

RISK ASSESSMENT

Assessment Title:	<i>Excavator Operations (180° & 360°)</i>	Reference Number:	OPRA001.01
		Company Name:	Oakbank Plant Hire Ltd
		Department / Location:	Oakbank Plant Hire Ltd

Risk Assessment Matrix

Risk Ratings Highlighted in 'Orange' are to be discussed– potential improvements. Risk Ratings Highlighted in 'Red' need immediate action.

<i>Risk = Likelihood x Consequence (Multiply 'X' axis by 'Y' axis)</i>		Consequence (Y)	<i>Catastrophic (5)</i>	5	10	15	20	25
1 – 4	<i>Acceptable</i>		<i>Major (4)</i>	4	8	12	16	20
5 – 9	<i>Adequate</i>		<i>Moderate (3)</i>	3	6	9	12	15
10 – 15	<i>Tolerable</i>		<i>Minor (2)</i>	2	4	6	8	10
16 – 25	<i>Unacceptable</i>		<i>Insignificant (1)</i>	1	2	3	4	5
			<i>Remote (1)</i>	<i>Unlikely (2)</i>	<i>Possible (3)</i>	<i>Probable (4)</i>	<i>Certain (5)</i>	
			<i>Likelihood (X)</i>					

Any queries arising from this risk assessment shall be addressed immediately with Line Management / Health & Safety Manager

Hazard(s)	Risks of Harm	Persons at Risk	Risk Rating(s)			Existing Control Measures	Residual Risk Rating(s)		
	<i>Related to hazard identified</i>	<i>Persons at risk from identified hazards</i>	<i>X</i>	<i>Y</i>	<i>R</i>	<i>Existing controls measures implemented when carrying out task or using associated plant / tooling</i>	<i>X</i>	<i>Y</i>	<i>R</i>
Slewing Boom (Moving Parts of Excavator)	Boom striking persons, structures or vehicles	Site operatives, contractors, visitors, any-one in the vicinity	4	4	16	<ul style="list-style-type: none"> Access to the work area to be restricted to authorised persons only when excavators are in operation No persons are permitted within the excavators working radius without obtaining permission from the operator. If it is necessary for anyone to go into the machines working radius, machine operator must be made aware before entry, normally by hand signals & shouting Excavator operations to temporarily cease while persons enter the radius of the boom No excavator bucket should be slewed directly over personnel or vehicle cabins. All persons required to work in the vicinity of excavator operations to remain within designated 'agreed' area clearly visible to the excavator operator at all times A large excavator must never be permitted to travel in a confined area, or around people, without a banksman to guide the driver. Machines operating in confined spaces or near other personnel must ensure 600mm clear space for tail swing. Vehicles should be loaded over the side or rear and materials should not be dropped from any unnecessary height Machine must not be operated if the operator's abilities are impaired by ill health, poor vision, prescribed drugs or illegal drugs, or alcohol Regular formal inspections of the excavator to be carried out by operators, checks to be recorded and should include ensuring all windows & mirrors are in good condition and clean All staff required to work within the area must wear the appropriate Personal Protective Equipment (PPE) including - hard hat (where required) and hi – visibility clothing at all times 	2	4	8

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Excavator Movements	Excavator colliding with persons, structures or vehicles	Site operatives, contractors, visitors, any-one in the vicinity	4	4	16	<ul style="list-style-type: none"> Only authorised fully trained operators are permitted to operate Excavators Exclusion zone to be created in the area of all excavator operations, access the area to be restricted to staff directly involved in the operations Prior to excavator movements / reversing the operator must perform checks for pedestrians / other vehicles prior to any excavator movements Safe working distances must be maintained between other machinery operating in the vicinity Banksman / signaller to be utilised where required. Anyone working in the vicinity of an excavator, such as signaller or banksmen, to remain in a position where they are clearly visible to the driver at all times All staff required to work within the area must wear the appropriate Personal Protective Equipment (PPE) - hard hat (where required) & hi – visibility clothing 	2	4	8
Excavator Overturning	Collapse of excavator, potentially causing crushing of persons or property, collapse of existing excavation	Excavator operator, on-site operatives and any persons in the vicinity	4	4	16	<ul style="list-style-type: none"> Excavator must only operate in the maximum gradients defined within the operator's manual Ground condition to be assessed prior to excavator operations to ensure a stable base can be provided Safe Working Load (SWL) must be adhered to at all times during excavator operations Dangerous overhangs must not be created on a high workface; the wheels or tracks of the machine should be positioned at 90 degrees to the workface to enable quick withdrawal if necessary A workface below the level of the machine must never be undercut so as to affect the stability of the machine If operating on a gradient cannot be avoided, it must be ensured that the work cycle is slowed down, the bucket is not extended to far in the downhill direction and travel is taking with extreme caution. Excavator attachments should be close to the machine, with the bucket just clear of the ground Wheeled excavator tyres to remain in good condition If stabilising devices are fitted they should be deployed when machine is excavating. 	2	4	8

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Underground Services / Overhead Cables	Electrocution	Excavator operator, on-site operatives and any persons in the vicinity	3	4	12	<ul style="list-style-type: none"> A ground and high-level survey of the site is carried out in order to ascertain the location of any services. Communication will be made with the site manager to provide relevant information regarding live services Goal posts will be erected in appropriate locations to where high-level electricity is present. 	1	4	4
Failure of Lifting Equipment / Falling Materials	Impact injuries / crushing resulting from materials falling or failure of lifting equipment	Excavator operator, on-site operatives and any persons in the vicinity	3	4	12	<ul style="list-style-type: none"> Excavator and any attachments to be Thoroughly Examined under the Lifting Operations & Lifting Equipment Regulations (LOLER) Safe Working Load (SWL) must be adhered to at all times during excavator operations Buckets must not be overloaded Operator to ensure loads are secured prior to moving the boom No persons to work in areas underneath raised boom 	2	4	8
Excavator Refuelling	Fire / Explosion	Excavator operator, anyone in the vicinity of fuel	4	5	20	<ul style="list-style-type: none"> Refuelling to be carried out in designated area only. No smoking and all naked flames prohibited in the area of refuelling operations. Refuelling to be carried out by trained competent staff. Allow components that operate at high temperature to cool before starting fuelling operations. 	2	4	8
Whole Body Vibration (WBV)	Health risks including severe back pain	Excavator operator	3	4	12	<ul style="list-style-type: none"> Excavator to be regularly serviced and maintained in accordance with manufacturer's guidelines. Operator to adjust the seat position to ensure that the back is provided with adequate support whilst ensuring all controls can be operated comfortably. Adjust the seat suspension to suit the operator weight. (If available) Excavator to be driven at a speed to suit the prevailing ground conditions In cases of excessive vibration levels, managers to investigate improved ways of working, including job rotation to limit exposure time 	2	3	6

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Inclement Weather	Obscured view leading to the potential for human error, heat or cold weather-related ailments	All persons working outdoors during excavator operations	4	2	8	<ul style="list-style-type: none"> Forecast to be checked prior to any operations. Task to be re-assessed for extreme weather conditions. Machine to be suitable for work in adverse weather. Operator to be supplied with adequate Personal Protective Equipment (PPE) for adverse weather. Task to be temporarily suspended where weather conditions may impact on the health & safety of those involved 	3	2	6