA) is a standard commonly used to ensure the type of PPE protects against the hazards it outlines. More information can be found at: https://www.csagroup.org/

For federally regulated companies, specific PPE standards can be found under the Canada Labour Code, Part II.

Symbol	Descriptor	Safety Standard
	Hard Hat	CSA Z94.1
	High Visibility Vest	CSA Z96.1
	Safety Boots	CSA Z195
	Gloves	*Based on Task, glove will control for specific hazard
	Safety Glasses *May have additional descriptor to specify the type	CSA Z94.3
	Ear Protection	CSA Z94.4
	Dust Mask	CSA Z94.2
	Protective Clothing *May have additional descriptor to specify the type	*Based on Task, xx changes to control specific hazard
	Respirator *May have additional descriptor to specify the type	CSA Z94.2
	Fall Protection	CSA Z259.12
	Face Mask/Shield	CSA Z94.3
	Welding Helmet	-

This page has intentionally been left blank.

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
01. Office Work	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with office work. This task involves a variety of tasks such as: using electronics for a prolonged period of time, lifting and carrying material and organizing the work area.

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Working with computers	MSD	Back and wrist strains due to prolonged sitting and typing	2	2	4	• Ensure workstation is adjusted to the worker • Training in office ergonomics • Office ergonomics safe work practice • Office ergonomics safe work practice training	1	2	2
1.1		MSD	Eye strain due to prolonged eye contact with computer screens	2	2	4	• Ensure monitor brightness is adjusted to the worker's comfort • Training in office ergonomics • Office ergonomics safe work practice • Office ergonomics safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.2		Phy	Neck strains due to prolonged sitting and working on computers above eye level	2	2	4	• Adjust monitors to eye level • Training in office ergonomics • Office ergonomics safe work practice • Office ergonomics safe work practice training	1	2	2
2.0	Using phones	MSD	Ergonomic stress due to prolonged awkward body positioning	2	2	4	• Training in office ergonomics • Office ergonomics safe work practice • Office ergonomics safe work practice training	1	2	2
3.0	Exposure to violent visitors/workers	Psy	Exposure to workplace violence and/or harassment	2	3	6	• Lock doors if working alone • Maintain a security system in the work area • Maintain emergency contacts at all times • Training in workplace violence and harassment • Workplace violence and harassment procedure • Workplace violence and harassment procedure training • Working alone safe work practice • Working alone safe work practice training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.0	Participating in staff meetings	MSD	Back strains due to prolonged sitting	2	2	4	• Take breaks when needed • Training in office ergonomics • Office ergonomics safe work practice • Office ergonomics safe work practice training	1	2	2
4.1		MSD	Eye strains due to prolonged eye contact with presentation screens	2	2	4	• Take breaks when needed • Adjust screen brightness according to the workers • Training in office ergonomics • Office ergonomics safe work practice • Office ergonomics safe work practice training	1	2	2
4.2		Sft	Trips, slips and falls due to cords or other objects in meeting room	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
4.3		Sft	Discomfort due to prolonged room closure causing lack of air flow	2	2	4	• Adequate ventilation in work area	1	2	2
5.0	Arranging room for meeting		*Refer to: 03 Manual Material Handling*							
6.0	Organizing workspace	MSD	Strains due to awkward reaching and bending	2	3	6	*Refer to: 02 Labour and Material Handling*	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
6.1		Sft	Trips, slips and falls due to cords or other objects in meeting room	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
6.2		Chm	Contact with toner resulting in irritation to the skin	2	2	4	• Training in WHMIS • SDS readily available	1	2	2
6.3		Chm	Contact with cleaning supplies in irritation to the skin	2	2	4	• Training in WHMIS • SDS readily available	1	2	2

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[O] Kneeling	[F] Sitting	[O] Pushing	[O] Pulling	[O] Carrying	[O] Reaching
[O] Walking	[N] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[O] Lifting 1 to 10 kg	

Chemicals Used

Cleaning Supplies

Equipment Used

N/A

Environment

[X] Indoor	[ ] Vibration	[ ] Heat	[ ] Noise	[ ] Wet	[ ] Other:
[ ] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures	Task-specific Training	Legislative References
Office Ergonomics Safe Work Practice	WHMIS	Duties of Employers- OHSA, s. 25 (1)(a-d)
Housekeeping Safe Work Practice	Workplace Violence and Harassment	Every Reasonable Precaution-
Material Handling Safe Work Practice	Office Ergonomics	OHSA, s. 25 (2)(h)
	Manual Material Handling & MSD Prevention	Housekeeping- O. Reg. 213/91, s. 35-48
		WV&H- OHSA, s. 32.0.1-32.0.8

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
02. Labour and Material Handling	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with manual handling and tool useage. This task is done throughout the project. This task involves lifting and carrying boxes, material, tools and equipment around site manually or with a pump cart. It also involves using power tools, parging and working with hot work tools on equipment that requires repairs.

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Lifting and carrying material	MSD	Injury, sprains or strains due to lifting and carrying heavy materials	2	2	4	• Manual handling aids • Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training	1	2	2
1.1		Sft	Cuts and scrapes due to contact with sharp edges or material	2	3	6	• Careful placement of hands during lifting and carrying • PPE : gloves	1	3	3
1.2		Sft	Slips, trips and fall due to cluttered work area or poor housekeeping	2	2	4	• Watch footing • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.3		Sft	Injury due to dropping material during lift	2	2	4	• Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training • PPE : safety boots	1	2	2
1.4		Sft	Trip, slip or fall due to rough terrain or unstable surface in work area	2	2	4	• PPE : safety boots	1	2	2
2.0	Operating power/hand tools	Sft	Cuts and scrapes due to contact with sharp components of tools or material	2	3	6	• Careful placement of hands • PPE: gloves	1	3	3
2.1		MSD	Strains due to continuous carrying of power tools	2	2	4	• Manual handling aids • Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training	1	2	2
2.2		Sft	Struck by drill bit due to poor maintenance	2	3	6	• Pre-use inspection on power tools • Report defects to supervisor immediately • Maintain tools as per manufacturer's instructions	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.3		Sft	Punctured skin due to improper handling of tools	2	3	6	• Careful placement of hands during use • Power tool safety training • Power/hand tool safe work practice • Power/hand tool safe work practice training	1	3	3
2.4		Sft	Eye injury due to projectiles	2	3	6	• Power tool safety training • Power/hand tool safe work practice • Power/hand tool safe work practice training • PPE : safety glasses	1	3	3
2.5		Sft	Foot injury due to dropped material or tools	2	2	4	• PPE : safety boots	1	2	2
2.6		Sft	Electric shock due to frayed wiring	2	3	6	• Pre-use inspection on power tools • Report defects to supervisor immediately • Maintain tools as per manufacturer's instructions	1	3	3
2.7		Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.8		Phy	Elevated noise levels due to use of tools	2	3	6	• Noise testing in work areas over 85dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE : ear protection			
3.0	Setting up equipment	Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Watch footing • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
3.1		Sft	Burns due to contact with hot equipment	2	2	4	• PPE: gloves	1	2	2
4.0	Welding/torch cutting	Sft	Burns/cuts/electric shock due to poor maintenance of welding equipment	3	3	9	• Pre-use inspection on welding/torching equipment • Report defects to supervisor immediately • Maintain equipment as per manufacturer's instructions	1	3	3
4.1		Sft	Health effects due to exposure to arc flash /bright lights	2	3	6	• Stop work immediately • Placement of barriers during work • Welding/torching safe work practice • Welding/torching safe work practice training • PPE: face shield	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.2		Phy	Adverse health effects due to exposure to UV radiation	2	3	6	• Training in welding/torching • Welding/torching safe work practice • Welding/torching safe work practice training • Physical agents -UV exposure and radiation safe job procedure training • PPE: protecting clothing, helmet	1	3	3
4.3		Chm	Respiratory discomfort due to inhalation of toxic fumes	2	3	6	• PPE: respirator	1	3	3
4.4		Sft	Burns due to contact with welded and torched pipes	2	3	6	• PPE: gloves	1	3	3
4.5		Sft	Fire/explosion due to using equipment near flammable material	2	3	6	• Keep flammable sources away from equipment • Training in fire extinguisher safety • Fire extinguisher readily available • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.6		MSD	Strains and sprains due to repetitive movements during operations	2	3	6	• Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training	1	3	3
5.0	Working around equipment	Sft	Electric shock due to working on equipment turned on	2	3	6	• Proper shutdown of equipment • Lockout and tagging of equipment • Training on lockout and tagging • Lockout and tagging safe job procedure • Lockout and tagging safe job procedure training	1	3	3
5.1		Sft	Respiratory irritation/skin burns due to working with chemicals to clean equipment	2	3	6	• SDS readily available • Training in WHMIS • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • PPE: gloves, safety glasses, dust mask (if needed)	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
6.0	Refuelling equipment	Chm	Fire/explosion due to working in close proximity of flammable sources	2	4	8	• Maintain a safe distance between refuelling area and flammable sources • Fire extinguisher in close proximity of work area • Proper storage of flammable sources • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4
6.1		Sft	Slips, trips and falls due to spilling fuel	2	3	6	• Spill kit readily available during refuelling • Training in spill response • Spill response safe job procedure • Spill response safe job procedure training	1	3	3
7.0	Using a power wash to clean equipment/ vehicles	Chm	Eye injury due to projectile of airborne particles or chemicals	2	3	6	• PPE: safety glasses • Power washing safe work practice • Power washing safe work practice training	1	3	3
7.1		Sft	Struck by power washer due to improper handling of equipment	2	4	8	• Training in power washer safety • Hold power washer firmly when using power washer	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
7.2		MSD	Strains and sprains due to lifting and carrying power washer and repetitive movements	2	2	4	• Manual handling aids • Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training	1	2	2
7.3		Chm	Fire/explosion due to gasoline being in close proximity to flammable sources	2	4	8	• Keep flammable material away from gasoline • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4
7.4		Sft	Worker injury due to excessive pressure of power washer	2	3	6	• Select appropriate power washer for cleaning • Power washer safe work practice • Power washer safe work practice training	1	3	3
7.5		Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training • Monthly workplace inspections	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
7.6		Sft	Worker injury due to poor maintenance of power washer	3	3	9	• Pre-use inspection of power washer • Report defects to supervisor • Maintain power washer as per manufacturer's instructions	1	3	3
8.0	Painting and labelling tanks	MSD	Strains and sprains due to repetitive movements with hands and overreaching	2	2	4	• Use assistive equipment to reach heights • Take appropriate breaks • Training in manual material handling and MSD prevention	1	2	2
8.1		Chm	Dizziness due to exposure to and inhalation of paint fumes	2	3	6	• Adequate ventilation provided • Training in WHMIS • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • SDS readily available	1	3	3
8.2		Sft	Slips and falls due to paint spills	2	3	6	• Spill response safe job procedure • Spill response safe job procedure training • Spill kit readily available	1	3	3
8.3		Sft	Eye injury due to projectile of paint	2	3	6	• PPE: safety glasses • SDS readily available	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
9.0	Parging: Mortar preparation	Phy	Adverse health effects such as: respiratory, ingestion, skin burn, and inhalation discomfort due to contact with mortar	2	4	8	• SDS readily available on site • Training in WHMIS • Chemical & hazardous material handling and storage safe job procedure • Chemical & hazardous material handling and storage safe job procedure training • PPE: dust mask, long sleeved clothing, gloves	1	4	4
9.1		Chm	Eye injury due to projectile of cement	2	3	6	• SDS readily available on site • PPE: safety glasses	1	3	3
9.2		Chm	Fire/explosion due to working with drywall compounds near flammable sources	3	3	9	• Do not mix compounds near flammable sources • Training in WHMIS • Training in fire extinguisher • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	3	3
10.0	Parging	MSD	Strains and sprains due to repetitive/awkward postures during application	2	3	6	• Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
10.1		Phy	Adverse health effects such as: respiratory, ingestion, skin burn, and inhalation discomfort due to contact with compound during application	2	4	8	• SDS readily available on site • Training in WHMIS • Chemical & hazardous material handling and storage safe job procedure • Chemical & hazardous material handling and storage safe job procedure training • PPE: dust mask, long sleeved clothing, gloves	1	4	4
10.2		Chm	Fire/explosion due to working with drywall compounds near flammable sources	3	3	9	• Avoid applying compounds near flammable sources • Training in WHMIS • Training in fire extinguisher • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	3	3

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[O] Kneeling	[N] Sitting	[O] Pushing	[O] Pulling	[C] Carrying	[O] Reaching
[F] Walking	[N] Climbing	[F] Bending	[F] Stooping	[F] Twisting	[C] Lifting 0 to 30 kg	

Chemicals Used

Fuel
Paint

Equipment Used

Welding Equipment
Torch Cutting Equipment
Power Washer
Power Tools

Environment

[X] Indoor	[X] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[X] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[M]	[M]	[M]	[ ]	[ ]	[M]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Welding Gloves**	**Safety Glasses**	**Ear Protection**	**Dust Mask**	**Protective / Tight Fitted**			**Welding Helmet**
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Use manual handling aids when needed. Ensure safe guards on welding/torch cutting/grinding equipment are in place and in good condition.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Material Handling Safe Work Practice
Housekeeping Safe Work Practice
Welding/Torching Safe Work Practice
Physical Agents- UV Exposure and Radiation Safe Job Procedure
Fire Extinguisher Safe Work Practice
Physical Agents: Noise Safe Job Procedure
Power/Hand Tool Safe Work Practice
Physical Agents: Vibration Safe Job Procedure
Lockout and Tagging Safe Job Procedure
Spill Response Safe Job Procedure
Chemical and Hazardous Material Handling and Storage Safe Job Procedure
Power Washer Safe Work Practice

Task-specific Training

Manual Material Handling & MSD Prevention
Welding Safety
Torch Cutting Safety
Fire Extinguisher Safety
Manual Material Handling & MSD Prevention
WHMIS 2015
Lockout and Tagging
Power Tool Safety
Spill Response

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Housekeeping- O. Reg. 213/91, s. 35-48
PPE- O. Reg. 213/91, s. 21-27
Welding- O. Reg. 213/91, s. 122-124
General Equipment- O. Reg. 213/91, s. 93-116
Fire Safety- O. Reg. 213/91, s. 52-58
Noise Safety- O. Reg. 381/15
WHMIS- O. Reg. 860

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
03. Forklift/Skid Steer Operations	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with forklift/skid steer operations. This task involves using a forklift/skid steer for a variety of tasks throughout site work.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Lifting load	Sft	Struck by injury due to load falling or sliding	3	3	9	• Proper securement of load • Forklift/skid steer certification • Forklift/skid steer safe job procedure • Forklift/skid steer safe job procedure training	1	3	3
1.1		Sft	Forklift/skid steer failure due to poor maintenance	3	3	9	• Pre-use inspection on forklift/skid steer • Report defects to supervisor immediately • Maintain forklift/skid steer as per manufacturer's instructions	1	3	3
2.0	Moving forklift/skid steer	Sft	Falling injury due to improper use of forklift/skid steer	2	3	6	• Forklift/skid steer certification • Forklift/skid steer safe job procedure • Forklift/skid steer safe job procedure training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.1		Sft	Collision or load sliding injury due to driver travelling at excessive speeds	3	4	12	• Operate forklift/skid steer within speed limits • Follow manufacturer's instructions • Forklift/skid steer certification • Forklift/skid steer safe job procedure • Forklift/skid steer safe job procedure training	1	4	4
2.2		Sft	Worker or pedestrian injury due to horseplay while operating the forklift/skid steer	3	3	9	• Place barriers around work area • Arms and legs in forklift/skid steer during use • Forklift/skid steer safe job procedure • Forklift/skid steer safe job procedure training	1	3	3
2.3		Sft	Forklift/skid steer collision due to poor housekeeping around the work area	3	3	9	• Housekeeping safe work practice • Housekeeping safe work practice training	1	3	3
3.0	Setting load down	Sft	Injury due to load tipping or sliding	3	3	9	• Be aware of load limits on racks • Do not exceed load heights	1	3	3
3.1		Sft	Striking worker injury due to load placed on unstable / uneven surface or placed over the worker	2	4	8	• Place load on even/stable surfaces • Maintain a safe distance when load being set down • Forklift/skid steer safe job procedure • Forklift/skid steer safe job procedure training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.2		Sft	Collision due to movement of the forklift/skid steer during unloading	2	3	6	• Ensure forklift/skid steer is at a stand still prior to unloading • Forklift/skid steer certification • Forklift/skid steer safe job procedure • Forklift/skid steer safe job procedure training	1	3	3

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[N] Kneeling	[C] Sitting	[O] Pushing	[O] Pulling	[N] Carrying	[N] Reaching
[N] Walking	[O] Climbing	[N] Bending	[N] Stooping	[F] Twisting	[N] Lifting 0 to 0 kg	

Chemicals Used

N/A

Equipment Used

Forklift
Skid Steer

Environment

[X] Indoor	[ ] Vibration	[ ] Heat	[X] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[ ] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[R]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**		**Safety Glasses**						
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Select appropriate forklift/skid steer for load being moved on site.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Forklift/Skid Steer Safe Job Procedure
Housekeeping Safe Work Practice

Task-specific Training

Forklift/Skid Steer Certification

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution-
OHSA, s. 25 (2)(h)
General Equipment-
O. Reg. 213/91, s. 93-116
PPE- O. Reg. 213/91, s. 21-27
Housekeeping- O. Reg. 213/91, s. 35-48

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent (4)	Likely (3)	Occasionally (2)	Unlikely (1)
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
04. Driving to/from Site	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with driving to and from site using MGI-owned/rented/leased vehicles only. This task involves driving in harsh weather conditions, as well as, other traffic conditions.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Walking to/entering/exiting vehicle	Sft	Trips, slips and falls due to poor weather conditions	2	2	4	• Wear proper footwear according to weather conditions	1	2	2
2.0	Driving	Sft	Collision with vehicles, pedestrians or objects due to icy/slippery weather conditions	2	4	8	• Avoid driving in harsh weather conditions • Installation of winter tires • Be cautious of surrounding traffic/pedestrians when driving • Defensive driving training • Defensive driving safe job procedure • Defensive driving safe job procedure training	1	4	4
2.1		Sft	Collision with vehicles, pedestrians or objects due improper maintenance of vehicle	3	3	9	• Circle check of vehicle prior to use • Report any defects to supervisor immediately • Maintain vehicle according to manufacturer's instructions	2	3	6

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.2		Sft	Collisions with vehicles due to distracted driving	3	4	12	• Be aware of surroundings • Do not use electronics or use hands-free devices when driving • Defensive driving training • Defensive driving safe job procedure • Defensive driving safe job procedure training	2	4	8
2.3		Sft	Collisions due to poor driving (ex. speeding, aggressive driving, etc.)	3	4	12	• Valid G license • Defensive driving training • Defensive driving safe job procedure • Defensive driving safe job procedure training	2	4	8
2.4		Chm	Irritation (respiratory, eye, skin) due to exposure to fluids/refueling	2	2	4	• WHMIS 2015 training • SDS readily available	1	2	2
2.5		Psy	Collision due to fatigue and stress from driving	3	4	12	• Do not drive if unable to • Take breaks when needed • Defensive driving training • Defensive driving safe job procedure • Defensive driving safe job procedure training	2	4	8

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.6		Sft	Blocked vision due to snow or ice falling off the roof of the vehicle	2	3	6	• Clean vehicle prior to driving • Be aware of surrounding vehicles • Defensive driving training • Defensive driving safe job procedure • Defensive driving safe job procedure training	1	3	3
2.7		Sft	Collisions or skids due to winter driving	3	3	9	• Re-schedule work if possible to avoid poor weather conditions • Maintain a winter kit in case of an emergency • Defensive driving safe job procedure • Defensive driving safe job procedure training	2	3	6
3.0	Backing up	Sft	Worker injury due to larger blind spot	3	4	12	• Install rear-view camera and monitor systems • Maintain eye-contact with oncoming drivers or pedestrians	1	4	4
3.1		Sft	Vehicle collision due to wide-turns	3	4	12	• Install blindspot mirrors • Check blind spot before turning • Maintain eye-contact with oncoming driver/ pedestrians	1	4	4
3.2			*Refer to: 08 On-site and Off-site Traffic*							

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[N] Standing	[N] Kneeling	[C] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[O] Reaching
[N] Walking	[O] Climbing	[O] Bending	[N] Stooping	[N] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

Washer Fluid
Brake Fluid
Engine Oil
Engine Coolant
Radiator Fluid
Washer Fluid
Transmission Fluid
Differential Oil
Power Steering Fluid

Equipment Used

Vehicle

Environment

[ ] Indoor	[X] Vibration	[X] Heat	[ ] Noise	[X] Wet	[ ] Other:_____
[X] Outdoor	[ ] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: N/A

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [ ] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures	Task-specific Training	Legislative References
Defensive Driving Safe Job Procedure	Defensive Driving	Duties of Employers- OHSA, s. 25 (1)(a-d) Every Reasonable Precaution- OHSA, s. 25 (2)(h)

This page has intentionally been left blank.

