

OSA Risk Assessment What-If Template

Below is a list of the typical information that is discussed and documented by a risk assessment team when using the What-If methodology approach. This information is often collected within an excel spreadsheet. Figure 1 provides an example of how the template may be set up within an excel spreadsheet.

Template Field	Explanation		
Activity	Define the activity being assessed.		
What If Event Scenario	Identify and record all potential event scenarios by using the What-If methodology questions approach.		
Potential Consequences	 For each identified scenario, answer the questions: what would be the result of that situation occurring? What are the potential causes that could lead to the consequence scenario? What are the conditions that allow the failure to occur? 		
Consequence Category	Select the appropriate consequence category to consider within the selected risk assessment matrix.		
Barrier(s)	Identify all potential barriers – physical and/or operational elements – that could be implemented to prevent, control, or significantly mitigate the event scenario likelihood or consequence.		
Consequence Level (C)	Using the selected risk matrix and its consequence categories, identify the consequence level (C) without barriers.		
Probability Level (P)	Using the selected risk matrix, identify the probability/likelihood level with confirmed barriers.		
Resulting Risk Level (R)	Determine the resulting risk level by using the risk matrix, the identified consequence and the identified probability levels.		
Recommendations	Document recommendations to address any identified gaps in meeting the barriers or controls, recommendations to improve the existing barriers or suggest new barriers/controls that should be considered.		

Figure 1 - Example of a Risk Assessment Template within Excel

Activity	What If Event Scenario	Potential Consequences	Consequence	Barrier(s)	C	PR	Recommendations
			Category				
Drilling Loss of Well Control	Drilling production hole in target formation and experience	Gas release and fire or explosion potentially impacting	Health and Safety	(1) Well Design	5	38	Use this column to document
	an unexpected kick due to high pressure zone resulting in	personnel on the drilling rig or on location		(2) Overbalance			recommendations to address any identified
	loss of well control						gaps in meeting the barriers or controls,
							recommendations to improve the existing
							or suggest new barriers/controls that
							should be considered.
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