Risk assessment – GOTCHA™ blast hole retrieval tool for mining use

RISK ASSESSMENT *for GOTCHA™ blast hole retrieval tool in mining operations in Australia*			
Detail of what is being assessed	GOTCHA™ blast hole retrieval tool for mining use	14/11/2022	31/12/2023
	Name	Position	
Assessment prepared by	Glenn Tobin	Director – Oresome Products Pty Ltd (AUS)	
Assessment reviewed by	Arnold Jones	Inventor – GOTCHA tool	
Resources to be consulted	Mr Henry Zuidersma	Principal Explosives Officer, Dangerous Goods and Critical Risks Directorate, Department of Mines, Industry Regulation and Safety, in terms of the Various Provisions of the Mines Safety and Inspection Act (1994) and Work Health and Safety (Mines) Regulations 2022 [WA]	

		Likelihood				
		E. Rare	D. Unlikely	C. Possible	B. Likely	A. Almost Certain
Consequence	5. Extreme	Medium	High	High	Very High	Very High
	4. Major	Low	Medium	High	High	Very High
	3. Moderate	Low	Medium	Medium	High	High
	2. Minor	Low	Low	Medium	Medium	High
	1. Insignificant	Low	Low	Low	Low	Medium

Likelihood				
		Qualitative	Qualitative	Qualitative
A	Almost Certain	Occurs often	95-100%	>10 times per year (could occur on a daily /weekly basis)
B	Likely	Expected to occur	50-95%	2-10 times / year (could occur on a monthly / quarterly basis)
C	Possible	Could occur, but more than likely will not	20-49%	Once every 1-10 years
D	Unlikely	May occur in unusual circumstance	1-19%	Once every 10-100 years
E	Rare	Would only occur under exceptional circumstance	<1%	Once every 100-1000 years

Consequence		Injury
5	Extreme	Multiple fatalities
4	Major	Single fatality / 10-20 permanent disabilities
3	Moderate	Less than 10 permanent disabilities
2	Minor	Lost time injuries
1	Insignificant	Medical treatment

Hierarchy of controls		
Level 1	Elimination	Most effective
Level 2	Substitution	
	Engineering controls	
Level 3	Administrative controls	
	Personal protective equipment	Least effective

Risk assessment		Risk control plan					
Hazard description	**Risk description**	**Current risk level**	**Proposed risk controls**	**Revised risk level**	**Person responsible**	**Target completion date**	**Actual completion date**
Product does not work properly	Incorrect maintenance of the tool	*1C*	Ensure tool is clean from last deployment to ensure the jaws move freely - Administrative controls.	1D	Drill & Blast Team	14/11/2022	On-going
Injury caused by jaws of the tool.	Incorrect storage of the tool.	*2C*	Store SMALL tool in the pouch provided once it has been cleaned after use. LARGE tool to be cleaned after use, then stored in the closed position by the retaining band provided – Elimination controls	2D	Drill & Blast Team	14/11/2022	On-going
Stretch-Snap-Shoot risk	Premature and unintended initiation of non-electronic IE, when the IE becomes trapped during the retrieval process.	*5C*	Do not pull initiating leads if resistance (greater that the weight of what is being retrieved) is felt at any stage of the retrieval process. Either lower and reattempt to recover item. Or load pillow deck after consulting Engineer Team – Elimination controls	1C	Drill & Blast and Engineering Teams	14/11/2022	On-going
Pinch points and/or abrasion from sharp points of tool	LARGE tool has potential pinch points between the jaw and lever elements of the tool. Both LARGE & SMALL tools have sharp jaws to enable and enhance catching and gripping of the item being retrieved.	*2C*	Wear site approved gloves and protective equipment, and follow the work instructions provided by the manufacturer and/or distributor of the tool – Administrative controls	2D	Drill & Blast Team	14/11/2022	On-going