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
05. Working On-Site	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with working on-site, while being exposed directly or indirectly to hazards in different sub-trades such as: drywall, rebar, concrete/asphalt, flooring/tiling, electrical, demolition, painting, HVAC, plumbing, roofing, millwork, carpentry, framing, hoisting and rigging, abatement, hot work, window installation, glazing and thermal/moisture protection.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Walking around site when conveying equipment	Sft	Trips, slips and falls due to walking on uneven grounds	2	2	4	• Always watch footing • PPE: safety boots	1	2	2
1.1		Phy	Exposure to elevated noise levels due to surrounding tools/equipment being used	2	3	6	• Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE: ear protection	1	3	3
1.2		Sft	Struck by falling debris from demolition of buildings	2	3	6	• Install debris or catch platforms • Block off area of demolition • PPE: safety helmet, safety shoes, safety glasses	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.3		Phy	Heat/cold stress due to supervising sites in extreme weather conditions	2	3	6	• Physical agents: heat/cold stress safe job procedure • Physical agents: heat/cold stress safe job procedure • Weather appropriate clothing	1	3	3
2.0	Working in/around concrete/asphalt sub trade	Chm	Respiratory discomfort due to poor ventilation in work area when pouring concrete/applying asphalt	2	3	6	• Ensure there is adequate ventilation in work area • PPE: dust mask or respirator	1	3	3
2.1		Chm	Skin burns due to projectile of concrete during pouring/applying asphalt	2	3	6	• Stay at a safe distance during concrete pouring • PPE: long sleeved clothing	1	3	3
2.2		Sft	Slips, trips and falls due to poor housekeeping	2	3	6	• Housekeeping safe work practice • Housekeeping safe work practice training	1	3	3
3.0	Working in/ around electrical sub trade	Sft	Electrocution due to contact with live wires	2	4	8	• Electrical safety safe job procedure • Electrical safety safe job procedure training • Maintain a safe distance during work at all times	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.1		Sft	Sparks/fire due to improper electrical work being performed	2	3	6	• Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	3	3
3.2		Sft	Arc flash due to standing in close proximity of electrical work being performed	2	3	6	• Maintain a safe distance at all times • PPE: arc flash helmet	1	3	3
4.0	Working in/around HVAC sub trade	Sft	Overhead injury due to dropped material or tools	2	2	4	• PPE: hard hat	1	2	2
4.1		Sft	Struck by tools and equipment due to standing in close proximity of work area	2	2	4	• Maintain a safe distance at all times	1	2	2
4.2		Sft	Cuts/scrapes due to contact with sharp material	2	2	4	• Maintain a safe distance at all times	1	2	2
5.0	Working in/around plumbing sub trade	Sft	Slips and falls due to walking on slippery surfaces	2	3	6	• PPE: safety boots	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.1		Sft	Explosion/Rupture of piping due to lack of awareness of locates	3	4	12	• Ensure locates are identified prior to walking on site • Maintain a safe distance from work at all times	1	4	4
5.2		Sft	Foot injury due to dropped material	2	2	4	• PPE: safety boots	1	2	2
5.3		Sft	Respiratory irritation due to exposure to fumes released from piping	1	3	3	• Ensure there is adequate ventilation in work area • PPE : dust mask	1	3	3
6.0	Working around hoisting and rigging	Sft	Head injury due to debris/tools falling	2	3	6	• Maintain a safe distance from the work area • PPE: hard hat, safety boots	1	3	3
6.1		Sft	Colliding with equipment due to standing in close proximity of operations	2	3	6	• Maintain a safe distance from the work area • Be aware of site surroundings	1	3	3
6.2			*Refer to: 25 Hoisting & Rigging*							

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
7.0	Supervising lead/asbestos abatement	Sft	Respiratory/skin, eye irritation due to exposure to lead/asbestos during abatement	2	4	8	• Maintain a safe distance during lead/asbestos abatement • Asbestos awareness safe job procedure • Asbestos awareness safe job procedure training • Lead awareness safe job procedure • Lead awareness safe job procedure training • PPE: respirator/dust mask, safety glasses, gloves	1	4	4

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[F] Standing	[F] Kneeling	[O] Sitting	[O] Pushing	[O] Pulling	[N] Carrying	[N] Reaching
[F] Walking	[O] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

N/A

Environment

[X] Indoor	[X] Vibration	[X] Heat	[X] Noise	[X] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[X] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[R]	[M]	[R]	[R]	[ ]	[ ]	[M]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**	**Dust Mask**			**Fall Protection**	
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [ ] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Physical Agents: Noise Safe Job Procedure
Fire Extinguisher Safe Work Practice
Electrical Safety Safe Job Procedure
Physical Agents: Heat/Cold Stress Safe Job Procedure
Housekeeping Safe Work Practice
Chemical and Hazardous Material Handling and Storage Safe Job Procedure
Asbestos Safe Job Procedure
Lead Safe Job Procedure

Task-specific Training

Fire Extinguisher Safety
Workplace Violence and Harassment
Heat/Cold Stress Safety
WHMIS 2015

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Fire Safety- O. Reg. 213/91, s. 52-58
WHMIS- O. Reg. 860
Noise Exposure- O. Reg. 381/15
Asbestos Exposure- O. Reg. 278/05
Lead Exposure- O. Reg. 843

This page has intentionally been left blank.

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
06. Supervision	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with supervising/visiting the site. This task involves the hazards of taking responsibility of others on-site.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Daily review of planned activities	Sft	*Refer to: 01 Office work*							
2.0	Walk around work site to identify hazards, materials available, tools, progress, etc.	Sft	Trips, slips and falls due to poor housekeeping	2	3	6	• Housekeeping safe work practice and training	1	3	3
2.1		Phy	Exposure to elevated levels of noise from ongoing work on site resulting in hearing damage	2	2	4	• PPE: Hearing Protection	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.2		Phy	Injury/fatality due to contact with vehicles, equipment or materials	2	4	8	• Enforcing site traffic plans; • Housekeeping safe work practice; • Working around mobile equipment safe work practice; • Use of flagman or spotter	1	2	2
2.3		Phy	Dealing with emergencies on site	2	4	8	• Emergency Response Procedures; • Safety Board information;	1	2	2
3.0	Toolbox meetings	Sft	Violence and Workplace harrasment due to dealing with sub-contractors, management and employees.	2	3	6	• Workplace violence policy; • Workplace violence procedure • and training	1	3	3
4.0	Working near overhead work (eg. workers on scaffolds or elevating work platforms)	Sft	Debris/tools falling from overhead striking workers below resulting injury	2	3	6	• Housekeeping safe work practice and training; • "Rope off" areas below; • PPE: Hard Hat	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.0	Meeting with clients/sub trades on site	Sft	Confrontation and danger to worker due to entry of unwelcome visitors on site	2	3	6	• Proper security services on site • Avoid working alone • Emergency contacts readily available • Workplace violence & harassment training • Workplace violence & harassment procedure • Workplace violence & harassment procedure training • Working alone safe work practice • Working alone safe work practice training	1	3	3
5.1		Sft	Exposure to risks associated with other trades tasks	2	4	8	• Verification of Subtrade qualification (i.e. Form 1000, • Health and Safety Policy, WSIB clearance certificates, liability insurance, etc.); • Completion of daily hazard assesments by all trades on site; • Competent Supervisors (e.g. Understanding of hazards associated with the Sub-trade task); • SDS available as required; • Copy of trade cards, • PPE: Appropriate for the environment and hazards associated with the task.	1	4	4

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[F] Standing	[O] Kneeling	[O] Sitting	[O] Pushing	[O] Pulling	[O] Carrying	[O] Reaching
[F] Walking	[O] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[O] Lifting 0 to 30 kg	

Chemicals Used

N/A

Equipment Used

N/A

Environment

[X] Indoor	[ ] Vibration	[X] Heat	[X] Noise	[X] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[X] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
M	[ ]	M	R	R	R	R	R	R	R	R
Hard Hat		**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**	**Dust Mask**	**Coveralls**	**Respirator**	**Fall Protection**	**Face Shield**
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [ ] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Workplace Violence Policy
Workplace Violence Procedure
Housekeeping Safe Work Practice
Hazard reporting Safe Work Practice
Emergency Response Procedures

Task-specific Training

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Housekeeping- O. Reg. 213/91, s. 35-48
WV&H- OHSA, s. 32.0.1-32.0.8

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
07. Site Set Up	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with site set up. Site set up includes setting up temporary trailer/washrooms, temporary heating, signs/barriers, guardrails, and fencing in the work area.

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up trailer/washroom	MSD	Struck by trailer/washroom during set up due to standing in close proximity to set up area	2	2	4	• Stand clear of trailer/washroom set up area • Be aware of surroundings	1	2	2
1.1		Sft	Trips, slips and falls due to poor housekeeping in set up area	2	3	6	• Watch footing at all times • Housekeeping safe work practice • Housekeeping safe work practice training	1	3	3
1.2		Sft	Tipping over due to improper placement or placement on soft terrain of trailer/washroom	2	4	8	• Select an appropriate area to set up trailer/washroom based on terrain and even ground levels	1	4	4
2.0	Setting up signs/barriers and guardrails	Sft	Struck by vehicles due to lack of signal or warning signs	3	3	9	• Be cautious of surroundings during set up • PPE: high visibility vests	2	3	6

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.1		Phy	Slips and falls due to extreme weather conditions	2	2	4	• Training in heat/cold stress • Physical agents: heat/cold stress safe job procedure • Training on physical agents: heat/cold stress safe job procedure	1	2	2
2.2		MSD	Strains and sprains due to lifting and carrying heavy signs/barriers/guardrails	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
3.0	Installing fencing	MSD	Strains due to lifting and carrying fences	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
3.1		Sft	Cuts and scrapes due to contact with sharp edges of fencing	2	2	4	• PPE: gloves	1	2	2
3.2		Sft	Foot injury due to dropping fence	2	2	4	• PPE: safety boots	1	2	2
4.0	Identify locates	MSD	Strains and sprains due to repetitive shoveling movements	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
4.1		Sft	Explosion due to contact with locates	3	3	9	• Do not use an excavator if within one metre of utilities • Hand excavate with caution • Working around utilities safe job procedure	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.2		Sft	Trips, slips and falls due to poor housekeeping in set up area	2	2	4	• Watch footing at all times • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
4.3		Sft	Worker injury due to improper shut down of locates	3	3	9	• Ensure locates have been shut down prior to beginning work	2	3	6

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[F] Standing	[F] Kneeling	[N] Sitting	[F] Pushing	[F] Pulling	[F] Carrying	[F] Reaching
[C] Walking	[N] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[F] Lifting 0 to 25 kg	

Chemicals Used

Propane

Equipment Used

N/A

Environment

[ ] Indoor	[ ] Vibration	[X] Heat	[ ] Noise	[X] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**						
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Use manual handling aids when needed to move material around site.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures	Task-specific Training	Legislative References
Material Handling Safe Work Practice	Manual Material Handling & MSD Prevention	Duties of Employers- OHSA, s. 25 (1)(a-d)
Housekeeping Safe Work Practice	Heat/Cold Stress Safety	Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Physical Agents: Heat/Cold Stress		PPE- O. Reg. 213/91, s. 21-27
Safe Job Procedure		Housekeeping- O. Reg. 213/91, s. 35-48
Working around Utilities Safe Job Procedure		

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
08. On-Site and Off-Site Traffic	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with road closures. This task involves placing barriers to prevent vehicles or pedestrians from entering the work premises during construction. This task includes: traffic control, placing pylons, electrical signage, and tape around the work site.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setup/takedown of traffic control equipment	Sft	Struck by vehicles due to lack of signal or warning signs	3	3	9	• Be aware of surroundings • Training in traffic control • Traffic control safe job procedure • Traffic control safe job procedure training • PPE: high visibility vest	1	3	3
1.1		Phy	Slips and falls due to extreme weather conditions	2	2	4	• Proper footwear to be worn • Training in heat/cold stress • Physical agents: heat/cold stress safe job procedure • Physical agents: heat/cold stress safe job procedure training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.2		Sft	Struck by vehicles due to distracted drivers	3	3	9	• Training in traffic control • Traffic control safe job procedure • Training on traffic control safe job procedure • PPE: high visibility vest	1	3	3
1.3		MSD	Strains and sprains due to lifting and carrying heavy equipment	2	2	4	• Use of manual handling aids • Training in manual material handling and MSD prevention • Manual material handling safe work practice • Training on manual material handling safe work practice	1	2	2
2.0	Flagging traffic	Sft	Struck by vehicles due to distracted drivers	3	3	9	• Training in traffic control • Traffic control safe job procedure • Training on traffic control safe job procedure • PPE: high visibility vest	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.1		Phy	Dizziness, nausea or discomfort due to working in extreme heat/cold conditions	2	3	6	• Stay hydrated • Take appropriate breaks • Training in heat/cold stress • Physical agents: heat/cold stress safe job procedure • Training on physical agents: heat/cold stress safe job procedure	1	3	3
2.2		Sft	Struck by machine due to improper flagging operations/lack of training	3	3	9	• Training in traffic control • Traffic control safe job procedure • Training on traffic control safe job procedure • PPE: high visibility vest	1	3	3
2.3		Sft	Strains due to prolonged standing during flagging operations	2	3	6	• Take appropriate breaks	1	3	3
2.4		Sft	Collision with equipment, worker or vehicle due to unattended flagging operations	3	3	9	• Avoid leaving flagging position unless advised • Training in traffic control • Traffic control safe job procedure • Training on traffic control safe job procedure	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Backing up/ Signalling	Sft	Worker injury due to vehicle blind spot	3	4	12	• Install rear-view camera and monitor systems • Install barricades to reduce access • Use Radio frequency detection system • Site Planning arrange drive-through Operations • PPE: High Visibility Vest and Hard Hat with RFID tags	1	4	4
3.1		Sft	Worker collision or crushing due to working around CMV	3	4	12	• Never work around reversing vehicle • Use Radio frequency detection system • Install barricades to reduce access • Have signaller direct traffic • Site Planning arrange drive-through Operations • PPE: High Visibility Vest and • Hard Hat with RFID tags	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.2		Sft	Collision with equipment, worker or vehicle due to unattended flagging operations	3	4	12	• Use Radio frequency detection system • Avoid leaving flagging position unless advised • Training in traffic control • Traffic control safe job procedure • Traffic control safe job procedure training • PPE: High Visibility Vest and • Hard Hat with RFID tags	1	4	4

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[F] Kneeling	[N] Sitting	[O] Pushing	[F] Pulling	[C] Carrying	[C] Reaching
[F] Walking	[O] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[C] Lifting 0 to 20 kg	

Chemicals Used

N/A

Equipment Used

Pylons
Signs
Flagging Equipment

Environment

[ ] Indoor	[ ] Vibration	[X] Heat	[ ] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**								
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: N/A

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [ ] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Traffic Control Safe Job Procedure
Material Handling Safe Work Practice

Task-specific Training

Traffic Control
Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Traffic Control- O. Reg. 213/91, s. 67-69.1
PPE- O. Reg. 213/91, s. 21-27

This page has intentionally been left blank.

