

JOB HAZARD ANALYSIS/ TASK INVENTORY

JOB TITLE: **HEAVY EQUIPMENT OPERATOR**

JOB TASKS	HEALTH AND SAFETY HAZARD	FREQUENCY	SEVERITY	PROBABILITY	RISK LEVEL	PRIORITY RATING	ENG. CONTROL	ADMIN. CONTROL	PPE CONTROL	ASSIGNED TO:
Heavy Equipment Operation	Equipment malfunction	1	3	2	6	M		Pre-trip/Post trip inspections; Maintenance program; 250 hour service		Operator
Heavy Equipment Operation	Inadvertant movement of equipment parts	2	3	3	8	H	Park brake, maxi brake	SWP (apply park brake/maxi brake; Lockout/Tagout procedures; lower attachments)		Operator
Heavy Equipment Operation	Overhead hazards (power lines, trees, snags) while outside of equipment	3	3	1	7	M	ROPS canopy (while inside)	SWP (be aware of overhead objects - e.g. Power lines/tree limbs); Use Spotter as required	CSA approved hardhat	Operator, Spotter
Heavy Equipment Operation	Slip/Trip/Fall	2	2	2	6	M		General HSE rules	CSA approved lace up boots with good traction	Operator
Heavy Equipment Operation	Traffic	3	2	2	7	M	Good quality headlights	SWP (maintain safe distance); Proper 2-way radio use; Use Spotter as required		Operator, Spotter
Heavy Equipment Operation	Eye injury (hydraulic oil, metal fragments)	2	1	2	5	L			CSA approved safety glasses	Operator
Heavy Equipment Operation	Loose articles in cab	3	2	2	7	M	Safety nets in cab; Cup holder; Fire extinguisher bracket			Operator
Heavy Equipment Operation	Fatigue	2	3	3	8	H		SWP (take appropriate breaks); Maintenance program (clean lights)	Appropriate sunglasses	Operator
Heavy Equipment Operation	Restricted visibility	2	3	2	7	M	Good quality, clean headlights/backup lights/mirrors; Beacons	SWP (maintain safe distance); Proper 2-way radio use	Appropriate sunglasses	Operator
Heavy Equipment Operation	Backing up	3	3	3	9	H	Good quality, clean headlights/backup lights/mirrors; Backup alarm	Use Spotter (STOP when Spotter out of view); Keep all personnel in operator's view	CSA approved high visibility clothing	Operator
Heavy Equipment Operation	Operator Distractions	3	2	3	8	H		SWP (NO cell phone use while operating; NO eating and drinking while operating)		Operator

JOB TASKS	HEALTH AND SAFETY HAZARD	FREQUENCY	SEVERITY	PROBABILITY	RISK LEVEL	PRIORITY RATIO	ENG. CONTROL	ADMIN. CONTROL	PPE CONTROL	ASSIGNED TO:
Heavy Equipment Operation	Boosting battery	1	2	1	4	L	Proper, heavy duty booster cables	Operator's Manual (follow instructions); Maintenance program; 250 hour service	CSA approved safety glasses, gloves	Operator, Mechanic
Install and Remove Tire Chains	Lifting chains (potential muscle strain)	2	2	1	5	L		SWP (proper lifting techniques, ensure proper footing)	CSA approved high visibility clothing	Operator
Changing Grader Blades	Lifting blades (potential muscle strain)	2	2	2	6	M		SWP (proper lifting techniques, ensure proper footing)	CSA approved high visibility clothing	Operator
Changing Grader Blades	Pinch points	2	2	2	6	M		Potential pinch points. Be aware of finger and hand placement.	CSA approved high visibility clothing	Operator
Fuelling	Fire/Explosion (potential burns, trauma)	3	3	1	7	M	Fire extinguisher	Follow procedures at fuelling station; No Smoking; NO cell phone use	Fire blanket at pump	Operator
Fuelling	Chemical exposure (potential cancer)	3	2	3	8	H	Automatic nozzle shut-off	Follow procedures at fuelling station; Do not overfill; Stay with nozzle	CSA approved rubber gloves	Operator
Working on Jobsite	Thermal exposure (potential frostbite, heat stress)	2	2	2	6	M	Functional heater/air conditioner to facilitate warming and cooling, if	SWP (thermal exposure guidelines); Frequent breaks; drink plenty of fluids	CSA approved winter headwear; Appropriate clothing for conditions	Operator
Working on Jobsite	Hydrogen Sulphide (H ₂ S) exposure (potential immediate death)	3	3	1	7	M	Personal H ₂ S monitor; Onsite monitors; Wind sock	SWP (follow specific procedures & instructions for the jobsite); Orientation		Operator
Working on Jobsite	Fire/Explosion (potential burns, trauma)	3	3	1	7	M	Positive air shut-off; Fire extinguisher	SWP (follow specific procedures & instructions for the jobsite); Orientation	CSA approved flame resistant clothing	Operator
Working on Jobsite	Silica dust (potential cancer)	2	3	3	8	H	Functional heater/air conditioner to allow driver to keep windows closed.	SWP (Silica Exposure Reduction Program: possibly use a water truck to soak the area if conditions warrant)	CSA approved dust masks	Operator
Washing Equipment	Eye Injury	1	1	1	3	L			CSA approved safety glasses	Operator, Mechanic
Greasing Equipment	Eye Injury	2	1	2	5	L			CSA approved safety glasses	Operator, Mechanic

Frequency Rating

- 1 Task done rarely
- 2 Task done occasionally, once per week
- 3 Task done daily, regular work task

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Severity Rating

- 1 First Aid or Minor loss
- 2 Medical Aid or Property Loss
- 3 Fatality, Serious Injury and/or Major

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Probability Rating

- 1 Small chance of occurrence
- 2 Moderate chance of occurrence
- 3 High chance of occurrence

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Risk Level

- 8-9 HIGH Priority Risk Rating
- 6-7 MEDIUM Priority Risk Rating
- 3-5 LOW Priority Risk Rating