

Job Title:		Use of Angle Grinder		Operations Approval (Name; Position):	
JHA Developed By (Name; Position):					
JHA Revised By (Name; Position):				HSE Approval (Name; Position):	
JHA Revision Date:				Dean Neuburger, Director OHS&E	
Job Steps		Potential Hazards	Risk Rating (Before Controls)	Hazard Controls	Risk Rating (After Controls)
1	Pre-task preparation, work area assessment and tool inspection.	<ol style="list-style-type: none"> Misinformation due to unclear instructions or lack of PSP (policies, standards, procedures). Use by untrained workers. Pre-existing work area hazards. Lacerations/Punctures from tool. Defective Tool: frayed cords, binding moving parts, safety guard missing, broken grinding wheel. Pinch Points caught between equipment/tools. Slips/Trips/Falls, from uneven ground, ruts, tools and debris on ground. Congested work area from other workers or equipment. 	C4	<ol style="list-style-type: none"> Ensure all applicable JHAs and SWPs are reviewed and signed by workers. Conduct and document a pre-task meeting. Complete permit for Hot Work. Only personnel trained and deemed competent by their supervisor can operate an angle grinder. Complete a thorough hazard assessment and eliminate/control all identified hazards, if hazards cannot be controlled, stop work and report conditions to supervision. Ensure tool is not connected to any power source before starting tool inspection. Wear CR gloves during inspection, watch hand and body placement. Never place your hands and/or body in the line of fire. Lock out/Tag out tool if deemed unsafe, report to your supervisor and inform site services that tool has been removed from service. Always inspect tools and equipment prior to use. Color code tools with Monthly/Quarterly (based on site requirements) tape. Trigger locks must be disabled; guards must be on the tool and in good condition. A second handle must be used on angle grinders. Always be aware of your surroundings. Wear CR gloves, watch hand and body placement. Ensure a clean work area. Use clear access path, sand area if required and always maintain good housekeeping. Clean as you go. Flag & Tag work area and schedule work to limit access to work zone if possible. 	C5

2	Performing Standard Adjustments.	<ol style="list-style-type: none"> 1. Pinch Points/Crush from striking hand/body or body placement. 2. Cuts/Lacerations/Punctures from tool and/or cutting and grinding discs. 3. Dropped tool or component. 4. Unintentional engagement of the tool. 	C4	<ol style="list-style-type: none"> 1. Identify pinch point/crush zone and watch hand & body placement. Never place either your hands or body in the line of fire. Always be aware of your surroundings. 2. Wear leather gloves over top of standard CR gloves when both are needed. Never place either your hands or body in the line of fire. 3. Place tool on a stable and secure surface. Watch body position and refrain from working in awkward body positions. Secure material at all times. 4. Ensure the tool has been de-energized prior to making any adjustments. 	C5
3	Angle Grinder Operation	<ol style="list-style-type: none"> 1. MSI from repetitive work motion. 2. Overexertion from lifting, pulling, pushing or twisting. 3. Lacerations/Punctures/Slivers from metal, tools or materials. 4. Pinch points/Crush from striking hand/body or body placement. 5. Loose clothing and/or jewellery. 6. Struck by stationary or moving objects/equipment/tools. 7. Electrical shock from faulty tools, wet and outdoor use. 8. Equipment Failure/Malfunction, pneumatic tool jam, hydraulic oil spills. 9. Dropped material or tools. 	A3	<ol style="list-style-type: none"> 1. Always stretch and flex prior to starting work day. Change up the task as required and use the proper tool for the job. 2. Use proper lifting techniques. Maintain good ergonomics while using tool, keep arms/hands/wrists in neutral position. 3. Watch hand & body placement. Never place your hands and/or body in the line of fire. Use CR gloves with leather gloves over top if necessary. Inspect material for sharp edges before handling. 4. Identify pinch point/crush zone and watch hand & body placement. 5. The operator of an angle grinder must wear tight fitted clothing and no hanging jewelry is allowed. 6. Never place either your hands or body in the line of fire. Always be aware of your surroundings. Secure material at all times. 7. Use GFCI for all outdoor tool use. 8. Check the grinding disc for any cracks. Change disc if cracks or deformities are found. Disconnect all tools from power source when not in use. Ensure disc is rated for the RPM of the tool used and the material to be cut. 9. Always maintain control of the tool, using both hands on the tool at all times, ensure disc has stopped moving before placing on surface and always place 	C5

		<p>10. Eye or face injuries from flying debris.</p> <p>11. Fire/Spark control.</p> <p>12. Fragmentation of the disk.</p>		<p>tool on a flat, stable surface. Always secure material being grinded to a stable surface.</p> <p>10. A face shield with sealed safety glasses underneath must be worn while using an angle grinder. Always use a grinding disc which is in good condition. Watch for kick back during tool use. Never place either your hands or body in the line of fire for yourself and other workers. Always be aware of your surroundings.</p> <p>11. Inspect the area where the sparks will be going while grinding. Ensure all materials, tools or other debris is removed from the area. Ensure no unauthorized personnel enter the grinding area and remove all flammable products, containers, and rags from the grinding area. A current certified and fully charged fire extinguisher must be readily available in the grinding area in case of fire.</p> <p>12. Ensure the proper disk is being used for the task; ferrous vs non-ferrous, cutting vs grinding or buffing.</p>		
Highest Task Risk Rating			A3 (High)	Highest Task Risk Rating		C5 (Low)

Safety Guidelines Required For Task (Completed on site)									
Process		PPE		Health		Training		Environment	
<input checked="" type="checkbox"/>	Pre Job Hazard Analysis		Arc flash coveralls		Yak tracks - Cleats		Bear awareness		Spill kit
	FLRA		Disposable coveralls		Goggles		CTEC		Drip trays
<input checked="" type="checkbox"/>	JHA review	<input checked="" type="checkbox"/>	Ear plugs	<input checked="" type="checkbox"/>	Face shield		CSTS		Traffic Mgt.
	Signage (Safety/Wet Floor)		Ear muffs	<input checked="" type="checkbox"/>	Cut gloves		Confined space		Wildlife Mgt.
	Spotter	<input checked="" type="checkbox"/>	Hard hat		Chain-mail gloves		Fall protection		Bear spray
	LOTO		Harness		Leather gloves		Fire extinguisher		Air horn
	PTW (Permit to Work)		Lanyard		½ Respiratory mask		LOTO		Vibration
	Toolbox		Life line		Other		Loader		Ventilation
	Ventilation		Knee pads				Skid steer		Other
	SDS review	<input checked="" type="checkbox"/>	Safety eyewear				Spill responder		
	Fall Protection Plan	<input checked="" type="checkbox"/>	Steel toed boots				TDG		
	Barricades						WHIMIS		
	Temp logs and verification						Other		
	Other								

		Severity				
		Catastrophic Death or multiple life-threatening principals	Major Life threatening injury or multiple serious injuries causing hospitalization	Moderate Significant serious injury Non- permanent injury	Minor Medical Help needed, Treatment by medical professional	Insignificant Injuries or ailments not requiring medical treatment
Probability		1	2	3	4	5
	A Almost Certain: Almost certain to occur in most circumstances	1	1	1	2	2
	B Likely: Likely to occur frequently	1	1	2	2	2
	C Possible: Possible and likely to occur at some time	1	2	2	2	3
	D Remotely Possible: May occur in rare and exceptional circumstances	2	2	2	3	3

[illegible]