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
09. Large Vehicle Operations	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with operating and working around large vehicles. Large vehicles in this context refers to commercial motor vehicles (CMV) with a registered actual and gross weight of 4,500 kg and is used for a variety of tasks on the site for the profit of the business. Examples of large vehicles include but are not limited to dump trucks, open top dumpster (roll-offs), box truck, semi-

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Walking to/ entering/ exiting CMV		*Refer to: 04 Driving to/from Site*							
1.1		Sft	Slips, Trips and Falls due to uneven footing	3	3	9	• Proper placement of feet when entering and exiting vehicle • Climb on and off only when vehicle is stationary • Use parts designed by manufacturer for mounting and dismounting • Three-point contact in and out of equipment • Face machine when entering and exiting CMV • Wear appropriate PPE; Avoid loose or torn clothing	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.2		Sft	Spine and Joint Injury due to chronic stress from force of landing during egress	3	3	9	• Use parts designed by manufacturer for mounting and dismounting • Three-point contact in and out of equipment • Avoid jumping from CMV • Watch footing at all times especially on slippery surces such as ice, mud or waste materials • Appropriate PPE: Safety Boots	2	3	6
1.3		Sft	Electrocution from stepping on live line	3	4	12	• Contact Utilities service to shut down utilities around project site • Identify locates and mark grounds to ensure it is visible to operators • Watch footting at all times • Electrical safety safe job procedure • Electrical safety safe job procedure training • Maintain a safe distance during work at all times	1	4	4
2.0	Operating CMV on the road		*Refer to: 04 Driving to/from Site*							

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.1		Sft	Collision with vehicle due to unestimation of relative stopping distance	4	4	16	• Do not drive if unable to • Take breaks when needed • Pre-use inspection of CMV • Ensure load sensor is connected • Competent drivers with Class AZ/DZ license operating vehicle as permitted by license • Maintain safe following distance, taking extra precaution of load weight • Defensive Driving Safe Job Practice • Defensive Driving Safe Job Practice Training	2	4	8
2.2		Sft	Electrocution due to collision with powerlines	3	4	12	• Identify overhead powerlines and locates prior to excavating • Plan route according to site conditions • Ensure a overhead powerline form is completed prior to unloading heavy equipment • Ensure there is a traffic control plan in place with designated areas (if required) to unload heavy equipment	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.3		Sft	Collision with vehicle due large blind spot	4	4	16	• Do not drive if unable to • Take breaks when needed • Pre-use inspection of CMV • Install blind spot detection system • Competent drivers with Class AZ/DZ license operating vehicle as permitted by license • Travel in the appropriate lane as specified by legislation • Signal well ahead of lane changes • Be mindful of those around your vehicle, especially at urban intersections • Take extra precaution of additional blind spot due to auxillary equipment • Defensive Driving Safe Job Practice • Defensive Driving Safe Job Practice Training	2	4	8
2.4		Sft	Injury or Fatality due to working around CMV	3	4	12	• Install barricades to reduce access • Have signaller direct traffic • Never work around unloading truck • PPE: High Visibility Vest	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.5		Sft	Injury and Fatality due to truck tripped rollover	3	4	12	• Do not drive if unable to • Operate vehicles with ESP, EBS, ABS, ACC, LDWS and hill holder system where possible • Drive Slowly; take extra precaution of load weight and when turning • Pre-use inspection of CMV • Be aware of overhead obstructions • Defensive Driving Safe Job Procedure • Defensive Driving Safe Job Procedure Training	1	4	12
2.6		Sft	Injury and Fatality due to truck untripped rollover	3	4	12	• Do not drive if unable to • Operate vehicles with ESP, EBS, ABS, ACC, LDWS and hill holder system where possible • Take breaks when needed • Pre-use inspection of CMV • Do not overload CMV • Distribute load evenly and securely • Maintain slow even speed to avoid hydroplaning • Defensive Driving Safe Job Procedure • Defensive Driving Safe Job Procedure Training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.7		Phy	Exposure to elevated noise levels from vehicle-engine noise	2	3	6	• Noise testing in work area over 85 dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE: ear protection	1	3	3
2.8		Phy	Ergonomic stress due to exposure to vibration from vehicle-engine	2	3	6	• Placement of anti-vibration guards • Physical agents: vibration safe job procedure • Physical agents: vibration safe job procedure training • PPE: anti-vibration gloves	1	3	3
3.0	Backing up/ Signalling		*Refer to: 08 On-site and Off-site Traffic*							
4.0	Truck Body or Attachment Operations	Sft	Injury or Fatality due to working around CMV	3	4	12	• Install barricades to reduce access • Have signaller direct traffic • Never work around unloading truck • PPE: High Visibility Vest	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.1		Sft	Struck by falling debris from loading dump truck	2	3	6	• Never work around unloading truck • Install barricades to reduce access • Have signaller direct traffic • PPE: safety helmet, safety shoes, safety glasses	1	3	3
4.2		Sft	Electrocution due to collision with powerlines	3	4	12	• Identify overhead powerlines and locates prior to excavating • Plan route according to site conditions • Ensure a overhead powerline form is completed prior to unloading heavy equipment • Ensure there is a traffic control plan in place with designated areas (if required) to unload heavy equipment	1	4	4
4.3			Injury and Fatality due to quick coupler release	4	4	16	• Complete a ground/bump test • Maintain and comply with operational manual for coupler	2	4	8

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.3		Sft	Collision with vehicle due large blind spot	4	4	16	• Do not drive if unable to • Take breaks when needed • Pre-use inspection of machine • Install blind spot detection system • Be mindful of those around your vehicle, especially at urban intersections • Take extra precaution of additional blind spot due to auxillary equipment • Defensive Driving Safe Job Practice • Defensive Driving Safe Job Practice Training	2	4	8
4.4		Sft	Collision from tire blow out	4	4	16	• Perform circle checks on vehicle before use • Maintain tires according to manufacturer's requirements	2	4	8

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.5			Injury and Fatality due to truck untripped rollover	3	4	12	• Do not drive if unable to • Operate vehicles with ESP, EBS, ABS, ACC, LDWS and hill holder system where possible • Take breaks when needed • Pre-use inspection of CMV • Do not overload CMV • Distribute load evenly and securely • Beaware of recent weather conditions; take precaution when driving on slippery surfaces • Defensive Driving Safe Job Procedure • Defensive Driving Safe Job Procedure Training	1	4	4
4.6		Sft	Worker injury due to being within machine's swing radii (large vehicle turn's blindspot)	3	4	12	• Develop Internal Traffic Control Plan • Drive Slowly; take extra precaution of load weight and when turning • Defensive Driving Safe Job Procedure • Defensive Driving Safe Job Procedure Training	1	4	12

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.7		Sft	Worker injury due to being within machine's blind areas	3	4	12	• Have signaller direct traffic • Develop Internal Traffic Control Plan • Backup Slowly; take extra precaution of load weight and when turning • Defensive Driving Safe Job Procedure • Defensive Driving Safe Job Procedure Training • PPE: High Visibility Vest	1	4	12
5.0	Exposure to hazardous material	Chm	Chronic exposure to hazardous Construction Material	3	4	12	• Training in WHMIS • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • SDS readily available • PPE: based on task	1	4	4
6.0	Refueling & Maintenance		*Refer to: 04 Driving to/from Site*							

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
6.1		Sft	Worker crushing injury or death due to vehicle fall or slide off jack	2	4	8	• Maintain according to vehicle service manual	1	4	4
6.2		Chm	Worker burns due to exposure to toxic hot fuel spills	3	4	12	• PPE: Safety glasses, gloves	2	4	8
6.3		Chm	Irritation (respiratory, eye, skin) due to exposure to fluids/refueling	2	2	4	• WHMIS 2015 training • SDS readily available	1	2	2
6.4		Sft	Slips, Trips and Falls from cluttered work area	4	1	4	• Perform circle checks on vehicle before use • Clean up spills and remove combustible or flammable materials • Maintain good housekeeping	1	1	1

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[N] Standing	[N] Kneeling	[C] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[O] Reaching
[O] Walking	[O] Climbing	[O] Bending	[N] Stooping	[N] Twisting	[N] Lifting: ___ to ___ kg	

Chemicals Used

Fuel

Equipment Used

Commercial Motor Vehicle

Environment

[ ] Indoor	[X] Vibration	[X] Heat	[X] Noise	[X] Wet	[ ] Other: _____
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[ ]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
	High Visibility Vest									
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering:

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard reporting
- [ ] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Defensive Driving Safe Job Procedure

Task-specific Training

Az/Dz Driving License
Defensive Driving Safe Job Procedure

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
10. Asbestos Abatement	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyses the risks associated with being exposed to asbestos during asbestos abatement. This task analyses the potential to be exposed to asbestos while performing the abatement process.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Prepare the work area	Sft	Slips trips and falls due to improper house keeping or poorly stored equipment.	3	2	6	• Proper proper housekeeping • Housekeeping toolbox talks • Housekeeping safe work practice	2	2	4
2.0	Walk through with surveyor	Sft	Slips trips and falls due to inproper house keeping or poorly stored equipment.	3	2	6	• Proper proper housekeeping • Housekeeping toolbox talks • Housekeeping safe work practice	2	2	4
3.0	Working with asbestos abatement on site	Sft	Exposure to asbestos	3	3	9	• Ensure barriers are put in place • Provide and make visible signs and barriers • Communicate to workers • abatement taking place • PPE - Face Mask • Asbestos safe job procedure	3	2	6

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.1		Sft	Working around abatement	3	3	9	• Ensure barriers are put in place Provide and make visible signs and barriers • Communicate to workers abatement taking place • PPE - Face Mask • Asbestos safe job procedure • Provide adequate ventillation	3	2	6
4.0	Inspecting after abatement	Sft	Exposure to asbestos	2	2	4	• Ensure to walk through with competent person of the subtrade • PPE - Face Mask	1	2	2
5.0	Cleaning up and setting up for work	Sft	Slips trips and falls due to inproper house keeping or poorly stored equipment	3	2	6	• Proper proper housekeeping • Housekeeping toolbox talks • Housekeeping safe work practice	2	2	4
5.1		MSD	Strains and sprains due to lifting material for work set up	2	3	6	• Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training • PPE : safety boots	1	3	3

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[N] Kneeling	[N] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[N] Reaching
[F] Walking	[N] Climbing	[N] Bending	[N] Stooping	[N] Twisting	[O] Lifting 0 to 10 kg	

Chemicals Used

N/A

Equipment Used

Signs and Barriers

Environment

[X] Indoor	[ ] Vibration	[ ] Heat	[ ] Noise	[ ] Wet	[X] Other: Asbestos
[ ] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[M]	[M]	[ ]	[R]
Hard Hat	**High Visibility Vest**	**Safety Boots**					**Coveralls**	**Respirators with P1-00 HEPA filters**		**Face Mask/ Shield**
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [X] Hazard reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Asbestos Safe Job Procedure
Material Handling Safe Work Practice
Housekeeping Safe Work Practice

Task-specific Training

Asbestos Awareness
Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
Housekeeping- O. Reg. 213/91, s. 35-48
Asbestos- O. Reg. 278/05

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
11. Lead Abatement	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyses the risks associated with being exposed to lead during lead abatement. This task analyses the potential to be exposed to lead while performing the abatement process.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Prepare the work area	Sft	Slips trips and falls due to improper house keeping or poorly stored equipment	3	2	6	• Proper housekeeping • Housekeeping toolbox talks • Housekeeping safe work practice	2	2	4
2.0	Walk through with surveyor	Sft	Slips trips and falls due to inproper house keeping or poorly stored equipment.	3	2	6	• Proper housekeeping • Housekeeping toolbox talks • Housekeeping safe work practice	2	2	4
3.0	Working with Lead abatement on site	Sft	Exposure to Lead	3	3	9	• Ensure barriers are put in place • Provide and make visible signs and barriers • Separate work area with poly • Communicate to workers abatement taking place • Lead safe job procedure • Lead safe job procedure training • PPE: face mask	3	2	6

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.1		Sft	Working around abatement	3	3	9	• Ensure barriers are put in place • Provide and make visible signs and barriers • Provide adequate ventillation • Communicate to workers abatement taking place • Lead safe job procedure • Lead safe job procedure training • PPE: face mask	3	2	6
4.0	Inspecting after abatement	Sft	Exposure to lead	2	2	4	• Ensure to walk through with competent person of the subtrade • PPE - respirator & face mask	1	2	2
5.0	Cleaning up and setting up for work	Sft	Slips trips and falls due to inproper house keeping or poorly stored equipment	3	2	6	• Proper housekeeping • Housekeeping toolbox talks • Housekeeping safe work practice	2	2	4
5.1		MSD	Strains and sprains due to lifting material for work set up	2	3	6	• Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training • PPE : safety boots	1	3	3

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[F] Kneeling	[O] Sitting	[C] Pushing	[N] Pulling	[O] Carrying	[F] Reaching
[O] Walking	[O] Climbing	[F] Bending	[O] Stooping	[F] Twisting	[O] Lifting 0 to 25 kg	

Chemicals Used

Encapsulants
Trisodium Phosphate
Solvent/Caustic-based paint strippers

Equipment Used

Knife
Glove Bag

Environment

[X] Indoor	[ ] Vibration	[X] Heat	[ ] Noise	[ ] Wet	[X] Other: Lead
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[M]	[M]	[ ]	[R]
Hard Hat	**High Visibility Vest**	**Safety Boots**					**Coveralls**	**Respirators with P1-00 HEPA filters**		**Face Mask/ Shield**
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Lead Safe Job Procedures
Manual Material Handling Safe Work Practice
Housekeeping Safe Work Practice

Task-specific Training

Lead Safety
Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
Housekeeping- O. Reg. 213/91, s. 35-48
Lead Safety- O. Reg. 843

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
12. Demolition	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with demolition.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Public Way Protection	Sft	Pedestrian struck by demolition debris due to insufficient or no area quarantined for work zone	2	4	8	• Install debris or catch platforms • Block off area of demolition with concrete barriers • Install warning signs	1	4	4
2.0	Carrying out light demolition and cleanup activities	Phy	Struck by falling or flying objects / material	2	3	6	• PPE: safety helmet, safety shoes, safety glasses	2	3	6
2.1		Sft	Struck by falling debris from demolition of buildings	2	3	6	• Install debris or catch platforms • Block off area of demolition • PPE: safety helmet, safety shoes, safety glasses	1	3	3
2.2		Sft	Slips, trips and falls due to cluttered work area	3	4	12	• PPE: safety shoes • Watch footing	2	1	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.3		Phy	Respiratory damage / irritation due to dust and silica	4	3	12	• Silica safe job procedure • Silica safe job procedure training • PPE: masks, respirators	1	3	3
2.4		MSD	Sprains and strains due to repetitive movement	3	4	12	• Ensure workers take adequate breaks • Rotate job tasks amongst workers	1	2	2
2.5		MSD	Sprains and strains due to manual lifting heavy objects	3	4	12	*Refer to: 02 Labour and Material Handling*	1	2	2
2.6		Phy	Ear damage due to elevated levels of noise	3	2	6	• Noise testing in work area over 85dBA • PPE: ear protection • Physical agents: noise safe job procedure • Physical agents: Noise safe job procedure training	1	2	2
2.7		Sft	Slips, trips and falls due to poor lighting	3	3	9	• Ensure additional lighting sources are used when overhead lighting is not present in the work zone	1	2	2
2.8		Sft	Skin cuts and punctures due to broken glass and exposed nails	3	3	9	• PPE: gloves, safety boots, safety glasses, hard hat	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Operating power/hand tools	Sft	Cuts and scrapes due to contact with sharp components of tools or material	2	3	6	• Careful placement of hands • PPE: gloves	1	3	3
3.1		MSD	Strains due to continuous carrying of power tools	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
3.2		Sft	Struck by drill bit due to poor maintenance	2	3	6	• Pre-use inspection on power tools • Report defects to supervisor immediately • Maintain tools as per manufacturer's instructions	1	3	3
3.3		Sft	Punctured skin due to improper handling of tools	2	3	6	• Careful placement of hands during use • Power tool safety training • Power/hand tool safe work practice • Power/hand tool safe work practice training	1	3	3
3.4		Sft	Eye injury due to projectiles	2	3	6	• Power tool safety training • Power/hand tool safe work practice • Power/hand tool safe work practice training • PPE : safety glasses	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.5		Sft	Foot injury due to dropped material or tools	2	2	4	• PPE : safety boots	1	2	2
3.6		Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
3.7		Sft	Electric shock due to frayed wiring	2	3	6	• Pre-use inspection on power tools • Report defects to supervisor immediately • Maintain tools as per manufacturer's instructions	1	3	3
3.8		Phy	Elevated noise levels due to use of tools	2	3	6	• Noise testing in work areas over 85dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE : ear protection	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.0	Use of heavy equipment for mechanical demolition	Sft	Electrocution due to contact with Utilities	3	4	12	• Identify overhead powerlines and locates prior to excavating • Plan route according to site conditions • Ensure a overhead powerline form is completed prior to unloading heavy equipment • Ensure there is a traffic control plan in place with designated areas (if required) to unload heavy equipment • Working around Utilities safe job procedure • Working around Utilities safe job procedure training	1	4	4
4.1			*Refer to: 09 Large Vehicle Operations*							
4.2		Phy	Struck by large debris from demolition while operating CMV	2	3	6	• Operate CMV as far as practicable for demolition • Install debris or catch platforms • Block off area of demolition • PPE: safety helmet, safety shoes, safety glasses	1	3	3
4.3		Sft	Worker flipping over due to load shifting on CMV on a unstable flooring/ structure collapse	3	4	12	• Fragile flooring is shored/ braced prior to demolition • Engineering survey to determine areas where there will be premature collapse • Install FOPS onto excavator	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.4			*Refer to: 14 Excavation, Trenching and Backfilling*							
4.5			*Refer to: 30 Occupational Health Hazards*							

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[O] Kneeling	[N] Sitting	[F] Pushing	[F] Pulling	[F] Carrying	[F] Reaching
[O] Walking	[O] Climbing	[F] Bending	[F] Stooping	[F] Twisting	[F] Lifting 0 to 30 kg	

Chemicals Used

N/A

Equipment Used

Manual/Powered Hand Tools

Environment

[X] Indoor	[X] Vibration	[X] Heat	[X] Noise	[X] Wet	[X] Other: Mould, Asbestos, Silica, Dirt
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Shoes**	**Safety Gloves**	**Safety Glasses**	**Ear Protection**	**Dust Mask**				
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Housekeeping Safe Work Practice
Demolition Safe Work Practice
Power/Hand Tool Safe Work Practice
Physical Agents: Vibration Safe Job Procedure
Physical Agents: Noise Safe Job Procedure
Material Handling Safe Work Practice

Task-specific Training

Manual Material Handling and MSD Prevention
Power Tool Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
O. Reg. 213/91, s. 93-116
PPE- O. Reg. 213/91, s. 21-27
General Equipment- O. Reg. 213/91, s. 93-116
Noise Exposure- O. Reg. 381/15
Housekeeping- O. Reg. 213/91, s. 35-48

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
13. Ladder Use	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with ladder use. This task involves using a ladder for a variety of uses such as storage management and reaching material at a height.

