



CORPORATE RISK MATRIX



Term	Rare	Unlikely	Possible	Likely	Very Likely	Almost Certain
Frequency	$\geq 10^{-6}$ to $< 10^{-5}$	$\geq 10^{-5}$ to $< 10^{-4}$	$\geq 10^{-4}$ to $< 10^{-3}$	$\geq 10^{-3}$ to $< 10^{-2}$	$\geq 10^{-2}$ to $< 10^{-1}$	$\geq 10^{-1}$ to ≤ 1
Probability	$< 0.001\%$	$> 0.001\% - < 0.01\%$	$> 0.01\% - 0.1\%$	$> 0.1\% - 1\%$	$> 1\% - 10\%$	$> 10\% - 100\%$
Likelihood	A similar event has not yet occurred somewhere in our industry	A similar event has occurred somewhere in our industry but not in ENTITIES	A similar event has occurred at least Once in ENTITIES	Event has occurred at least once in ENTITIES or is likely to occur within the lifetime of 10 similar COMPANIES	Event has occurred more than several times in ENTITIES or has occurred once or twice in the lifetime of the COMPANY	The event likely to occur several times in the lifetime of the COMPANY

Severity	HSE Impact		Business Impact		#	1	2	3	4	5	6
	Health and Safety	Environmental	Financial	Non-Financial							
			Financial Impact on Asset, Projects and Production	Reputation, Media, Key Stakeholder Reaction and Regulatory Enforcement							
Disastrous	<ul style="list-style-type: none"> Potential for multiple fatalities Onsite (or onset of life threatening Health effects) > 10 injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours Single or more than 1 Public Fatality 	<ul style="list-style-type: none"> Future impact, e.g., unintended release, with widespread damage which remains in an "unsatisfactory" state for a period > 5 years. Discharge of contaminants > 100,000L in offshore and/or > 10,000L in sensitive areas 	<ul style="list-style-type: none"> Disastrous damage Revamping necessary to resume the operations/business (> 50% of Annual Production/Business/Profit Plan) 	<ul style="list-style-type: none"> International concern Extensive negative attention in international media Long term national outrage Substantial Long-term damage to relationships with key stakeholders Action by a government resulting in a complete and permanent loss of license to operate Potentially sever impact on access to new areas 	A	1A	2A	3A	4A	5A	6A
Catastrophic	<ul style="list-style-type: none"> Potential single fatality Onsite, acute or chronic, actual or alleged. 4 up to 10 injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours. Serious injury to public 	<ul style="list-style-type: none"> Future impact with extensive damage which can only be restored to a "satisfactory"/agreed state in a period of more than 1 and up to 5 years. Discharge of contaminants 1,000 - 10,000L to sensitive areas and/or 10,000 - 100,000L in offshore 	<ul style="list-style-type: none"> Extensive damage Major change to resume operations / business (> 35% - 50% of Annual Production/Business/Profit Plan) 	<ul style="list-style-type: none"> International public attention National & global media coverage Medium term national outrage Moderate long term Damage to relationships with key stakeholders Action by a government resulting in partial and/or temporary loss of license to operate Substantial regulatory enforcement action by regulators 	B	1B	2B	3B	4B	5B	6B
Major	<ul style="list-style-type: none"> Permanent disability (ies) 2 or 3 injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours. 	<ul style="list-style-type: none"> Future impact with extensive damage which can be restored to an equivalent capability in a period of around 1 year. Discharge of contaminants 100 - 1,000L to sensitive areas and/or 1,000 to 10,000L in offshore 	<ul style="list-style-type: none"> Major damage Long time change to resume operations / business (> 20% - 35% of Annual Production/Business/Profit Plan) 	<ul style="list-style-type: none"> National public concern Extensive negative attention in national media Long term local outrage Partial Damage to relationships with key stakeholders Moderate regulatory enforcement action by regulators Potentially restrictive measures and/or impact on grant of licences 	C	1C	2C	3C	4C	5C	6C
Serious	<ul style="list-style-type: none"> Lost Time Injury (LTI) Partial disability (ies) Several non-permanent injuries or health impacts 	<ul style="list-style-type: none"> Future impact with localized damage which can be restored to an equivalent capability in a period of months. Discharge of contaminants 10 - 100L to sensitive areas and/or 100 to 1,000L in offshore 	<ul style="list-style-type: none"> Local damage The unit has been repaired/replaced to resume operations/business (> 5% - 1% of Annual Production/Business/Profit Plan) 	<ul style="list-style-type: none"> Regional public concern Negative attention national media Limited local outrage Limited Damage to relationships with local stakeholders Limited regulatory enforcement action by regulators. Possibly negative stance of local government 	D	1D	2D	3D	4D	5D	6D
Minor	<ul style="list-style-type: none"> Recordable injury or health effects from common source / event. Medical Treatment Case or Restricted Work Day Case 	<ul style="list-style-type: none"> Future impact with immediate area damage which can be restored to an equivalent capability in a period of months. Discharge of contaminants < 10L to sensitive areas and/or 100 - 10L in offshore 	<ul style="list-style-type: none"> Minor damage Possible short disruption of operations / business (> 1% - 0.1% of Annual Production / Business / Profit Plan) 	<ul style="list-style-type: none"> Some local public concern / media coverage Limited damage to relationships with local stakeholders Government reaction to non-compliance with legal and regulatory requirements that does not result in consequences beyond simply restoring regulatory compliance 	E	1E	2E	3E	4E	5E	6E
Notable	<ul style="list-style-type: none"> First aid Over-exposures causing noticeable irritation but no actual health effects 	<ul style="list-style-type: none"> Future impact with immediate area damage which can be restored to an equivalent capability in a period of days or weeks. Discharge of contaminants with no impact to sensitive areas and/or < 10L in offshore 	<ul style="list-style-type: none"> Slight damage Disruption to operations / business (< 0.1% of Annual Production / Business / Profit Plan) 	<ul style="list-style-type: none"> No public concern / media coverage Negligible damage to relationships with local stakeholders Non-compliance with regulatory requirements that does not generate any government reaction 	F	1F	2F	3F	4F	5F	6F

Risk Level	Minimum Required Action	Management Signoff Authority
Level 1 - High (Intorelable)	Long term operation in high risk not allowed. Immediately identify risk mitigation according to the hierarchy of controls and implement risk mitigation to reduce the risk to ALARP within 30 days. In case of extention, an approval from relevant holding company shall be obtained. Include in Risk Register for tracking. Consider advanced Risk Analysis methodologies for further investigation. Reporting within 24hrs. Notify relevant Oil & Gas Holding Companies within 7 Days.	Signoff by Chairman / Managing Director(s) / VP's/CEO (Consultation with appropriate SME required)
Level 2 - Medium/High (Torelable if ALARP)	Conduct an ALARP study to determine if the cost of implementing additional risk mitigation is appropriate. Include in Risk Register for tracking. Consider advanced Risk Analysis methodologies for further investigation. Reporting time within 7 Days	Signoff by Senior management i.e. , Operations GM, Projects GM, Drilling GM, Financial GM, HSE GM ...etc.
Level 3 - Medium (Torelable if ALARP)	Conduct an ALARP study to determine if the cost of implementing additional risk mitigation is appropriate. Monitor and improve effectiveness of current controls. Include in Risk Register for tracking. Reporting time within 30 Days	Signoff by Function GM i.e. District GM, Refinery Unit GM ...etc.
Low (Broadly acceptable)	Low Priority, monitor and improve effectiveness of current controls. Include in Risk Register for tracking.	Signoff by Area Authority i.e. OIM, Production Manager, Maintenance Manager ...etc.