



Integrity Management Standard Risk Matrix

Major Accident Risk MAR

Health and Safety	Health and Safety - 3rd Parties	Environmental Impact	Financial Loss	Reputation	Severity Level	Possible, but not known to have occurred in the E&P Industry	Has not occurred in the E&P Industry	Has not occurred in the E&P Industry in the last 10 years	Occurs once in 100 facility lifetimes	Occurs once in 10 facility lifetimes	Occurs once in the facility lifetime	Occurs once, or more, every 5 years	Occurs more than 5 times a year
						($\sim 10^{-6}$ / yr)	(10^{-6} to 10^{-5} / yr)	(10^{-5} to 10^{-4} / yr)	(10^{-4} to 10^{-3} / yr)	(10^{-3} to 10^{-2} / yr)	(10^{-2} to 10^{-1} / yr)	(10^{-1} to 1 / yr)	~ 1 / yr
						1	2	3	4	5	6	7	8
>200 acute or chronic (actual or alleged) fatalities	>50 acute or chronic (actual or alleged) fatalities	>100,000 bbls of oil in sensitive coastal waters; >1,000,000 bbls of oil in other coastal waters. Prolonged regional/global contamination	>\$10 billion	Global outrage, global brand damage and/or affecting international legislation.	A	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
>50 acute or chronic (actual or alleged) fatalities	>10 acute or chronic (actual or alleged) fatalities	>10,000 bbls of oil in sensitive coastal waters. >100,000 bbls of oil in other coastal waters. Short term damage at regional level. Prolonged contamination affecting extensive nature conservation	\$5-10 billion	International media coverage. Regional outrage, for example North America, Europe. Regional brand damage. Likely to lead to change of regulations at regional level.	B	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
>10 acute or chronic (actual or alleged) fatalities	1 or more acute or chronic (actual or alleged) fatalities. Multiple permanent injuries or irreversible health effects	>10,000 bbls Oil, >1,000 bbls of oil in sensitive areas, >100 Te of classified material. Long Term damage affecting extensive area.	\$10 million - \$1 billion	Regional media coverage or severe national outrage. Threat of, or loss of license to operate for affected businesses. Likely to lead to change of regulations at National level.	C	LOW	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH
1 or more acute or chronic (actual or alleged) fatalities. Multiple permanent injuries or irreversible health effects.	Permanent injury or irreversible health effect affecting single person. Non permanent injuries or short term health effects affecting multiple people	Uncontained release of reportable quantity (e.g. >100 bbls oil, less if in sensitive location) or >10 Te (classified material). Extensive short term pollution/contamination. Prolonged pollution/contamination affecting limited area.	\$10 to \$100 million	National media attention or severe local outrage. Prosecution by regulator.	D	LOW	LOW	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH
One or more permanent / disabling injuries	One or more serious injuries requiring medical care beyond first response.	Release offshore with immediate remediation or onsite release with prolonged damage.	\$1 to \$10 million	State media coverage	E	LOW	LOW	LOW	MEDIUM	MEDIUM	HIGH	HIGH	HIGH
One or more loss time injuries	One or more minor injuries.	Onsite release that is remediated immediately	\$100,000 to \$1 million	Local media coverage	F				LOW	MEDIUM	MEDIUM	HIGH	HIGH
One or more first aid injuries	No offshore impacts	Contained onsite release.	<\$100,000	No community notification	G	LOW	LOW	LOW	LOW	LOW	MEDIUM	MEDIUM	HIGH

Approval Levels apply to Major Hazards which are contained within this boundary