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Ladder transport and set up	Sft	Struck by ladder due to improper handling	2	2	4	• Use assistive equipment to move ladder • Ladder safety training • Ladder safe work practice • Ladder safe work practice training	1	2	2
1.1		MSD	Strains due to Improper lifting and ladder manipulation	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
1.2		Sft	Slips, trips and falls due to poor housekeeping	2	2	4	• Watch footing • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
1.3		Sft	Pinch points due to improper finger placement	2	2	4	• Careful placement of fingers	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.0	Working on ladders	Sft	Falls due to improper placement of ladder / uneven grounds	3	3	9	• Select appropriate ladder prior to use • Place ladder on stable surfaces • Ladder safety training • Ladder safe work practice • Ladder safe work practice training	1	3	3
2.1		Sft	Falls due to improper use of ladder	3	3	9	• Three point contact at all times • Ensure ladder is free of debris • If above 10 feet, fall protection must be used • Training in ladder use • Ladder safe work practice • Ladder safe work practice training	1	3	3
2.2		Sft	Falls due to poor maintenance of ladder	3	3	9	• Pre-use inspection of ladder • Report defects to supervisor immediately • Maintain ladder as per manufacturer's instructions	1	3	3

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[F] Kneeling	[N] Sitting	[O] Pushing	[O] Pulling	[F] Carrying	[F] Reaching
[O] Walking	[C] Climbing	[O] Bending	[O] Stooping	[F] Twisting	[F] Lifting 0 to 25 kg	

Chemicals Used

N/A

Equipment Used

Step Ladder
Extension Ladder
6 and 8 Foot Ladder

Environment

[X] Indoor	[ ] Vibration	[ ] Heat	[ ] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[R]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**							**Fall Protection**	
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Select appropriate ladder based on use of ladder.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Ladder Safe Work Practice
Material Handling Safe Work Practice

Task-specific Training

Ladder Safety
Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Ladder- O. Reg. 213/91, s. 78-85, 86
PPE- O. Reg. 213/91, s. 93-116

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
14. Elevating Work Platform Operations	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with using an elevating work platform (EWP) in the work area. This task involves reaching at a height for work such as plywood blocking. This task also involves using fall protection.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Accessing the equipment	Sft	Falls and tipping of equipment due to improper accessing (climbing scissors, using an extension ladder)	2	3	6	• Proper access to EWP • EWP certification • Elevating work platform safe job procedure • Elevating work platform safe job procedure training	1	3	3
2.0	Operating the EWP	Sft	Malfunction of equipment due to improper maintenance	3	4	12	• Pre-use inspection of EWP • Report defects to supervisor immediately • Maintain EWP as per manufacturer's instructions	1	4	4
2.1		Sft	Falling due to faulty railings	3	4	12	• Pre-use inspection of railings • Report defects to supervisor immediately • Maintain railings as per manufacturer's instructions	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.2		Sft	Falls, collisions or worker injury due to sudden stopping, depressions, drop-offs, overreaching, etc.	3	4	12	• EWP certification • Working at Heights certification • Elevating work platform safe job procedure • Elevating work platform safe job procedure training • Working at heights safe job procedure • Working at heights safe job procedure training • PPE : fall protection	1	4	4
2.3		Sft	Tipping over/crushing of workers due to uneven ground	3	3	9	• Operate EWP on even grounds • Spotter readily available • Plan route prior to using EWP	1	3	3
2.4		Sft	Collision with other workers, equipment or material due to improper use of EWP	3	3	9	• Spotter readily available • Plan routes according to site • Place barriers around work area	1	3	3
2.5		Sft	Worker falling due to overloading the platform or lack of stability	3	3	9	• Avoid overloading EWP • Follow manufacturer's instructions on load capacities • Select appropriate scissor lift based on work being done • Elevating work platform safe job procedure • Elevating work platform safe job procedure training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.6		Sft	Collisions due to working near other equipment	3	3	9	• Maintain a safe distance from workers and equipment • Spotter available to guide operator • EWP certification • Elevating work platform safe job procedure • Elevating work platform safe job procedure training	1	3	3
2.7		Sft	Struck by falling EWP	3	3	9	• Do not overload EWP • Distribute load on EWP • Place barriers around work area • EWP certification • Elevating work platform safe job procedure • Elevating work platform safe job procedure training	1	3	3
2.8		Sft	Tipping over due to moving the EWP raised	3	4	12	• Lower EWP prior to moving it • EWP certification • Elevating work platform safe job procedure • Elevating work platform safe job procedure training	1	4	4
3.0	Working at heights		*Refer to: 15 Working at Heights*							

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[O] Kneeling	[N] Sitting	[O] Pushing	[O] Pulling	[N] Carrying	[N] Reaching
[N] Walking	[F] Climbing	[F] Bending	[F] Stooping	[F] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Elevating Work Platform
Fall Protection

Environment

[ ] Indoor	[ ] Vibration	[ ] Heat	[ ] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[M]	[ ]	[ ]	[ ]	[ ]	[M]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**		**Safety Glasses**					**Fall Protection**	
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Ensure guardrails are in good condition.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Elevating Work Platform Safe Job Procedure
Working at Heights Safe Job Procedure
Working at Heights- Rescue Plan

Task-specific Training

Elevating Work Platform Certification
Working at Heights

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution-
OHSA, s. 25 (2)(h)
EWP- O. Reg. 213/91, s. 143-149
Overhead Powerlines-
O. Reg. 213/91, s. 188
PPE- O. Reg. 213/91, s. 21-27
Working at Heights-
O. Reg. 213/91, s. 26.1-26.9

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
15. Working at Heights	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with working at heights. This task involves working at heights when working on elevating work platforms or scaffolding.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Tieing off	Sft	Falls due to faulty equipment	3	4	12	• Pre-use inspection on fall protection • Report defects to supervisor immediately • Maintain fall protection as per manufacturer's instructions	1	4	4
1.1		Sft	Falls due to Inadequate tie-off between anchor points	3	4	12	• Proper tie off prior to working at heights • Training in working at heights • Working at heights safe job procedure • Working at heights safe job procedure training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.2		Sft	Slips, trips and falls due to poor housekeeping in the work area	2	2	4	• Ensure surfaces are free from debris • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
2.0	Working at heights	Sft	Falls due to faulty equipment	3	4	12	• Pre-use inspection on fall protection • Report defects to supervisor immediately • Maintain fall protection as per manufacturer's instructions	1	4	4
2.1		Sft	Injuries/fatalities due to workers using improper working techniques	3	4	12	• Do not walk backwards • Training in working at heights • Working at heights safe job procedure • Working at heights safe job procedure training	1	4	4
2.2		Sft	Striking worker due to objects falling from heights	3	4	12	• Training in working at heights • Working at heights safe job procedure • Working at heights safe job procedure training • PPE : hard hat	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.3		Sft	Falls due to lack of rescue plan	4	4	16	• Rescue plan developed and approved prior to beginning work on site • Working at heights rescue plan • Working at heights rescue plan training	1	4	4

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[O] Kneeling	[N] Sitting	[N] Pushing	[O] Pulling	[N] Carrying	[F] Reaching
[C] Walking	[O] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Harness
Lanyard
Ropes
Guardrails

Environment

[X] Indoor	[ ] Vibration	[X] Heat	[ ] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[X] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[M]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**							**Fall Protection**	
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Select appropriate fall protection based on work being done.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Working at Heights Safe Job Procedure
Working at Heights- Rescue Plan
Housekeeping Safe Work Practice

Task-specific Training

Working at Heights

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Housekeeping- O. Reg. 213/91, s. 35-48
Working at Heights- O. Reg. 213/91, s. 26.1-26.9

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
16. Excavation, Trenching and Backfilling	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with excavation, trenching, and backfilling. This task involves excavating, balancing and sloping the site with the excavator and using different attachments throughout site work for a variety of tasks.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up excavator	Sft	Worker injury due to accidental start up of excavator	3	3	9	• Training in excavation • Excavation and trenching safe job procedure • Excavation and trenching safe job procedure training • Shut down of excavator	1	3	3
2.0	Setting up attachment	Sft	Finger pinching due to setting up attachment equipment	2	2	4	• PPE : gloves	1	2	2
2.1		Sft	Cuts and scrapes due to handling sharp edges of material	2	2	4	• PPE : gloves	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Accessing/exiting excavator	Sft	Slips, trips and falls due to entering and exiting excavator	2	2	4	• Proper placement of feet when entering and exiting excavator • Three point contact in and out of equipment • Face machine when entering and exiting equipment	1	2	2
4.0	Operating the excavator	Chm	Electric shock or gas explosion due to working around utilities	3	4	12	• Identify overhead powerlines and locates prior to excavating • Plan route according to site conditions	1	4	4
4.1		Sft	Collision due to poor maintenance of excavator	3	4	12	• Training in excavation • Excavation and trenching safe job procedure • Excavation and trenching safe job procedure training • Proper maintenance of excavator	1	4	4
4.2		Sft	Striking worker, collision or worker injury due to blocked vision while operating excavator	3	4	12	• Training in excavation • Excavation and trenching safe job procedure • Excavation and trenching safe job procedure training	1	4	4
4.3		Sft	Eye irritation due to dust exposure	2	2	4	• PPE : safety glasses	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.4		Sft	Collision with other equipment or workers due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
4.5		Sft	Machine malfunction due to overloading excavator	3	4	12	• Training in excavation • Excavation and trenching safe job procedure • Excavation and trenching safe job procedure training	1	4	4
4.6		Sft	Environmental hazards due to contact with broken hoses or leaking valves or fittings	3	4	12	• Identify locates prior to excavating • Hand excavation if one metre near utilities	1	4	4
4.7		Sft	Soil striking worker due to excavating over workers	3	4	12	• Do not approach equipment during operations • Stay out of swing radius unless eye contact with operator has been established or equipment is at a full stop • Move material or excavated material to a safe area	1	4	4
4.8		Phy	Ear damage due to elevated noise levels	2	3	6	• Noise testing in work area over 85 dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE: ear protection	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.9		Phy	Struck by large debris from demolition while operating excavator	2	3	6	• Install FOPS onto excavator • Install debris or catch platforms • Block off area of demolition • PPE: safety helmet, safety shoes, safety glasses	1	3	3
4.10		Sft	Concrete striking worker due to excavating near workers	3	4	12	• Do not approach equipment during operations • Stay out of swing radius unless eye contact with operator has been established or equipment is at a full stop • Move material or excavated material to a safe area	1	4	4
4.11		Sft	Striking worker due to poor securement of attachment	2	3	6	• Proper securement of attachment • Test attachment prior to operations	1	3	3
5.0	Trenching	Sft	Falls or injury due to cave ins	3	4	12	• Slope excavation • Placement of trench boxes • Training in excavation • Excavation and trenching safe job procedure • Excavation and trenching safe job procedure training	1	4	4
5.1		Sft	Falls due to improper surfaces	3	4	12	• Do not stand in trenched areas • Use of fall protection if required • Ensure surface is stable prior to working on it	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.2		Sft	Overhead injury due to material, tools or workers falling	2	3	6	• PPE : hard hat	1	3	3
5.3		Sft	Worker injury due to water accumulation	3	4	12	• Dewater trenches • Avoid working in trenches with water accumulation • Excavation and trenching safe job procedure • Excavation and trenching safe job procedure training	1	4	4
6.0	Sloping	Sft	Falls or injury due to cave ins	3	4	12	• Safe angle of slope with consider the soil conditions • Training in excavation • Trenching safe job procedure • Trenching safe job procedure training	1	4	4
6.1		Sft	Falls due to improper surfaces	3	4	12	• Do not stand in trenched areas • Use of fall protection if required • Ensure surface is stable prior to working on it	1	4	4
6.2		Sft	Overhead injury due to material, tools or workers falling	2	3	6	• PPE : hard hat	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
6.3		Sft	Worker injury due to water accumulation	3	4	12	• Dewater trenches • Avoid working in trenches with water accumulation • Trenching safe job procedure • Trenching safe job procedure training	1	4	4
6.4		Sft	Eye injury due to projectile of soil or rocks	2	2	4	• PPE : safety glasses	1	2	2
6.5		Sft	Soil striking worker due to excavating over workers	3	4	12	• Do not approach equipment during operations • Stay out of swing radius unless eye contact with operator has been established or equipment is at a full stop • Move material or excavated material to a safe area	1	4	4
7.0	Preparing trench boxes	Sft	Strike worker due to lifting the trench box	3	3	12	• Proper securement of load • Confirm securement prior to lift • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • PPE : hard hat • Use proper slings, chains and chokers	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
8.0	Using trench boxes	Sft	Falls due to working in close proximity to trenches	3	3	9	• Careful placement of footing • Placement of barriers and signs	1	3	3
8.1		Sft	Slips, trips and falls due to entering and exiting trench box	2	2	4	• Ladder must be set up in the trench box. • PPE : Safety Boots	1	2	2
8.2		Sft	*Refer to: 25 Hoisting and Rigging*							
8.3		Sft	*Refer to: 13 Ladder Use*							
9.0	Backfilling	Sft	Striking worker due to workers standing in close proximity of excavator	2	3	6	• Placement of barriers around work area • Backfilling safe job procedure • Backfilling safe job procedure training	1	3	3
9.1		Sft	Eye injury due to projectile of soil or rocks	2	2	4	• PPE : safety glasses	1	2	2
9.2		Sft	Falls due to workers standing in close proximity of excavated area	3	4	12	• Placement of barriers around work area • Backfilling safe job procedure • Backfilling safe job procedure training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
9.3		Sft	Collision, worker injury or malfunction due to poor maintenance of excavator	3	4	12	• Pre-use inspection of excavator • Report defects immediately • Maintain excavator as per manufacturer's instructions	1	4	4

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[O] Kneeling	[F] Sitting	[N] Pushing	[N] Pulling	[O] Carrying	[O] Reaching
[O] Walking	[O] Climbing	[O] Bending	[N] Stooping	[F] Twisting	[O] Lifting 0 to 10 kg	

Chemicals Used

N/A

Equipment Used

Excavator

Environment

[ ] Indoor	[ ] Vibration	[ ] Heat	[X] Noise	[X] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[R]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**					
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Select appropriate attachment for task being performed.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Excavation and Trenching Safe Job Procedure
Housekeeping Safe Work Practice
Physical Agents: Noise Safe Job Procedure
Backfilling Safe Job Procedure

Task-specific Training

Excavator Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Excavation- O. Reg. 213/91, s. 222-242
Housekeeping- O. Reg. 213/91, s. 35-48
Noise Exposure- O. Reg. 381/15
PPE- O. Reg. 213/91, s. 21-27

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
17. Excavator Operations	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This task builds upon Task 16 and analyzes the hazards associated with operating an excavator. This task involves startup, operations and maintenance of the excavator.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	*Refer to: Task 16 Excavation, Trenching and Backfilling*									
2.0	Setting up excavator	Sft	Slips, trips and falls during pre-use inspection	2	1	2	• Ensure proper housekeeping • Housekeeping safe job procedure	1	1	1
3.0	Accessing/exiting excavator	Sft	Lower back and limb strain and sprains from jumping off excavator	4	2	8	• Install slip-resistant steps and grab rails • Maintain three point contact when exiting equipment	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	**Description**	**Hazard Grp**	**Potential Hazards & Risk**	**How Likely**	**How Serious**	**Risk Level**	**What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE**	**How Likely**	**How Serious**	**Risk Level**
4.0	Operating the excavator	Sft	Excavator roll-over due operating/parking on steep grades	3	4	12	• Never climb a grade that is too steep or narrow • Do not overload excavator • Be aware of unstable ground or soft spots • Excavation and Trenching safe job proedure • Excavation and Trenching safe job procedure training	1	4	4
4.1		Sft	Worker and machine cave during excavation of unconsolidated material	2	4	8	• Be aware of unstable ground or soft spots • Limit dept of cut/slope or bench material	1	4	4
4.2		Sft	Worker crushed when going under machinery to remove caught items	2	4	8	• Ensure machine is properly turned off, breaks are locked and keys are removed • Bring machine to mechanic bay before going under machine			

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.0	Refuelling & maintenance of excavator	Chm	Fire/explosion due to working in close proximity of flammable sources	2	4	8	• Maintain a safe distance between refuelling area and flammable sources • Fire extinguisher in close proximity of work area • Proper storage of flammable sources • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4
5.1		Sft	Slips, trips and falls due to spilling fuel	2	3	6	• Spill kit readily available during refuelling • Training in spill response • Spill response safe job procedure • Spill response safe job procedure training	1	3	3
5.2		Sft	Electric shock due to contact with live wires	2	3	6	• Remove key when exiting machine • Lockout and Tagging safe job procedure • Lockout and Tagging safe job procedure training	1	3	3
5.3		Sft	Squash and puncture points when working with cables/ springs/ sharps	3	2	6	• PPE: Gloves	1	2	2

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.4		Sft	Excavator roll-over due parking on steep grades	3	4	12	• Park on level ground • Proper shut down of excavator and place bucket on ground • Remove key when exiting equipment	1	4	4
5.5		Sft	Burns/cuts/electric shock due to poor maintenance of welding equipment				*Refer to: 02 Labour and Material Handling*			

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[O] Kneeling	[F] Sitting	[N] Pushing	[N] Pulling	[O] Carrying	[O] Reaching
[O] Walking	[O] Climbing	[O] Bending	[N] Stooping	[F] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Excavator

Environment

[ ] Indoor	[ ] Vibration	[ ] Heat	[X] Noise	[X] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[R]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**					
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.1	CSA Z94.3

Controls

Engineering:

Administrative

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Excavation and Trenching Safe Job Procedure
Housekeeping Safe Work Practice
Physical Agents: Noise Safe Job Procedure
Fire extinguisher Safe Work Practice
Lockout and Tagging Safe Job Procedure
Spill Response Safe Job Procedure

