











RISK ASSESSMENT		Nature of Safety Subject /Activity: Excavator Operation								
AUTHORED BY:	Shaun Stephenson	APPROVED BY:	SHAUN STEPHENSON							
POSITION:	Safety Consultant	POSITION:	SAFETY CONSULTANT							
DATE:	September 13 th , 2021	DATE:	September 13 th 2021							
SIGNATURE:		SIGNATURE:								
HAZARD IDENTIFICATION										
HAZARD (VISUAL IDENTIFICATION):			HAZARD TASK: (DESCRIPTION OF ACTIVITY):							
			Hazards associated with operating 360 excavators.							
PERSONS AFFECTED BY THE WORKS										
PERSONS EXPOSED:	PERSONS CARRYING OUT THE TASK	✓	OFFICIAL VISITORS	✓	NUMBER EXPOSED:	5+				
	ON-SITE STAFF	✓	MEMBERS OF THE PUBLIC		DURATION AND FREQUENCY OF EXPOSURE:	Daily				
	SUB-CONTRACTORS		YOUNG PERSONS							
	DRIVERS	✓	OTHER							
RISK EVALUATION										
SEVERITY (S)	Risk Factor (RF)									
(6) Multi-fatal	6	12	18	24	30	36	Very high risk	Very high risk	Intolerable – Do not start work	
(5) Fatality	5	10	15	20	25	30	High risk	High risk	Work can commence with reassessment of the risk levels and direct supervision	
(4) Major	4	8	12	16	20	24				
(3) Notifiable	3	6	9	12	15	18	Medium risk	Medium risk	Tolerable: reduce where practicable	
(2) Minor	2	4	6	8	10	12	Low risk			
(1) Negligible	1	2	3	4	5	6				
	(1) Very rare				(6) Almost certain					
	(2) Remote				(5) Frequent					
	(3) Occasional		(4) Regular							
	LIKELIHOOD (L)									
HAZARD:	CONSEQUENCES WITH NO CONTROL MEASURES	Initial risk rating			CONTROLS	Present risk rating				
		S	L	RF		S	L	RF		
Collapse of platforms/ excavations	Potential for death or serious injury if excavator overturns	6	3	18	Excavation/fill batters cut to 45degrees by excavator Areas to be + 2m beyond footprint of machine working on platform Platforms to be constructed from dry compactable material Induction to include detailed safety instructions on how to work around plant and where plant will be operating. All plant operators will have CPCS or equivalent operator safety training.	6	1	6		
	Damage to plant									
Inexperienced operatives	Potential for death/injury to operative	5	4	20	Only trained and experienced operatives to work with/near excavator. Operators must switch off and remove the keys before leaving the excavator unattended.	5	1	5		

Nearby operatives	Potential for death/injury to operative if hit with excavator.	5	4	20	<p>Operatives will be made aware of the dangers of the excavator during induction and agree to work in accordance with the risk assessment.</p> <p>600mm slewing clearance to be maintained.</p> <p>Toolbox talks will be used to remind operatives of the dangers of working near plant.</p> <p>Plant and pedestrian routes will be segregated by physical barriers where reasonably practicable.</p> <p>No person may approach a working excavator until they have signalled the operator and the operator has confirmed that it is safe to approach.</p> <p>Operators will stop work, lower arm and isolate machine if operatives are seen to be approaching their immediate vicinity.</p> <p>Mobile phones are not to be used whilst operating plant, operators should lower arm and isolate excavator before using phones.</p>	5	1	5
Nearby vehicles or other plant	Potential for death or serious injury to operator/driver if hit with other plant Damage to plant/vehicles	5	3	15	<p>Daily activity brief will be carried out each morning to make operators aware of where plant and vehicles will be working.</p> <p>Mobile phones are not to be used whilst operating plant, operators should lower arm and isolate excavator before using phones.</p>	5	1	5
Working at height	Potential for death or serious injury to operator or persons maintaining excavator.	5	3	15	<p>Work at height will be avoided where possible.</p> <p>Operators will have CPCS or equivalent operator safety training.</p> <p>Provided safe means of access will be used to maintain excavator.</p> <p>Three points of contact must be maintained at all times whilst climbing in/on excavator.</p> <p>The excavator will be used to transport the operator to a safe point before the operator exits the excavator.</p>	5	1	5
Unstable ground	Potential for death or serious injury to operator and/or other site operatives if excavator overturns. Damage to excavator Damage to other plant/vehicles Damage to nearby structures	5	4	20	<p>Operators will have CPCS or equivalent operator safety training.</p> <p>Risk assessment section regarding working platforms to be adhered to.</p> <p>Excavator tracks not to go within 3 metres of excavations.</p> <p>The load capacities of the machine and any attachments must never be exceeded during lifting operations.</p>	5	2	10
Overloading/over-extending excavator arm	Potential for death or serious injury to operator and/or other site operatives if excavator overturns. Damage to excavator Damage to other plant/vehicles Damage to nearby structures	5	3	15	<p>Operators will have CPCS or equivalent operator safety training.</p> <p>Operators will have CPCS or equivalent operator safety training.</p> <p>The load capacities of the machine and any attachments must never be exceeded during lifting operations.</p>	5	1	5

