

**CAS Project
IBRA risk matrix**

RISK RANKING						PROBABILITY / LIKELIHOOD				
CONSEQUENCE / SEVERITY										
Safety (S)	Occupational Health (H)	Environment (E)	Quality (Q)	Reputational loss (C)	Legal liability (R)	Conceivable, but very unlikely (has not happened yet) (1/100 years or 1/lifetime)	Has never been known to occur in the business, but has happened somewhere and is highly unlikely that it will happen within 20 years.	Has happened in the business at some time and could happen within 10 years (1/10 years)	Medium Frequency - Occurs in order of less than once per year and is likely to occur within next 10 years (1/year)	Happens frequently - Occurs in order of one or more times per year (1/month)
						1	2	3	4	5
Multiple Fatalities	Permanent disability with potentially lethal effects - effects from exposure may cause death to multiple persons.	Disastrous impact <i>external to company premises</i> on the environment. Irreversible effects to flora and fauna (e.g. total destruction of wetlands).	Critical impact on the quality of the product or service / production loss exceeding R100m or more / Loss of customer(s). E.g. multiple unit (furnaces) shutdown / Late shipment	Prolonged international condemnation. Irreparable damage to highly valued items of great cultural significance or breakdown of social order.	Potential for <i>permanent closure of site operations</i> , jail terms for executives and or very high fines for company, prolonged multiple litigation / major breach of other requirements	5	10	15	20	25
Single fatality or permanent total disabilities	Permanent or lethal effects. Permanent effects - loss of quality of life, life threatening.	Severe impact on the environment. Reversible effects <i>external to the company premises</i> , to flora and fauna with long term damage (1-10 years) to widespread area of significance	Severe impact on the quality of the product or service / production loss exceeding R10m / serious impact on the customer. E.g. Unit (furnace) shutdown	International multi-non-governmental organizations and media condemnation. Very serious widespread social impacts. Irreparable damage to highly valued items.	<i>Temporary suspension of operations</i> , very significant prosecution and fines, multiple litigation / severe breach of other requirements	4	8	12	16	20
Injuries that are reportable to the Inspectorate (Such as loss of limb, sight loss or severe disability to body functions)	Permanent Non-lethal effects. Permanent effects - loss of quality of life, but not life threatening.	Serious impact on the environment. Reversible effects to flora and fauna with short-medium term damage (1-5 years) to large areas of significance.	Serious impact on the quality of the product or service / production loss exceeding R1m / moderate impact on the customer.	National multi-non-governmental organizations and media condemnation	Very significant prosecution and fines, multiple litigation / severe breach of other requirements	3	6	9	12	15
Injuries that require time off work / loss time injury / RWC (Restricted work case) - No permanent disabilities	Serious reversible health effects that would require off-site medical treatment	Moderate impact on the environment. Short term damage (<1 year) to small areas of limited significance.	Moderate impact on the quality of the product or service / production loss exceeding R0.1m / minor impact on the customer	Serious public or media outcry. On going serious social issues. Significant damage to structures/items of cultural significance	Serious non-compliance and breaches of regulation, with investigation or report to authority with significant prosecution and fines / serious breach of other requirements	2	4	6	8	10
Medical treatment required - Treat and return to work	Adverse health effects that may require on-site medical treatment - fit for work to start next shift.	Minor impact on the environment. Short term damage (Immediate rehabilitation possible) to small areas of limited significance.	Minor impact on the quality of the product or service / production loss exceeding R20,000.00 / negligible impact on the customer	Attention from media, local criticism by Non-governmental organizations. Minor social impacts on local population.	Minor non-compliance and breaches of regulation / other requirements	1	2	3	4	5
GO (Low)	TOLERABLE				Acceptable Risk - Monitor and manage risk					
GO BUT (Moderate)	ALARP Reduce Risk to As Low as Reasonably Possible				Substantial Risk - Implement preventative action and monitor action(s)					
NO GO (High)	INTOLERABLE Significant and urgent action(s) required				High Risk - Take immediate preventative action(s) or consider discontinue					