Task-specific Training

Excavator Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27

Job Hazard Analysis

SEVERITY: If the incident occurs, how serious?		PROBABILITY: Frequent (4)	Likely (3)	Occasionally (2)	Unlikely (1)
Severe Injury/Death	4	16	12	8	4
Critical/Lost Time Injury	3	12	9	6	3
Minor- First/Medical Aid	2	8	6	4	2
Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
18. Loader Operations	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with loader operations. This task involves using a loader to move material, moving snow and for general housekeeping purposes.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Lifting load	Sft	Struck by injury due to load falling or sliding	3	3	9	• Do not overload bucket • Select appropriate loader according to material being lifted • Refer to manufacturer's instructions • Loader certification • Loader safe job procedure • Loader safe job procedure training	1	3	3
1.1		Sft	Loader failure due to poor maintenance	3	3	9	• Pre-use inspection on loader • Report defects to supervisor immediately • Maintain Loader as per manufacturer's instructions	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.2		Sft	Struck by falling debris when loading	2	3	6	• Do not overload loader • PPE: safety helmet, safety shoes, safety glasses	1	3	3
2.0	Moving loader	Sft	Falling injury due to improper use of loader	2	3	6	• Loader certification • Loader safe job procedure • Loader safe job procedure training	1	3	3
2.1		Sft	Worker or pedestrian injury due to horseplay of workers during loader operations	3	3	9	• Do not have more than two workers on the loader • Loader in the right of way during operations • Place barriers around work area • Loader safe job procedure • Loader safe job procedure training	1	3	3
2.2		Sft	Collision or load sliding injury due to driver travelling at excessive speeds	1	4	4	• Operate loader within speed limits • Follow manufacturer's instructions certification • Loader safe job procedure • Loader safe job procedure training	1	4	4
2.3		Sft	Loader collision due to poor housekeeping around the work area	1	4	4	• Plan route according to work area • Housekeeping safe work practice • Housekeeping safe work practice training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Setting load down	Sft	Injury due to load tipping or sliding	1	3	9	• Be aware of surroundings when placing load down • Place loads on flat surfaces	1	3	3
3.1		Sft	Striking worker injury due to load placed on unstable/ uneven surface or placed over the worker	2	4	8	• Plan route accordingly prior to setting load down • Place load on even/stable surfaces • Loader safe job procedure • Loader safe job procedure training	1	4	4
3.2		Sft	Collision due to movement of the loader during unloading	2	3	6	• Proper parking of loader prior to unloading • Loader safe job procedure • Loader safe job procedure training	1	3	3

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[N] Kneeling	[C] Sitting	[O] Pushing	[O] Pulling	[N] Carrying	[N] Reaching
[N] Walking	[F] Climbing	[N] Bending	[N] Stooping	[F] Twisting	[N] Lifting: ___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Loader

Environment

[X] Indoor	[X] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other: _____
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[R]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**						
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Loader Safe Job Procedure
Housekeeping Safe Work Practice

Task-specific Training

Loader Certification

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
General Equipment- O. Reg. 213/91,
Housekeeping- O. Reg. 213/91, s. 35-48

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
19. Moving Material On-Site	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with transporting material. This task involves moving material to and from the site.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering>Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Transporting material	Sft	Collision/worker injury due to poor maintenance of truck	2	4	8	• Pre-use inspection on dump truck • Report defects to supervisor immediately • Maintain truck according to manufacturer's instructions	1	4	4
1.1		Sft	Collision due to blocked vision when driving	2	4	8	• Maintain a clear path for driver • Spotter readily available on site • Honk prior to turning corners on site	1	4	4
1.2		Sft	Eye injury due to exposure to dust particles	2	3	6	• Placement of cloth or sheet over material • PPE: safety glasses	1	3	3
1.3		Sft	Struck by falling debris when loading bins	2	3	6	• PPE: safety helmet, safety shoes, safety glasses	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.4		Sft	Tipping over due to overloading truck	2	4	8	• Select appropriate truck to transport material • Load truck according to manufacturer's instructions	1	4	4
1.5		Sft	Struck by falling debris from loading dump truck	2	3	6	• Never work around unloading truck • Install barricades to reduce access • Have signaller direct traffic • PPE: safety helmet, safety shoes, safety glasses	1	3	3
1.6		Sft	Tipping over due to driving on uneven terrain	2	4	8	• Placement of barriers around excavated area • Be cautious of surroundings when transporting material • Spotter readily available	1	4	4
1.7		Sft	Collision due to poor driving	2	4	8	*Refer to: 04 Driving to/from Site*	1	4	4

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[N] Standing	[N] Kneeling	[C] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[O] Reaching
[N] Walking	[O] Climbing	[O] Bending	[N] Stooping	[N] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Dump Truck

Environment

[ ] Indoor	[X] Vibration	[X] Heat	[ ] Noise	[X] Wet	[ ] Other:_____
[X] Outdoor	[ ] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[ ]	[M]	[ ]	[R]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat		**Safety Boots**		**Safety Glasses**						
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Defensive Driving Safe Job Procedure
Housekeeping Safe Work Practice

Task-specific Training

Defensive Driving

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution-
OHSA, s. 25 (2)(h)
General Equipment- O. Reg. 213/91, s. 93-116
Housekeeping- O. Reg. 213/91, s. 35-48

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
20. Crawler Tractor Operations	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with bulldozing operations. This task involves using a crawler tractor (bulldozer) to push material on the site.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering>Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up bulldozer	Sft	Worker injury due to accidental start up of bulldozer	3	3	9	• Proper shut down of bulldozer • Bulldozer safe job procedure • Bulldozer safe job procedure training	1	3	3
2.0	Accessing/exiting bulldozer	Sft	Slips, trips and falls due to entering and exiting bulldozer	2	2	4	• Proper placement of feet when entering and exiting bulldozer • Three point contact in and out of equipment • Face machine when entering and exiting equipment	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Operating the bulldozer	Chm	Electric shock or gas explosion due to working around utilities	3	4	12	• Shut down of utilities prior to operations • Plan route according to site conditions • Ensure a overhead powerline form is completed • Ensure there is a traffic control plan in place	1	4	4
3.1		Sft	Collision due to poor maintenance of grader	3	4	12	• Pre-use inspection of grader • Report defects to supervisor immediately • Maintain grader according to manufacturer's instructions	1	4	4
3.2		Sft	Striking worker, collision or worker injury due to blocked vision while operating bulldozer	3	4	12	• Placement of barriers around grading area • Grading safe job procedure • Grading safe job procedure training	1	4	4
3.3		Sft	Eye irritation due to dust exposure	2	2	4	• PPE : safety glasses	1	2	2
3.4		Sft	Collision with other equipment or workers due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.0	*Refer to: 09 Large Vehicle Operations*									
5.0	Backing up/ Signalling		*Refer to: 08 On-site and Off-site Traffic*							

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[N] Kneeling	[C] Sitting	[O] Pushing	[O] Pulling	[N] Carrying	[N] Reaching
[N] Walking	[F] Climbing	[N] Bending	[N] Stooping	[F] Twisting	[N] Lifting:___ to ___kg	

Chemicals Used

Equipment Used

Crawler Tractor

Environment

[X] Indoor	[X] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[ ]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**		**Safety Glasses**						
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.1	CSA Z94.3

Controls

Engineering:

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on equipment
- [ ] Hazard reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work area
- [X] Review and understand policies

Practices and Procedures

Bulldozer Safe Job Procedure
Housekeeping Safe Work Practice

Task-specific Training

Heavy Equipment Operator

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
General Equipment- O. Reg. 213/91,
Housekeeping- O. Reg. 213/91, s. 35-48

This page has intentionally been left blank.

Job Hazard Analysis

		PROBABILITY How likely is the incident to occur?			
		Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?	4	3	2	1
	Severe Injury/Death (4)	16	12	8	4
	Critical/Lost Time Injury (3)	12	9	6	3
	Minor- First/Medical Aid (2)	8	6	4	2
	Extremely Minor (1)	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
21. Grading/Gravelling	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with grading/gravelling. This task involves levelling out the surface excavated by taking soil from high spots to low spots. This can be done with a grader or by hand.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up grader	Sft	Worker injury due to accidental start up of grader	3	3	9	• Proper shut down of grader • Grading safe job procedure • Grading safe job procedure training	1	3	3
2.0	Accessing/exiting grader	Sft	Slips, trips and falls due to entering and exiting grader	2	2	4	• Proper placement of feet when entering and exiting grader • Three point contact in and out of equipment • Face machine when entering and exiting equipment	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Operating the grader	Chm	Electric shock or gas explosion due to working around utilities	3	4	12	• Shut down of utilities prior to operations • Identify marked located prior to grading/gravelling • Working around Utilities safe job procedure • Working around Utilities safe job procedure training	1	4	4
3.1		Sft	Collision due to poor maintenance of grader	3	4	12	• Pre-use inspection of grader • Report defects to supervisor immediately • Maintain grader according to manufacturer's instructions	1	4	4
3.2		Sft	Striking worker, collision or worker injury due to blocked vision while operating grader	3	4	12	• Placement of barriers around grading area • Grading safe job procedure • Grading safe job procedure training	1	4	4
3.3		Sft	Eye irritation due to dust exposure	2	2	4	• PPE : safety glasses	1	2	2
3.4		Sft	Collision with other equipment or workers due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.5		Sft	Environmental hazards due to contact with broken hoses or leaking valves or fittings	3	4	12	• Identify locates prior to excavating • Hand excavation if one metre near utilities	1	4	4
3.6		Sft	Gravel striking worker due to grading around workers	3	4	12	• Do not approach equipment during operations • Stay out of swing radius unless eye contact with operator has been established or equipment is at a full stop	1	4	4
3.7		Phy	Ear damage due to elevated noise levels	2	3	6	• Noise testing in work area over 85 dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE: ear protection	1	3	3
4.0	Hand grading	MSD	Strains and sprains due to repetitive movements and lifting and carrying shovel	2	3	6	*Refer to: 02 Labour and Material Handling*	1	3	3
4.1		Sft	Respiratory irritation due to exposure to soil	2	2	4	• PPE: dust mask	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.2		Bio	Trips, slips and falls due to poor housekeeping	2	2	4	• Watch footing • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
4.3		Sft	Fire/explosion due to contact with utilities	2	4	8	• Ensure utilities are shut down prior to grading • Be cautious of utilities when grading • Fire extinguisher readily available on site • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[F] Kneeling	[C] Sitting	[F] Pushing	[F] Pulling	[F] Carrying	[F] Reaching
[C] Walking	[O] Climbing	[O] Bending	[F] Stooping	[F] Twisting	[F] Lifting 0 to 10 kg	

Chemicals Used

N/A

Equipment Used

Grader

Shovel

Environment

[ ] Indoor	[ ] Vibration	[ ] Heat	[X] Noise	[X] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[R]	[M]	[M]	[R]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**	**Dust Mask**				
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on equipment
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Material Handling Safe Work Practice
Housekeeping Safe Work Practice
Physical Agents: Noise Safe Job Procedure
Grading Safe Job Procedure

Task-specific Training

Grading Safety
Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
Housekeeping- O. Reg. 213/91, s. 35-48
Noise Exposure- O. Reg. 381/15
General Equipment- O. Reg. 213/91, s. 93-116

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
22. Roller Compaction	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with rolling operations. This task involves using a roller to compact earth, soil and gravel. It includes after grading and asphalt after asphalt application.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up roller	Sft	Worker/pedestrian injury due to accidental start up	3	3	9	• Proper shut down of roller prior to set up	1	3	3
2.0	Operating roller	Sft	Worker injury caused by roller malfunction due to poor maintenance	3	4	12	• Pre-use inspection of roller • Report defects to supervisor immediately • Maintain roller according to manufacturer's instructions	1	4	4
2.1		Sft	Collision due to blocked vision	3	4	12	• Traffic control plan in place (if required) • Spotter available if required Place barriers around work area • Roller to have right of way during operations • Roller compaction safe job procedure • Roller compaction safe job procedure training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.2		Chm	Respiratory irritation due to exposure to fumes during compaction	2	4	8	• Take adequate breaks if needed • Adequate ventilation available	1	4	4
2.3		Sft	Fire/explosion due to operating roller near flammable sources	2	3	6	• Fire extinguisher readily available • Training in fire extinguisher • safety Fire extinguisher safe work • practice Fire extinguisher safe work	1	3	3
2.4		Sft	Eye injury due to projectile of gravel/asphalt particles	2	3	6	• PPE: safety glasses	1	3	3
2.5		Sft	Foot injury due to standing in close proximity of roller during use	2	3	6	• Maintain a safe distance with roller during operations • PPE: safety boots	1	3	3
2.6		Sft	Strains due to excessive vibration	2	3	6	• Placement of anti-vibration guards • Physical agents: vibration safe job procedure • Physical agents: vibration safe job procedure training • PPE: anti-vibration gloves	1	3	3

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[F] Standing	[O] Kneeling	[F] Sitting	[O] Pushing	[O] Pulling	[O] Carrying	[O] Reaching
[O] Walking	[O] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Roller

Environment

[ ] Indoor	[X] Vibration	[X] Heat	[ ] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[ ] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[ ]	[R]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**		**Dust Mask**				
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Placement of anti-vibration safe guards on roller.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Roller Compaction Safe Job Procedure
Fire Extinguisher Safe Job Procedure
Housekeeping Safe Work Practice
Physical Agents: Vibration Safe Job Procedure

Task-specific Training

Roller Safety
Fire Extinguisher Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Fire Safety- O. Reg. 213/91, s. 52-58
PPE- O. Reg. 213/91, s. 21-27
General Equipment- O. Reg. 213/91, s. 93-116
Housekeeping- O. Reg. 213/91, s. 35-48

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
23. Place Pipe	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with placing pipe in excavated areas. This task involves manually placing pipe.

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Manually placing pipe in excavated area	MSD	Injury, sprains or strains due to lifting and carrying heavy materials	2	2	4	• Manual material handling training • Material handling safe work practice • Material handling safe work practice training • Manual handling aids	1	2	2
1.1		Sft	Cuts and scrapes due to contact with sharp edges or material	2	3	6	• Manual material handling training • Material handling safe work practice • Material handling safe work practice training • PPE : gloves	1	3	3
1.2		Sft	Slips, trips and fall due to cluttered work area or poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.3		Sft	Trip, slip or fall due to rough terrain or unstable surface in work area	2	2	4	• Manual material handling training • Material handling safe work practice • Material handling safe work practice training • PPE : safety boots	1	2	2
1.4		Sft	Overhead injury due to dropping material into excavated area	2	2	4	• PPE: hard hat	1	2	2
1.5		Sft	Slipping into excavated area due to blocked vision when moving pipe	2	3	6	• Watch footing when moving pipe • Use another worker to assist in guiding through path of travel	1	3	3
1.6		Sft	Worker injury due to cave-ins on excavation walls from carrying pipe close to trench	2	3	6	• Be aware of surroundings when moving pipe into excavated area • Proper shoring methods	1	3	3

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[F] Standing	[F] Kneeling	[N] Sitting	[O] Pushing	[O] Pulling	[F] Carrying	[F] Reaching
[F] Walking	[O] Climbing	[F] Bending	[O] Stooping	[F] Twisting	[F] Lifting 0 to 25 kg	

Chemicals Used

N/A

Equipment Used

N/A

Environment

[ ] Indoor	[X] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**						
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Ensure safe guards on mobile crance are in place and in good condition prior to operations.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Material Handling Safe Work Practice
Housekeeping Safe Work Practice

Task-specific Training

Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Housekeeping- O. Reg. 213/91, s. 35-48
PPE- O. Reg. 213/91, s. 21-27

Job Hazard Analysis

SEVERITY: If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
		4	3	2	1
Severe Injury/Death	4	16	12	8	4
Critical/Lost Time Injury	3	12	9	6	3
Minor- First/Medical Aid	2	8	6	4	2
Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
24. Placing Manholes	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with placing manholes. This task involves using an excavator or loader to create an excavated area, and using chains to place the manhole.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Excavating the area		*Refer to: 16 Excavation, Trenching and Backfilling*							
2.0	Using a loader to move material		*Refer to: 18 Loader Operations*							
3.0	Setting up attachment	Sft	Finger pinching due to setting up rigging equipment	2	2	4	• PPE : gloves	1	2	2
3.1		Sft	Cuts and scrapes due to handling sharp edges of material	2	2	4	• PPE : gloves	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.0	Lifting manhole and transporting it to designated area	Sft	Overhead injury due to improper securement of material	3	4	12	• Proper securement of load • Confirm securement prior to lift • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • PPE : hard hat • Use proper slings, chains and chokers	1	4	4
4.1		Sft	Striking worker due to overloading rigging equipment	3	4	12	• Follow manufacturer's instructions • Do not overload rigging equipment • Select appropriate equipment for the load being moved • Training in hoisting and rigging • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training	1	4	4
4.2		Sft	Tipping over due to mobile equipment moving at an excessive speed	3	4	12	• Training in hoisting and rigging • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • Follow manufacturer's instructions	1	4	4
4.3			*Refer to: 25 Hoisting and Rigging*							

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.3		Sft	Fire/sparks due to contacting an overhead powerline	3	4	12	• Contact utility services immediately • Follow supervisor's instructions • Overhead powerlines safe job procedure • Overhead powerlines safe job procedure training	1	4	4
4.4		Sft	Collision with equipment, workers or pedestrians due to blocked vision	3	4	12	• Spotter readily available • Plan route prior to moving load • Be aware of surroundings • Training in mobile equipment operations • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training	1	4	4
4.5		Sft	Mobile equipment malfunction due to poor maintenance	3	4	12	• Pre-use inspection of crane • Report defects to supervisor immediately • Maintain mobile equipment as per manufacturer's instructions	1	4	4
5.0	Setting load down	Sft	Overhead injury due to load lowered at an accelerated speed	3	4	12	• Training in mobile equipment operations • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • Follow manufacturer's instructions	1	4	4

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[O] Kneeling	[F] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[N] Reaching
[O] Walking	[O] Climbing	[O] Bending	[N] Stooping	[F] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Mobile Equipment
Rigging Equipment

Environment

[ ] Indoor	[ ] Vibration	[X] Heat	[ ] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[R]	[R]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**					
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: N/A

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Hoisting and Rigging Safe Job Procedure
Overhead Powerlines Safe Job Procedure
Housekeeping Safe Work Practice
Excavation and Trenching Safe Job Procedure
Physical Agents: Noise Safe Job Procedure
Loader Safe Job Procedure

Task-specific Training

Hoisting and Rigging
Mobile Equipment Safety
Excavator Operations
Loader Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
Hoisting and Rigging- O. Reg. 213/91,
Overhead Powerlines- O. Reg. 213/91, s. 188
General Equipment- O. Reg. 213/91, s. 93-116
Housekeeping- O. Reg. 213/91, s. 35-48
Excavation- O. Reg. 213/91, s. 222-242
Noise Exposure- O. Reg. 381/15