Quick hitch attachments	Potential for death or serious injury to operator and/or other site operatives Damage to other plant/vehicles	5	3	15	Operators should be adequately trained on the use of quick hitches in general Operators should be competent to use the specific hitch on the machine they use The manufacturer-specified retaining pin must be available on the machine Operators should only use pins which have been designed for this specific use Operator should check the pin is in place on the hitch before starting the work and every time a different attachment is fitted	5	1	5
Maintaining excavator.	Potential for injury from working on plant e.g. trapping a person's limbs within moving parts of excavator Potential hydraulic injection injury	4	5	20	Only trained and competent operatives will attempt to maintain/repair the excavator Operator will carry out pre-start checks before commencing operations Excavator will be completely isolated and switched off before operatives are allowed to work in its immediate vicinity or do maintenance work on it Operative to wear overalls and gloves whilst maintaining forklift	4	1	4
Unauthorised use	Potential for death or serious injury	5	3	15	Excavator operator to remove keys when not in use	5	1	5
Slips, trips and falls	Potential for tripping over debris or tools.	3	4	12	Designated walkways will be created using physical barriers where reasonably practicable. Good housekeeping will be maintained, among operatives; walkways kept clear etc. This will be reinforced with toolbox talks.	3	1	3
Hazardous substances other than asbestos	Potential for harming health of employees	2	5	10	Operatives will be briefed on the CoSHH assessments during induction and agree to work in accordance with them. Appropriate PPE will be worn where necessary. Spill kits used where necessary	2	1	2
Noise	Potential for damaging hearing when working with excavator. Disruption to neighbours	3	4	12	An assessment of the noise level will be carried out and recorded. Operatives will wear hearing protection when working near excavator. No residential properties within the immediate vicinity. excavator used only between 7.30am and 6pm.	3	1	3
Accessing working platforms	Risk of falling Risk of injury to employees	4	4	16	Ramps to be constructed from suitable 'stable' material Ramps to be no steeper than 1:3 Ramps to be + 1m the working area of the plant utilising access ramp Continuous monitoring of piles for stability to be carried out by operatives working on platforms	4	2	8

Refuelling	Potential for crushing operatives harming the environment Skin irritation Fire	5	4	20	Fuel to be stored in locked and banded tanks only Spill kit to be located in immediate proximity to fuel tanks Nitrate gloves to be worn whilst refuelling plant No naked flames around fuelling area Fire extinguishers to be within immediate proximity Excavator will be completely isolated and switched off before operatives are allowed to work in its immediate vicinity or do maintenance work on it.	5	1	5
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PERSONAL PROTECTIVE EQUIPMENT REQUIREMENT

								
BS EN 397	BS EN 20345	BS EN 20471 Class-2	BS EN 388	BS EN166 F	BS EN 470	BS EN 352	BS EN 140	-

Remember: A RISK ASSESSMENT IS ONLY AS GOOD AS EVERYONE CONCERNED PUTTING IT INTO PRACTICE.

Monitoring:	<p>The persons responsible for maintaining a safe place of work are:</p> <ul style="list-style-type: none"> • Overall – Director • Implementation, monitoring and arrangements – Supervisor • Excavator operator
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ADDITIONAL INFORMATION

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