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
25. Hoisting and Rigging	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with hoisting and rigging. This task involves using a crane, or mobile equipment with an attachment to lift and move light fixtures and poles into place.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up crane/mobile equipment for use	Sft	Worker or pedestrian injury due to accidental start up of crane/mobile equipment	3	4	12	• Proper shut down of crane/mobile equipment prior to set up • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training	1	4	4
1.1		Sft	Falls due to standing on unstable surface	2	2	4	• Watch footing	1	2	2
2.0	Attaching rigging equipment/chains to material	Sft	Finger pinching due to setting up rigging equipment	2	2	4	• PPE : gloves	1	2	2
2.1		Sft	Cuts and scrapes due to handling sharp edges of material	2	2	4	• PPE : gloves	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Lifting load and transporting it to designated area	Sft	Overhead injury due to improper securement of material	3	4	12	• Proper securement of load • Confirm securement prior to lift • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • PPE : hard hat • Use proper slings, chains and chokers	1	4	4
3.1		Sft	Striking worker due to overloading crane	3	4	12	• Follow manufacturer's instructions • Do not overload crane/mobile equipment • Select appropriate crane for the load being moved • Training in crane/mobile equipment operations • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training	1	4	4
3.2		Sft	Tipping over due to crane/mobile equipment moving at an excessive speed	3	4	12	• Training in crane/mobile equipment operations • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • Follow manufacturer's instructions	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.3		Sft	Fire/sparks due to contacting an overhead powerline	3	4	12	• Contact utility services immediately • Follow supervisor's instructions • Overhead powerlines safe job procedure • Overhead powerlines safe job procedure training	1	4	4
3.4		Sft	Collision with equipment, workers or pedestrians due to blocked vision	3	4	12	• Spotter readily available • Plan route prior to moving load • Be aware of surroundings • Training in crane/mobile equipment operations • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training	1	4	4
3.5		Sft	Crane/mobile equipment malfunction due to poor maintenance	3	4	12	• Pre-use inspection of crane • Report defects to supervisor immediately • Maintain crane/mobile equipment as per manufacturer's instructions	1	4	4
4.0	Setting load down	Sft	Overhead injury due to load lowered at an accelerated speed	3	4	12	• Training in crane/mobile equipment operations • Hoisting and rigging safe job procedure • Hoisting and rigging safe job procedure training • Follow manufacturer's instructions	1	4	4

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[O] Kneeling	[F] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[N] Reaching
[O] Walking	[O] Climbing	[O] Bending	[N] Stooping	[F] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

Equipment Used

Crane
Mobile Equipment

Environment

[ ] Indoor	[ ] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[R]	[R]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**					
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Safe guards in good conditions and readily available for use.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Hoisting and Rigging Safe Job Procedure
Overhead Powerlines Safe Job Procedure
Housekeeping Safe Work Practice

Task-specific Training

Hoisting and Rigging
Mobile Equipment Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
Hoisting and Rigging- O. Reg. 213/91, s. 150-156
Overhead Powerlines- O. Reg. 213/91, s. 188
General Equipment- O. Reg. 213/91,
Housekeeping- O. Reg. 213/91, s. 35-48

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
26. General Spill Response	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with containing spilled oils. This task involves the hazards of occassionally cleaning oil on-site.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Assessing Spill	Chm	Burns due to spills contacting skin	2	3	6	• Refer to SDS for more information • PPE : long sleeved clothing	1	3	3
1.1		Sft	Fire and explosion due to fluid contact with possible ignition sources	3	4	12	• Prepare a written emergency prevention plan • Store gas/ reactive fluids away from possible heat sources	1	4	4
2.0	Clean up Spill	Sft	Slips, trips and falls from oil spill	2	2	4	• PPE: safety boots, hard hat	1	2	2
2.1		Chm	Respiratory irritation from aerosol formation of contaminated area	2	3	6	• Erect signs and barriers to prevent entry until it is safe to do so	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Setting up vacuum truck	Sft	Worker injury due to accidental start up of vacuum truck	2	3	6	• Proper shut down of vacuum truck	1	3	3
4.0	Vacuum truck operations	Sft	Worker injury due to poor maintenance of vacuum truck	3	3	9	• Pre-use inspection of vacuum truck • Report defects to supervisor immediately • Maintain vacuum truck as per manufacturer's intructions	2	3	6
4.1		Chm	Fire/explosion due to vacuuming toxic/corrosive chemicals/mixing chemicals	2	4	8	• Do not mix chemicals when vacuuming/Empty tanks prior to vacuuming different chemicals • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4
4.2		Chm	Respiratory irritation due to exposure to fumes	2	4	8	• Adequate ventilation available on site • Take breaks if needed • PPE: dust masks, respirators (if required)	1	4	4
4.3		Sft	Skin burns and eye injury due to projectile of particles and oil	2	4	8	• PPE: safety glasses, gloves, long sleeved clothing	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.4		Phy	Ear injury due to elevated noise levels	2	3	6	• Physical agents: noise safe job procedure • Physical agents: noise safe job procedure • PPE: ear protection	1	3	3
4.5		Sft	Slips due to spills	3	3	9	• Select appropriate vacuum cleaner for cleanup • Training in spill response • Spill response safe job procedure • Spill response safe job procedure training	2	3	6
4.6		Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Watch footing when cleaning spills	1	2	2
4.7		MSD	Strains and sprains due to repetitive movements	2	3	6	*Refer to: 02 Labour and Material Handling*	1	3	3

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[N] Kneeling	[N] Sitting	[F] Pushing	[F] Pulling	[F] Carrying	[F] Reaching
[F] Walking	[N] Climbing	[O] Bending	[O] Stooping	[O] Twisting	[F] Lifting 0 to 25 kg	

Chemicals Used

N/A

Equipment Used

Vacuum Truck

Environment

[X] Indoor	[ ] Vibration	[X] Heat	[X] Noise	[X] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

									
[ ]	[M]	[M]	[M]	[M]	[M]	[R]	[M]	[R]	[ ]	[ ]
	High Visibility Vest	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**	**Dust Mask**	**Long Sleeved Clothing**	**Respirator**		
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: N/A

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Procedures

Spill Response Safe Job Procedure
Material Handling Safe Work Practice
Fire Extinguisher Safe Work Practice

Task-specific Training

Vacuum Truck Safety
Manual Material Handling & MSD Prevention
Fire Extinguisher Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
Housekeeping- O. Reg. 213/91, s. 35-48

This page has intentionally been left blank.

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
27. Concrete Processing	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes hazards associated with processing concrete. This task involves using an attachment on an excavator to crush concrete, manual crushing, seperation from rebar and concrete recycling.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up excavator	Sft	Worker injury due to accidental start up of excavator	3	3	9	• Proper shut down of excavator • Training in excavator operations • Crushing concrete safe job procedure • Crushing concrete safe job procedure training	1	3	3
2.0	Setting up attachment	Sft	Finger pinching due to setting up rigging equipment	2	2	4	• PPE : gloves	1	2	2
2.1		Sft	Cuts and scrapes due to handling sharp edges of material	2	2	4	• PPE : gloves	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.0	Accessing/exiting excavator	Sft	Slips, trips and falls due to entering and exiting excavator	2	2	4	• Proper placement of feet when entering and exiting excavator • Three point contact in and out of equipment • Face machine when entering and exiting equipment	1	2	2
4.0	Crushing concrete	Chm	Electric shock or gas explosion due to working around utilities	3	4	12	• Identify overhead powerlines and locates prior to excavating • Plan route according to site conditions • Working around Utilities Safe Job Procedure • Working around Utilities Safe Job Procedure training	1	4	4
4.1			*Refer to Task: 16 Excavation, Trenching and Backfilling*							
4.2		Sft	Collision due to poor maintenance of excavator	3	4	12	• Training in excavation • Crushing concrete safe job procedure • Crushing concrete safe job procedure training • Proper maintenance of excavator	1	4	4
4.3		Sft	Striking worker, collision or worker injury due to blocked vision while operating excavator	3	4	12	• Training in excavation • Crushing concrete safe job procedure • Crushing concrete safe job procedure training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.4		Sft	Eye irritation due to dust exposure	2	2	4	• PPE : safety glasses	1	2	2
4.5		Sft	Collision with other equipment or workers due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
4.6		Sft	Concrete striking worker due to excavating near workers	3	4	12	• Do not approach equipment during operations • Stay out of swing radius unless eye contact with operator has been established or equipment is at a full stop • Move material or excavated material to a safe area	1	4	4
4.7		Phy	Ear damage due to elevated noise levels	2	3	6	• Noise testing in work area over 85 dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE: ear protection	1	3	3
5.0	Concrete Recycling: Tracking Impact Crusher	Sft	Burns/cuts/electric shock due to poor maintenance and overheating (30+ mins of tracking) of impact crusher	3	4	9	• Pre-use inspection on impact crusher • Report defects to supervisor immediately • Maintain equipment as per manufacturer's instructions	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.1		Sft	Burns/cuts/electric shock due to overheating due to extended tracking length (30+ mins) or engine over normal operating temperature range	3	4	9	• Pre-use inspection on impact crusher • Report defects to supervisor immediately • Maintain equipment as per manufacturer's instructions	1	3	3
5.2		Sft	Striking worker due to improper transition of impactor from track operation mode to a stationary position	3	4	12	• Pre-use inspection to ensure all accessories have been stowed away • Stay clear of machine and its path • Abide to manufacturer's operating procedure • Impact Crusher Safe Job Procedure • Impact Crusher Safe Job Procedure training	1	4	4
5.3		Sft	Worker injury from direct or indirection collision due to radio remote control malfuction or improper warmup time in cold weather	3	4	12	• Manoeuver machine to prescribed transport position and admissible speed • Abide to manufacturer's operating procedures • Pre-use inspection to ensure braking, signalling and lighting systems are fully functional	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
5.4		Sft	Collisions due to poor driving (ex. speeding, aggressive driving, etc.)	3	4	12	• Manoeuver machine in accordance with traffic regulations • Impact crusher Safe Job Procedure • Impact crusher Safe Job Procedure training	1	4	4
5.5		Sft	Worker injury to material found in the feed hopper and crusher	3	4	12	• Refer to manufacturer's procedures when finishing crushing to ensure all materials have run off all of the conveyors	1	4	4
6.0	Excavator lifting crushed concrete into feed	Sft	Worker injury due to fallout of material debris from excavator	3	4	12	• Partition area off where excavator is operating • Avoid standing around excavator swing radius • Excavation and trenching Safe Job Procedure • Training in excavation and trenching Safe Job Procedure	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
7.0	Impact Crusher Operations	Sft	Worker injury due to projectile material deflecting out of machine	4	4	16	• Do not overload hopper • Ensure level sensor is correctly set • Ensure all safe guards are installed and in correct working order before operating • Partition area off where impact crusher is operating • Limit access to equipment and surroundings throughout operational activities	1	4	4
7.1		Sft	Worker falls into machine while in operation	2	4	8	• Do not stand on machine whilst in operation • Impact Crusher Safe Job Procedure • Impact Crusher Safe Job Procedure training	1	4	4
7.2			*Refer to Task: 30 Exposure to Occupational Health Hazards*							
8.0	Deposit crushed concrete into track stacker	Sft	Worker injury due to struck by mobile equipment	2	3	6	• Be aware of surroundings • Utilizing proper signs on site • Training in traffic control • Traffic control safe job procedure • Traffic control safe job procedure training • PPE: high visibility vest	1	3	6

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
8.1		Sft	Skin burn due to projectile of concrete during pouring	2	3	6	• Stand at a safe distance during concrete pouring • Concrete pouring safe work practice • Concrete pouring safe work practice training • PPE : long sleeved clothing	1	3	3
9.0	Seperating concrete from rebar	Sft	Cuts and scrapes due to handling recovered rebar	2	2	4	• PPE : gloves	1	2	2
9.1		Sft	Arm and shoulder strain due to excess vibration of manual recovery	2	3	6	• Take breaks when needed • Physical agents- vibration safe job procedure • Physical agents- vibration safe job procedure training • PPE: anti-vibration gloves	1	3	3
10.0	Maintenance of Impact Crusher	Chm	Irritation (respiratory, eye, skin) due to exposure to fluids/refueling	2	2	4	• WHMIS 2015 training • SDS readily available	1	2	2
10.1		Sft	Worker injury due to projectile material deflecting out of machine	4	4	16	• Maintenance to be completed by competent and trained worker • Never use wedges or other material to clear blockages in the feeding opening • Impact Crusher Safe Job Procedure • Impact Crusher Safe Job Procedure training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
10.2		Sft	Worker crushed due to blockage removal	2	4	8	• Maintenance to be completed by competent and trained worker • Never stand inside crusher to remove blockage • Impact Crusher Safe Job Procedure • Impact Crusher Safe Job Procedure training	1	4	4
10.3		Sft	Severe burns from contact with machine immediately after it is shut down	2	3	6	• Ensure engine is cool before maintenance is started • Maintenance to be completed by competent and trained worker • Impact Crusher Safe Job Procedure • Impact Crusher Safe Job Procedure training	1	3	3

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[O] Standing	[O] Kneeling	[F] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[N] Reaching
[O] Walking	[O] Climbing	[O] Bending	[N] Stooping	[F] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

N/A

Equipment Used

Excavator
Impact Crusher
Track Stacker
Drill Attachment

Environment

[ ] Indoor	[X] Vibration	[ ] Heat	[X] Noise	[X] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[ ] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[R]	[M]	[M]	[ ]	[ ]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**	**Ear Protection**					
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Crushing concrete Safe Job Procedure
Housekeeping Safe Work Practice
Physical Agents: Noise Safe Job Procedure

Task-specific Training

Excavator Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
General Equipment- O. Reg. 213/91, s. 93-116
Housekeeping- O. Reg. 213/91, s. 35-48
Noise Exposure- O. Reg. 381/15
PPE- O. Reg. 213/91, s. 21-27

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
28. Site Cleanup	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with site cleanup.

		RECOGNIZE		ASSESS (before control)			CONTROL	EVALUATE (after control)		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering>Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Cleaning the site	Sft	Slips, trips and fall due to cluttered work area or poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
1.1		MSD	Strains due to lifting and carrying heavy garbage bags	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
1.2		Sft	Cuts and scrapes due to contact with sharp objects	2	2	4	• PPE : gloves	1	2	2
1.3		Bio	Worker injury due to exposure to biological agents such as: bird bat droppings, feces, or sharps/needles	2	2	4	• Refer to supervisor's instructions when working around biological agents • Biological agents safe job procedure • Biological agents safe job procedure training • PPE: gloves, half face mask	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering>Administrative>PPE	How Likely	How Serious	Risk Level
2.0	Lifting and carrying material		Strains and sprains due to repetitive or awkward movements.	2	3	6	• Utilize proper lifting techniques • Two man lift over 22kg • Use of Jack/ Dolly • Manual Material Handling	1	3	3
3.0	Sweeping work area	Sft	Slips, trips and falls due to wet surfaces	2	2	4	• Magnetic sweep for sharp metals • Watch footing during clean up • Place signage	1	2	2
3.1		MSD	Strains and sprains due to repetitive movements	2	2	4	• Use lift support equipment • Take appropriate breaks • Training in manual material handling and MSD prevention • PPE: supports	1	2	2
4.0	Removing garbage	Sft	Eye injury due to exposure to dust particles	2	2	4	• PPE: safety glasses, gloves • Designated Garbage area to be layed out • Dolly use • Remove sharp objects	1	2	2
4.1		Bio	Disease exposure due to contact with biological agents	3	3	9	• Biological agents safe job procedure • Biological agents safe job procedure training • PPE: gloves, dust mask, safety glasses • SDS Document review	1	3	3
4.2		Sft	Worker struck against projecting, poorly stacked items or misplaced materials	3	3	9	• PPE: Hard hat, long sleeved clothing, safety glasses	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering>Administrative>PPE	How Likely	How Serious	Risk Level
4.3		Sft	*Refer to: 09 Large Vehicle Operations*							
5.0	Salvage Material		*Refer to: 27 Concrete Processing*							
5.1		Sft	Worker struck against projecting, poorly stacked items or misplaced materials	3	3	9	• Stockpile similar materials with another in an interlocking fashion • PPE: Hard hat, long sleeved clothing, safety glasses	1	3	3
5.2		Sft	Cuts and scrapes due to contact when sorting sharp objects	2	3	6	• PPE: Puncture resistant gloves, safety glasses	1	3	3
5.3		Bio	Disease exposure due to contact with biological agents	3	3	9	• Biological agents safe job procedure • Biological agents safe job procedure training • PPE: gloves, dust mask, safety glasses • SDS Document review	1	3	3
5.4		Sft	Respiratory irritation/ infection due to chronic inhalation of old building structure	2	3	6	• Use vaccum cleaners fitted with HEPA filters when applicable • Stack and Store old material in a dry location • PPE: respirator/ dusk mask, long sleeved clothing, safety glasses, gloves	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering>Administrative>PPE	How Likely	How Serious	Risk Level
6.0	*Refer to: 30 Exposure to Occupational Health Hazards*									

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[F] Standing	[F] Kneeling	[N] Sitting	[F] Pushing	[F] Pulling	[F] Carrying	[F] Reaching
[F] Walking	[N] Climbing	[F] Bending	[F] Stooping	[F] Twisting	[F] Lifting 0 to 15 kg	

Chemicals Used

N/A

Equipment Used

N/A

Environment

[ ] Indoor	[ ] Vibration	[X] Heat	[ ] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[ ]	[R]	[M]	[ ]	[ ]	[ ]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Gloves**	**Safety Glasses**		**Half Mask**	**Coveralls**			
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [ ] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [ ] Place barriers around work area
- [ ] Place signs and warning labels around the work
- [ ] Review and understand policies

Practices and Procedures

Material Handling Safe Work Practice
Housekeeping Safe Work Practice
Biological Agents Safe Job Procedure

Task-specific Training

Manual Material Handling & MSD Prevention

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Housekeeping- O. Reg. 213/91, s. 35-48
PPE- O. Reg. 213/91, s. 21-27

Job Hazard Analysis

SEVERITY	If the incident occurs, how serious?		PROBABILITY: Frequent	Likely	Occasionally	Unlikely
			4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
29. Equipment Maintenance	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with external maintenance on equipment. This task involves sanding, power washing, working around and painting the exterior of equipment and other structures.

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Setting up equipment	Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Watch footing • Housekeeping safe work practice • Housekeeping safe work practice training	1	2	2
1.1		Sft	Burns due to contact with hot equipment	2	2	4	• PPE: gloves	1	2	2
2.0	Sanding	Sft	Cuts and scrapes due to poor maintenance of sander	2	3	6	• Pre-use inspection on sander • Ensure blade ratings fits sander • Maintain sander according to manufacturer's instructions • PPE: gloves • Sander safe work practice • Sander safe work practice training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.1		Sft	Burns due to exposure to sparks	2	3	6	• PPE: protective clothing, gloves	1	3	3
2.2		Sft	Respiratory discomfort due to projectile of metal dust	2	3	6	• PPE: dust mask	1	3	3
2.3		Sft	Burns due to contact with hot equipment	2	3	6	• PPE: gloves	1	3	3
2.4		Sft	Exposure to elevated noise levels	2	3	6	• Noise testing in work areas over 85 dBA • Physical agents: noise safe job procedure • Physical agents: noise safe job procedure training • PPE: ear protection	1	3	3
2.5		Sft	Entanglement of hair and loose clothing due to poor handling/use of sander	2	3	6	• Tie hair back and do not wear loose clothing • PPE: tight fitted clothing	1	3	3
2.6		Sft	Cuts/scrapes due to contact with sander blade	2	3	6	• Ensure all safe guards are in place prior to operations • PPE: gloves	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.7		MSD	Strains and sprains due to repetitive movements during operations	2	3	6	• Training in manual material handling and MSD prevention • Material handling safe work practice • Material handling safe work practice training	1	3	3
3.0	Using a power wash to equipment	Chm	Eye injury due to projectile of airborne particles or chemicals	2	3	6	• PPE: safety glasses • power washing safe work practice • power washing safe work practice training	1	3	3
3.1		Sft	Struck by power washer due to improper handling of equipment	2	4	8	• Training in power washer safety • Hold power washer firmly when using power washer	1	4	4
3.2		MSD	Strains and sprains due to lifting and carrying power washer and repetitive movements	2	2	4	*Refer to: 02 Labour and Material Handling*	1	2	2
3.3		Chm	Fire/explosion due to gasoline being in close proximity to flammable sources	2	4	8	• Keep flammable material away from gasoline • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.4		Sft	Worker injury due to excessive pressure of power washer	2	3	6	• Select appropriate power washer for cleaning • Power washer safe work practice • Power washer safe work practice training	1	3	3
3.5		Sft	Trips, slips and falls due to poor housekeeping	2	2	4	• Housekeeping safe work practice • Housekeeping safe work practice training • Monthly workplace inspections	1	2	2
3.6		Sft	Worker injury due to poor maintenance of power washer	3	3	9	• Pre-use inspection of power washer • Report defects to supervisor • Maintain power washer as per manufacturer's instructions	1	3	3
4.0	Working around equipment	Sft	Electric shock due to working on equipment turned on	2	3	6	• Proper shutdown of equipment • Lockout and tagging of equipment • Training on lockout and tagging • Lockout and tagging safe job procedure • Lockout and tagging safe job procedure training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.1		Sft	Respiratory irritation/skin burns due to working with chemicals to clean equipment	2	3	6	• SDS readily available • Training in WHMIS • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • PPE: gloves, safety glasses, dust mask (if needed)	1	3	3
4.2	Refuelling equipment	Chm	Fire/explosion due to working in close proximity of flammable sources	2	4	8	• Maintain a safe distance between refuelling area and flammable sources • Fire extinguisher in close proximity of work area • Proper storage of flammable sources • Training in fire extinguisher safety • Fire extinguisher safe work practice • Fire extinguisher safe work practice training	1	4	4
4.3		Sft	Slips, trips and falls due to spilling fuel	2	3	6	• Spill kit readily available during refuelling • Training in spill response • Spill response safe job procedure • Spill response safe job procedure training	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.4	Painting and labelling equipment/ structures	MSD	Strains and sprains due to repetitive movements with hands and overreaching	2	2	4	• Use assistive equipment to reach heights • Take appropriate breaks • Training in manual material handling and MSD prevention	1	2	2
4.5		Sft	Slips and falls due to paint spills	2	3	6	• Spill kit readily available • Spill response safe job procedure • Spill response safe job procedure training	1	3	3
4.6		Chm	Dizziness due to exposure to and inhalation of paint fumes	2	3	6	• Adequate ventilation provided • SDS readily available • Training in WHMIS • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training	1	3	3
4.7		Sft	Eye injury due to projectile of paint	2	3	6	• SDS readily available • Eyewash station readily available • PPE: safety glasses	1	3	3

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[O] Kneeling	[N] Sitting	[F] Pushing	[F] Pulling	[O] Carrying	[O] Reaching
[O] Walking	[N] Climbing	[F] Bending	[F] Stooping	[O] Twisting	[F] Lifting 0 to 10 kg	

Chemicals Used

Fuel

Equipment Used

Welding Equipment
Torch Cutting Equipment
Sander
Power Tools
Power Washer

Environment

[ ] Indoor	[X] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other:
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[X] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

										
[M]	[M]	[M]	[M]	[M]	[ ]	[M]	[M]	[ ]	[ ]	[M]
Hard Hat	**High Visibility Vest**	**Safety Boots**	**Welding Gloves**	**Safety Glasses**		**Dust Mask**	**Protective/Tight Fitted**			**Welding Helmet**
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.1	

Controls

Engineering: Ensure safe guards on welding/torch cutting/grinding equipment are in place and in good condition.

Administrative:

- [X] Complete task specific training
- [X] Training on task specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [X] Conduct a pre-use inspection on equipment
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [ ] Place signs and warning labels around the work area
- [ ] Review and understand policies

Practices and Procedures

Physical Agents- UV Exposure and Radiation Safe Job Procedure
Fire Extinguisher Safe Work Practice
Material Handling Safe Work Practice
Sanding Safe Work Practice
Physical Agents: Noise Safe Job Procedure
Power/Hand Tool Safe Work Practice
Physical Agents: Vibration Safe Job Procedure
Lockout and Tagging Safe Job Procedure
Spill Response Safe Job Procedure

Task Specific Training

Fire Extinguisher Safety
Manual Material Handling and MSD Prevention
Lockout and Tagging
Power Tool Safety
Spill Response

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
PPE- O. Reg. 213/91, s. 21-27
General Equipment- O. Reg. 213/91, s. 93-116
Fire Safety- O. Reg. 213/91, s. 52-58
Noise Safety- O. Reg. 381/15

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
30. Exposure to Occupational Health Hazards	Kurtis Samchee	17-May-19	Kira Hoskin, Marco Samchee	3-Jan-23

Description:

This section analyzes the hazards associated with occupational health exposures. This task involves workers being exposed to: lead, silica, asbestos, chemicals, hazardous material, chemical spills, physical agents and biological agents.

«CRITICAL TASK «

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
1.0	Exposure to lead	Sft	Respiratory irritation due to inhalation or ingestion	3	4	12	• Training in lead safety • Lead safe job procedure • Lead safe job procedure training • PPE: based on task	1	4	4
1.1		Sft	Skin burn due to contact with lead	3	4	12	• Training in lead safety • Lead safe job procedure • Lead safe job procedure training • PPE: based on task	1	4	4
1.2		Sft	Fire/explosion due to lead exposure to flammable sources	2	4	8	• Training in lead safety • Lead safe job procedure • Lead safe job procedure training • Fire extinguisher safe work practice • Fire extinguisher safe work practice • PPE: based on task	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
2.0	Exposure to silica	Sft	Respiratory irritation due to inhalation or ingestion	3	4	12	• Training in silica safety • Silica safe job procedure • Silica safe job procedure training • PPE: based on task	1	3	3
2.1		Sft	Skin burn due to contact with silica	3	3	9	• Training in silica safety • Silica safe job procedure • Silica safe job procedure training • PPE: based on task	1	3	3
2.2		Sft	Over-exposure to silica during operations resulting in dizziness	3	3	9	• Training in silica safety • Silica safe job procedure • Silica safe job procedure training • Take appropriate breaks	1	3	3
2.3		Sft	Eye irritation due to projectile of silica dust	2	4	8	• Training in silica safety • Silica safe job procedure • Silica safe job procedure training • PPE: based on task	1	3	3
3.0	Exposure to asbestos	Sft	Exposure to asbestos due to lack of worker's knowledge	3	4	12	• Training in asbestos awareness • Asbestos safe job procedure • Asbestos safe job procedure training • PPE: based on task	1	4	4
3.1		Sft	Respiratory damage due to exposure to asbestos	3	4	12	• Training in asbestos awareness • Asbestos safe job procedure • Asbestos safe job procedure training • PPE: based on task	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
3.2		Sft	Skin irritation due to contact with asbestos	3	4	12	• Training in asbestos awareness • Asbestos safe job procedure • Asbestos safe job procedure training • PPE: based on task	1	4	4
3.3		Sft	Eye irritation/damage due to exposure to asbestos	3	3	9	• Training in asbestos awareness • Asbestos safe job procedure • Asbestos safe job procedure training • PPE: based on task	1	3	3
3.4		Sft	Fire/explosion due to asbestos exposure to flammable sources	3	4	12	• Training in asbestos awareness • Asbestos safe job procedure • Asbestos safe job procedure training • Fire extinguisher safe work practice • Fire extinguisher safe work practice • PPE: based on task	1	4	4
4.0	Exposure to biological agents	Bio	Long/short term health effects due to bacteria transmitted during work	3	4	12	• Biological agents safe job procedure • Biological agents safe job procedure training • PPE: based on task	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
4.1		Bio	Skin irritation due to contact with biological hazards	2	3	6	• Biological agents safe job procedure • Biological agents safe job procedure training • PPE: based on task	1	3	3
4.2		Bio	Projectile of biological agents due to clearing area	2	3	6	• Biological agents safe job procedure • Biological agents safe job procedure training • PPE: based on task	1	3	3
5.0	Exposure to physical agents	Phy	Heat or cold stress due to working in extreme weather conditions	2	3	6	• Training in heat/cold stress • Heat/cold stress safe job procedure • Heat/cold stress safe job procedure • PPE: based on weather conditions	1	3	3
5.1		Phy	Exposure to elevated noise levels on site	2	3	6	• Noise safe job procedure • Noise safe job procedure training • PPE: based on task	1	3	3
5.2		Phy	Ergonomic stress due to exposure to vibration from power tools	2	3	6	• Vibration safe job procedure • Vibration safe job procedure training	1	3	3
5.3		Phy	Long/short term health effects due to exposure to UV exposure or radiation	3	3	9	• UV exposure and radiation safe job procedure • UV exposure and radiation safe job procedure training • PPE: based on task	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
6.0	Exposure to chemicals or hazardous material	Chm	Inhalation, ingestion or skin contact due to acute or chronic exposure to chemical or hazardous material	3	4	12	• Training in WHMIS 2015 • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • SDS readily available • PPE: based on task	1	4	4
6.1		Chm	Skin burns due to projectile of chemical or hazardous material	3	4	12	• Training in WHMIS 2015 • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • SDS readily available • PPE: based on task	1	4	4
6.2		Chm	Fire/explosion due to handling chemicals and hazardous material near flammable material	3	4	12	• Training in WHMIS 2015 • Chemical and hazardous material handling and storage safe job procedure • Chemical and hazardous material handling and storage safe job procedure training • Fire extinguisher safe work practice • Fire extinguisher safe work practice • PPE: based on task	1	4	4

Job Hazard Analysis

		RECOGNIZE		ASSESS			CONTROL	EVALUATE		
Step	Description	Hazard Grp	Potential Hazards & Risk	How Likely	How Serious	Risk Level	What Needs to be Done Eliminate>Substitute>Engineering> Administrative>PPE	How Likely	How Serious	Risk Level
6.3		Chm	Slips and falls due to spills	3	3	9	• Training in WHMIS 2015 • Spill response safe job procedure • Spill response safe job procedure training • Spill kit readily available	1	3	3
7.0	Working in confined spaces	Chm	Fatality or adverse health conditions due to working in a confined space with the following exposures: • Oxygen-deficient • Oxygen-enriched	3	4	12	• Training in confined space awareness • Confined space safe job procedure • Confined space safe job procedure training • PPE: Respiratory protection, anchored body harness, gas monitor and artificial respiration / emergency rescue air supply	2	4	8
7.1		Chm	Fatality or severe burns due to working in a confined space with the following flammable and explosive atmospheres: • Natural gas • Methane • Propane gas • Gasoline vapors • Painting, cleaning and refinishing solvent vapors	3	4	12	• Training in confined space awareness • Confined space safe job procedure • Confined space safe job procedure training • PPE: Respiratory protection, anchored body harness, gas monitor and artificial respiration / emergency rescue air supply	2	4	8

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[N] Standing	[N] Kneeling	[N] Sitting	[N] Pushing	[N] Pulling	[N] Carrying	[N] Reaching
[N] Walking	[N] Climbing	[N] Bending	[N] Stooping	[N] Twisting	[N] Lifting:___ to ___ kg	

Chemicals Used

Based on Task

Equipment Used

Based on Task

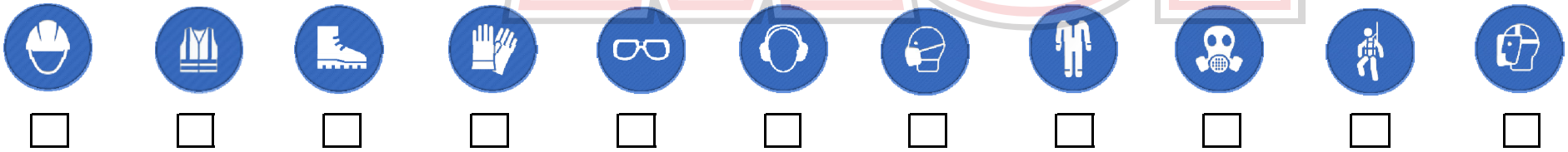
Environment

[ ] Indoor	[X] Vibration	[X] Heat	[X] Noise	[ ] Wet	[ ] Other:_____
[X] Outdoor	[X] Dust	[X] Cold	[ ] Fumes	[ ] Radiation	

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

******Based on Task******



CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	Based on Task	CSA Z94.2	CSA Z259.12	CSA Z94.3
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Controls

Engineering: **N/A**

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instructions
- [ ] Conduct a pre-use inspection on
- [ ] Hazard Reporting
- [X] Ensure proper housekeeping
- [ ] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [X] Review and understand policies

Practices and Procedures

Lead Safe Job Procedure
Silica Safe Job Procedure
Asbestos Safe Job Procedure
Physical Agents- Heat/Cold Stress Safe Job Procedure
Spill Response Safe Job Procedure
Fire Extinguisher Safe Work Practice
Confined Space Safe Job Procedure
Physical Agents- Noise Safe Job Procedure
Physical Agents- Vibration Safe Job Procedure
Physical Agents- UV Exposure and Radiation Safe Job Procedure
Biological Agents Safe Job Procedure
Chemical and Hazardous Material Handling and Storage Safe Job Procedure

Task-specific Training

Lead Safety
Silica Safety
Asbestos Awareness
Heat/Cold Stress Safety
WHMIS 2015
Spill Response
Fire Extinguisher Safety
Confined Space Safety

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution- OHSA, s. 25 (2)(h)
Asbestos Exposure- O. Reg. 278/05
Silica Exposure- O. Reg. 845
Lead Exposure- O. Reg. 843
Noise Exposure- O. Reg. 381/15
PPE- O. Reg. 213/91, s. 21-27
WHMIS- O. Reg. 860
Fire Safety- O. Reg. 213/91, s. 52-58
Confined Space- O. Reg. 632/05

Job Hazard Analysis

			PROBABILITY How likely is the incident to occur?			
			Frequent	Likely	Occasionally	Unlikely
SEVERITY	If the incident occurs, how serious?		4	3	2	1
	Severe Injury/Death	4	16	12	8	4
	Critical/Lost Time Injury	3	12	9	6	3
	Minor- First/Medical Aid	2	8	6	4	2
	Extremely Minor	1	4	3	2	1

Task:	Developed By:	Date:	Reviewed & Approved By:	Date:
Mechanic: Heavy Equipment Maintenance	Diana Markovic	18-Apr-23	Kira Hoskin	22-Nov-23

Description:

This section analyzes the hazards associated with mechanics working on heavy equipment in the shop or on site. Hazards includes environmental hazards.

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
1.0	Working on heavy equipment	Chm	Exposure to chemicals, solvents, solder, other products	2	3	6	WHMIS training Good ventilation Keep food and drinks away from chemicals, solvents SDS readily available PPE: gloves, safety glasses, mask, face shield	1	3	3
1.1		Chm	Inhalation of exhaust fumes from vehicles in the yard	2	2	4	Ensure area is well ventilated Do not stand directly beside exhaust Limit truck idling	1	3	3
1.2		Sft	Burns from battery acid, hot surfaces, exhaust, sparks	2	3	6	Ensure soap and water is available to clean off any acid on PPE before removing Ensure first aid kit is stocked and accessible PPE: rubber gloves, apron, safety glasses	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
1.3		Phy	Injury from working with compressed air	2	4	8	Avoid cleaning with compressed air If required, Use minimally and wear appropriate PPE Never use compressed air to clean asbestos, silica dust and/or mould Do not direct compressed air towards body openings or breaks in the skin When using compressed air to clean, use face masks to protect against respiratory hazards Do not use compressed air to clean combustible dust Use wet sweeping, sweeping compounds or vacuum cleaners with filters to clean dust	1	4	4
2.0	Operating powered hand tools	Phy	Injury from working with rotating parts	2	3	6	Stop the rotating parts when in close contact Ensure proper placement of arms and hands to avoid injury	1	3	3
2.1		Sft	Struck by drill bit due to poor maintenance	2	3	6	Pre-use inspection on power tools Report defects to supervisor immediately Maintain tools as per manufacturer's instructions	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
2.2		Sft	Punctured skin due to improper handling of tools	2	3	6	Careful placement of hands during use Power tool safety training Power/hand tool safe work practice Power/hand tool safe work practice training	1	3	3
2.3		Sft	Eye injury due to projectiles	2	3	6	Power tool safety training Power/hand tool safe work practice Power/hand tool safe work practice training PPE : safety glasses	1	3	3
2.4		Sft	Foot injury due to dropped material or tools	2	2	4	PPE : safety boots	1	2	2
2.5		Sft	Electric shock due to frayed wiring	2	3	6	Pre-use inspection on power tools Report defects to supervisor immediately Maintain tools as per manufacturer's instructions	1	3	3
2.6		Sft	Trips, slips and falls due to poor housekeeping	2	2	4	Housekeeping safe work practice Housekeeping safe work practice training	1	2	2

Job Hazard Analysis

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
2.7		Phy	Elevated noise levels from powered tools	2	3	6	Noise testing in work areas over 85dBA Physical agents: noise safe job procedure PPE : ear protection	1	2	2
2.8		Sft	Burns due to contact with hot equipment	2	3	6	PPE: gloves	1	2	2
3.0	Welding/torch cutting	Sft	Burns/cuts/electric shock due to poor maintenance of welding equipment	3	3	9	Pre-use inspection on welding/torching equipment Report defects to supervisor immediately Maintain equipment as per manufacturer's instructions	1	3	3
3.1		Sft	Health effects due to exposure to arc flash and bright lights	2	3	6	Placement of barriers during work Welding/torching safe work practice PPE: face shield	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
3.2		Phy	Adverse health effects due to exposure to UV radiation	2	3	6	Training in welding/torching Welding/torching safe work practice Physical agents -UV exposure and radiation safe job procedure training PPE: protective clothing, face shield and helmet	1	3	3
3.3		Chm	Respiratory discomfort due to inhalation of toxic fumes	2	3	6	PPE: respirator	1	3	3
3.4		MSD	Strains and sprains due to repetitive movements during operations	2	3	6	Ask for assistance when needed Proper lifting training Stretch before work and during Job rotation to prevent repetitive movements Avoid being in awkward position for prolonged period Take a break if needed or switch task Store heavy equipment or supplies waist level to prevent heaving lifting	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
4.0	Using a power washer to clean equipment/ vehicles	Chm	Eye injury due to projectile of airborne particles or chemicals	2	3	6	PPE: safety glasses with full seal Power washing safe work practice	1	3	3
4.1		Sft	Struck by power washer due to improper handling of equipment	2	4	8	Training in power washer safety Hold power washer firmly when using power washer	1	4	4
4.2		MSD	Strains and sprains due to lifting and carrying power washer and repetitive movements	2	2	4	Manual handling aids Training in manual material handling and MSD prevention Material handling safe work practice	1	2	2
4.3		Sft	Worker injury due to excessive pressure of power washer	2	3	6	Select appropriate power washer for cleaning Power washer safe work practice	1	3	3

Job Hazard Analysis

		RECOGNIZE		ASSESS				EVALUATE		
Step	Description	Hazard Group	Potential Hazards & Risk	How Likely	How Serious	Risk Level		How Likely	How Serious	Risk Level
4.4		Sft	Worker injury due to poor maintenance of power washer	3	3	9	Pre-use inspection of power washer Report defects to supervisor Maintain power washer as per manufacturer's instructions	1	3	3
5.0	Painting and labelling equipment	MSD	Strains and sprains due to repetitive movements with hands and overreaching	2	2	4	Use assistive equipment to reach heights Take appropriate breaks Training in manual material handling and MSD prevention	1	2	2
5.1		Chm	Dizziness due to exposure to and inhalation of paint fumes	2	3	6	Adequate ventilation provided Training in WHMIS Chemical and hazardous material handling and storage safe job procedure Chemical and hazardous material handling and storage safe job procedure training SDS readily available	1	3	3
5.2		Sft	Slips and falls due to paint spills	2	3	6	Spill response safe job procedure Spill kit readily available	1	3	3
5.3		Sft	Eye injury due to projectile of paint	2	3	6	PPE: safety glasses SDS readily available	1	3	3

Job Hazard Analysis

Physical Demands

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

[C] Standing	[O] Kneeling	[N] Sitting	[O] Pushing	[O] Pulling	[C] Carrying	[O] Reaching
[F] Walking	[O] Climbing	[F] Bending	[F] Stooping	[F] Twisting	[C] Lifting: 0 to 30 kg	

Chemicals Used

Washer Fluid	Power Steering Fluid
Engine Oil	Brake Fluid
Radiator Fluid	Engine Coolant
Transmission Fluid	Washer Fluid

Equipment Used

Welding Equipment
Torch Cutting Equipment
Power Washer
Power Tools

Environment

[X] Indoor	[X] Vibration	[X] Heat	[X] Noise	[X] Wet
[X] Outdoor	[X] Dust	[X] Cold	[X] Fumes	[X] Radiation

Personal Protective Equipment Required

M = Mandatory, R = Recommended based on specific tasks and situation

[M] Hard Hat	[M] High Visibility Clothing	[M] Safety Boots	[M] Gloves	[M] Safety Glasses	[R] Ear Protection	[M] Dust Mask	[R] Respirator	[ ] Fall Protection	[M] Face Mask/ Shield
CSA Z94.1	CSA Z96.1	CSA Z195	Based on Task	CSA Z94.3	CSA Z94.4	CSA Z94.2	CSA Z94.2	CSA Z259.12	CSA Z94.3

Controls

Engineering: Ensure safe guards on welding/torch cutting/grinding equipment are in place and in good condition.

Administrative:

- [X] Complete task-specific training
- [X] Training on task-specific procedures
- [X] Equipment maintained to manufacturer's instruction
- [X] Conduct a pre-use inspection
- [X] Hazard Reporting
- [X] Ensure proper housekeeping
- [X] Take appropriate breaks during task
- [X] Place barriers around work area
- [X] Place signs and warning labels around the work
- [X] Review and understand policies

Task-specific Training

Manual Material Handling & MSD Prevention
Welding Safety
Torch Cutting Safety
Fire Extinguisher Safety
Manual Material Handling & MSD Prevention
WHMIS 2015
Lockout and Tagging
Power Tool Safety
Spill Response

Legislative References

Duties of Employers- OHSA, s. 25 (1)(a-d)
Every Reasonable Precaution-
OHSA, s. 25 (2)(h)
Housekeeping- O. Reg. 213/91, s. 35-48
PPE- O. Reg. 213/91, s. 21-27
Welding- O. Reg. 213/91, s. 122-124
General Equipment- O. Reg. 213/91, s. 93-116
Fire Safety- O. Reg. 213/91, s. 52-58
Noise Safety- O. Reg. 381/15
WHMIS- O. Reg. 860

TRAINING MATRIX

Task	Handling Workplace Violence and Harassment: Bill-168&132	Health & Safety Awareness Training	AODA	WHMIS 2015	Manual Material Handling	Office Ergonomics	Power Tool Safety	Fire Extinguisher Safety	Lockout and Tagging	Spill Response	Defensive Driving	Heat/Cold Stress Safety	Asbestos Awareness	Lead Awareness	Ladder Safety	Silica Awareness	Welding Safety	Torching Safety	Forklift/Skid Steer Certification	Traffic Control	Elevating Work Platform Certification	Working at Heights	Excavator Certifcation	Loader Certification	Grading/Gravelling	Roller Safety	Mobile Equipment Safety	Hoisting and Rigging	Vacuum Truck Safety	Confined Space Safety
01. Office Work	✓	✓	✓	✓	✓	✓																								
02. Labour and Material Handling	✓	✓	✓	✓	✓		✓	✓	✓	✓							✓	✓												
03. Forklift/Skid Steer Operations	✓	✓	✓	✓															✓											
04. Driving to/from Site	✓	✓	✓	✓							✓																			
05. Working on Site	✓	✓	✓	✓				✓				✓																		
06. Supervision	✓	✓	✓																											
07. Site Set Up	✓	✓	✓	✓	✓							✓																		
08. On-Site and Off-Site Traffic	✓	✓	✓	✓	✓															✓										
09. Large Vehicle Operations											✓																			
10. Asbestos Abatement	✓	✓	✓	✓	✓								✓																	
11. Lead Abatement	✓	✓	✓	✓										✓																
12. Manual Demolition	✓	✓	✓	✓	✓		✓																							
13. Ladder Use	✓	✓	✓	✓	✓										✓															
14. Elevating Work Platform Operations	✓	✓	✓	✓																	✓	✓								
15. Working at Heights	✓	✓	✓	✓																		✓								
16. Excavation, Trenching and Backfilling	✓	✓	✓	✓																			✓							
17. Excavator Operations	✓	✓	✓	✓																			✓							
18. Loader Operations	✓	✓	✓	✓																				✓						
19. Moving Material on Site	✓	✓	✓	✓							✓																			
20. Tractor Crawler Operations	✓	✓	✓	✓																				✓						
21. Grading/Gravelling	✓	✓	✓	✓	✓																				✓					
22. Roller Compaction	✓	✓	✓	✓				✓																		✓				
23. Placing Pipe	✓	✓	✓	✓	✓																			✓				✓		
24. Placing Manholes	✓	✓	✓	✓																										
25. Hoisting and Rigging																											✓	✓		
26. General Spill Response	✓	✓	✓	✓	✓			✓																					✓	
27. Concrete Processing	✓	✓	✓	✓																			✓							
28. Site cleanup	✓	✓	✓	✓	✓																									
29. Equipment Maintenance	✓	✓	✓		✓		✓	✓	✓	✓																				
30. Exposure to Occupational Health Hazards	✓	✓	✓	✓				✓		✓		✓	✓	✓	✓	✓														✓

Online Training

In Class/Hands On Training

PRACTICE AND PROCEDURE MATRIX

Task	Office Ergonomics Safe Work Practice	Housekeeping Safe Work Practice	Material Handling Safe Work Practice	Welding/Torching Safe Work Practice	Power Washing Safe Work Practice	Fire Extinguisher Safe Work Practice	Power/Hand Tool Safe Work Practice	Hazard Reporting Safe Work Practice	Demolition Safe Work Practice	Sanding Safe Work Practice	Ladder Safe Work Practice	Lockout and Tagging Safe Job Procedure	Physical Agents: Radiation and UV Exposure Safe Job Procedure	Physical Agents: Noise Safe Job Procedure	Physical Agents: Vibration Safe Job Procedure	Chemcial and Hazardous Material Handling and Storage Safe Job Procedure	Spill Response Safe Job Procedure	Forklift/Skid Steer Safe Job Procedure	Defensive Driving Safe Job Procedure	Electrical Safety Safe Job Procedure	Asbestos Safe Job Procedure	Lead Safe Job Procedure	Physical Agents: Heat/Cold Stress Safe Job Procedure	Traffic Control Safe Job Procedure	Elevating Work Platform Safe Job Procedure	Working at Heights Safe Job Procedure	Working at Heights- Recue Plan	Excavation and Trenching Safe Job Procedure	Backfilling Safe Job Procedure	Bulldozer Safe Job Practice	Loader Safe Job Procedure	Grading Safe Job Procedure	Roller Compaction Safe Job Procedure	Hoisting and Rigging Safe Job Procedure	Overhead Powerlines Safe Job Procedure	Crushing Concrete Safe Job Procedure	Biological Agents Safe Job Procedure	Silica Safe Job Procedure	Confined Space Safe Job Procedure
01. Office Work	✓	✓	✓																																			
02. Labour and Material Handling		✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓																					
03. Forklift/Skid Steer Operations		✓																✓																				
04. Driving to/from Site																			✓																			
05. Working on Site		✓				✓								✓		✓				✓	✓	✓	✓														
06. Supervision		✓						✓																														
07. Site Set Up		✓	✓																					✓														
08. On-Site and Off-Site Traffic	✓	✓	✓	✓	✓		✓		✓		✓	✓							✓	✓																		
09. Large Vehicle Operations																			✓																			
10. Asbestos Abatement		✓	✓																			✓															
11. Lead Abatement		✓	✓																				✓														
12. Manual Demolition		✓	✓		✓				✓					✓	✓																						
13. Ladder Use			✓								✓																										
14. Elevating Work Platform Operations																									✓	✓	✓										
15. Working at Heights		✓																								✓	✓										
16. Excavation, Trenching and Backfilling		✓												✓														✓	✓								
17. Excavator Operations		✓				✓						✓		✓			✓											✓									
18. Loader Operations		✓																													✓						
19. Moving Material on Site		✓																	✓																		
20. Tractor Crawler Operations		✓																												✓							
21. Grading/Gravelling		✓	✓			✓																										✓					
22. Roller Compaction		✓				✓									✓																		✓				
23. Placing Pipe		✓	✓																																		
24. Placing Manholes		✓												✓														✓			✓				✓	✓		
25. Hoisting and Rigging		✓																																	✓	✓		
26. General Spill Response		✓	✓														✓																				
27. Concrete Processing		✓												✓																						✓		
28. Site cleanup		✓	✓																																		✓	
29. Equipment Maintenance			✓			✓	✓			✓		✓	✓	✓	✓		✓																				
30. Exposure to Occupational Health Hazards						✓							✓	✓	✓	✓	✓					✓	✓	✓												✓	✓	✓

Safe Work Practice Safe Job Procedure

PHYSICAL DEMANDS MATRIX

Task	Standing	Kneeling	Sitting	Pushing	Pulling	Carrying	Reaching	Walking	Climbing	Bending	Stooping	Twisting	Lifting	Min lift weight (kgs)	Max lift weight (kgs)
01. Office Work	O	O	F	O	O	O	O	O	N	O	O	O	O	0	10
02. Labour and Material Handling	C	O	N	O	O	C	O	F	N	F	F	F	C	0	30
03. Forklift/Skid Steer Operations	O	N	C	O	O	N	N	N	O	N	N	F	N	0	0
04. Driving to/from Site	N	N	C	N	N	N	O	N	O	O	N	N	N	0	0
05. Working on Site	F	F	O	O	O	N	N	F	O	O	O	O	N	0	0
06. Supervision	F	O	O	O	O	O	O	F	O	O	O	O	O	0	30
07. Site Set Up	F	F	N	F	F	F	F	C	N	O	O	O	F	0	25
08. On-Site and Off-Site Traffic	C	F	N	O	F	C	C	F	O	O	O	O	C	0	20
09. Large Vehicle Operations	N	N	C	N	N	N	O	O	O	O	N	N	N	0	0
10. Asbestos Abatement	C	N	N	N	N	N	N	F	N	N	N	N	O	0	10
11. Lead Abatement	C	F	O	C	N	O	F	O	O	F	O	F	O	0	25
12. Manual Demolition	C	O	N	F	F	F	F	O	O	F	F	F	F	0	30
13. Ladder Use	C	F	N	O	O	F	F	O	C	O	O	F	F	0	25
14. Elevating Work Platform Operations	C	O	N	O	O	N	N	N	F	F	F	F	N	0	0
15. Working at Heights	C	O	N	N	O	N	F	C	O	O	O	O	N	0	0
16. Excavation, Trenching and Backfilling	O	O	F	N	N	O	O	O	O	O	N	F	O	0	10
17. Excavator Operations	O	O	F	N	N	O	O	O	O	O	N	F	N	0	0
18. Loader Operations	O	N	C	O	O	N	N	N	F	N	N	F	N	0	0
19. Moving Material on Site	N	N	C	N	N	N	O	N	O	O	N	N	N	0	0
20. Tractor Crawler Operations	O	N	C	O	O	N	N	N	F	N	N	F	N	0	0
21. Grading/Gravelling	C	F	C	F	F	F	F	C	O	O	F	F	F	0	10
22. Roller Compaction	F	O	F	O	O	O	O	O	O	O	O	O	N	0	0
23. Placing Pipe	F	F	N	O	O	F	F	F	O	F	O	F	F	0	25
24. Placing Manholes	O	O	F	N	N	N	N	O	O	O	N	F	N	0	0
25. Hoisting and Rigging	O	O	F	N	N	N	N	O	O	O	N	F	N	0	0
26. General Spill Response	C	N	N	F	F	F	F	F	N	O	O	O	F	0	25
27. Concrete Processing	O	O	F	N	N	N	N	O	O	O	N	F	N	0	0
28. Site cleanup	F	F	N	F	F	F	F	F	N	F	F	F	F	0	15
29. Equipment Maintenance	C	O	N	F	F	O	O	O	N	F	F	O	F	0	10
30. Exposure to Occupational Health Hazar	N	N	N	N	N	N	N	N	N	N	N	N	N	0	0

Continuously (C) 67-100% Frequently (F) 34-66% Occasionally (O) 1-33% Not Applicable (N) 0%

PERSONAL PROTECTIVE EQUIPMENT MATRIX

Task	Hard Hat	High-Visibility Vest	Safety Footwear	Safety Glasses	Gloves	Hearing Protection	Protective Clothing	Fall Protection	Dust Mask	Respirator	Face Shield	Welding Helmet
01. Office Work												
02. Labour and Material Handling	M	M	M	M	M	M	M		M			M
03. Forklift/Skid Steer Operations	M	M	M	R								
04. Driving to/from Site												
05. Working on Site	M	M	M	M	R	R		R	R			
06. Supervision	M		M	R	R	R	R	R	R	R	R	
07. Site Set Up	M	M	M	M	M							
08. On-Site and Off-Site Traffic	M	M	M									
09. Large Vehicle Operations		M										
10. Asbestos Abatement	M	M	M				M			M	R	
11. Lead Abatement	M	M	M				M			M	R	
12. Manual Demolition	M	M	M	M	M	M			M			
13. Ladder Use	M	M	M					R				
14. Elevating Work Platform Operations	M	M	M	M				M				
15. Working at Heights	M	M	M					M				
16. Excavation, Trenching and Backfilling	M	M	M	M	R	M						
17. Excavator Operations	M	M	M	M	R	M						
18. Loader Operations	M	M	M	M	R							
19. Moving Material on Site	M		M		R							
20. Tractor Crawler Operations	M	M	M	M								
21. Grading/Gravelling	M	M	M	R	M	M			R			
22. Roller Compaction	M	M	M	M	M				R			
23. Placing Pipe	M	M	M	M	M							
24. Placing Manholes	M	M	M	M	R	R						
25. Hoisting and Rigging	M	M	M	R	M	R						
26. General Spill Response		M	M	M	M	M		M	R	R		
27. Concrete Processing	M	M	M	M	R	M						
28. Site cleanup	M	M	M	M	M		M		R			
29. Equipment Maintenance	M	M	M	M	M		M		M			M

M Mandatory R Recommended

PRE-USE INSPECTION MATRIX

Task	Welding Equipment	Torching Equipment	Power Tools	Power Washer	Sander	Forklift/Skid Steer	Company Vehicle	Commercial Motor Vehicle	Ladder	Elevating Work Platform	Working at Heights	Excavator	Loader	Dump Truck	Mobile Equipment	Impact Crusher	Track Stacker	Crane	Grader	Roller	Tractor Crawler	Rigging Equipment	Vacuum Truck	Excavator Attachment
01. Office Work																								
02. Labour and Material Handling	✓	✓	✓	✓																				
03. Forklift/Skid Steer Operations						✓																		
04. Driving to/from Site							✓																	
05. Working on Site																								
06. Supervision																								
07. Site Set Up																								
08. On-Site and Off-Site Traffic																								
09. Large Vehicle Operations								✓																
10. Asbestos Abatement																								
11. Lead Abatement																								
12. Manual Demolition			✓																					
13. Ladder Use									✓															
14. Elevating Work Platform Operations										✓	✓													
15. Working at Heights											✓													
16. Excavation, Trenching and Backfilling												✓												
17. Excavator Operations												✓												
18. Loader Operations													✓											
19. Moving Material on Site														✓										
20. Tractor Crawler Operations																					✓			
21. Grading/Gravelling																			✓					
22. Roller Compaction																				✓				
23. Placing Pipe																								
24. Placing Manholes												✓	✓									✓		
25. Hoisting and Rigging															✓			✓						
26. General Spill Response																							✓	
27. Concrete Processing												✓				✓	✓							✓
28. Site cleanup																								
29. Equipment Maintenance	✓	✓	✓	✓	✓																			