HAZOP STUDY WORKSHEET

Project:	t2	**NODE**	**node1**
Design Intent :		**System**	
Design Conditions:		**HAZOP Boundary**	
Operating Conditions:			
PFD, PID No. :		**Date**	

Guide Word	Deviation	Causes	Consequences	CAT	Unmitigated Risk Assessment			Major Accident Event	Existing Safeguards	Mitigated Risk Assessment Matrix			Recommendations	Action No.	Action by
				(P/A/E/R/Q)	S	L	R	(Y/N)		S	L	R			
Less/Low Flow	Less of	x1			4	4	H	Y	ex1	4	3	H	r1	rat (TOP-XX)	
MisdirectedFlow	Misdirected	x2	c1						41				r2	rat (TOP-XX)	
More/HighFlow	More of	x3	c2											rat (TOP-XX)	
No Flow	None	x4	c3											rat (TOP-XX)	
Reverse Flow	Reverse	x5	c4											rat (TOP-XX)	
MLess/Low Pressure	Less of	x6												rat (TOP-XX)	
More/High Pressure	More of	x7												rat (TOP-XX)	

HAZOP STUDY WORKSHEET

Project:	t2	**NODE**	**node2**
Design Intent :		**System**	
Design Conditions:		**HAZOP Boundary**	
Operating Conditions:			
PFD, PID No. :		**Date**	

Guide Word	Deviation	Causes	Consequences	CAT	Unmitigated Risk Assessment			Major Accident Event	Existing Safeguards	Mitigated Risk Assessment Matrix			Recommendations	Action No.	Action by
				(P/A/E/R/Q)	S	L	R	(Y/N)		S	L	R			
Less/Low Flow	Less of	c1			4	3	H		5400	3	3	M	r1		MDP-Jaruwat P.
MisdirectedFlow	Misdirected	c2			4	2	M		5400	3	2	L	r2		MDP-Jaruwat P.
More/HighFlow	More of	c3													MDP-Jaruwat P.
No Flow	None	c4													MDP-Jaruwat P.
Reverse Flow	Reverse	c5													MDP-Jaruwat P.
MLess/Low Pressure	Less of	c6													MDP-Jaruwat P.
More/High Pressure	More of	c7													MDP-Jaruwat P.

HAZOP STUDY WORKSHEET

Project:	t2	**NODE**	**node1**
Design Intent :		**System**	
Design Conditions:		**HAZOP Boundary**	
Operating Conditions:			
PFD, PID No. :		**Date**	

Guide Word	Deviation	Causes	Consequences	CAT	Unmitigated Risk Assessment			Major Accident Event	Existing Safeguards	Mitigated Risk Assessment Matrix			Recommendations	Action No.	Action by
				(P/A/E/R/Q)	S	L	R	(Y/N)		S	L	R			
Less/Low Flow	Less of	x1			4	4	H	Y	ex1	4	3	H	r1	rat (TOP-XX)	
MisdirectedFlow	Misdirected	x2	c1						41				r2	rat (TOP-XX)	
More/HighFlow	More of	x3	c2											rat (TOP-XX)	
No Flow	None	x4	c3											rat (TOP-XX)	
Reverse Flow	Reverse	x5	c4											rat (TOP-XX)	
MLess/Low Pressure	Less of	x6												rat (TOP-XX)	
More/High Pressure	More of	x7												rat (TOP-XX)	

HAZOP STUDY WORKSHEET

Project:	t2	**NODE**	**node2**
Design Intent :		**System**	
Design Conditions:		**HAZOP Boundary**	
Operating Conditions:			
PFD, PID No. :		**Date**	

Guide Word	Deviation	Causes	Consequences	CAT	Unmitigated Risk Assessment			Major Accident Event	Existing Safeguards	Mitigated Risk Assessment Matrix			Recommendations	Action No.	Action by
				(P/A/E/R/Q)	S	L	R	(Y/N)		S	L	R			
Less/Low Flow	Less of	c1			4	3	H		5400	3	3	M	r1		MDP-Jaruwat P.
MisdirectedFlow	Misdirected	c2			4	2	M		5400	3	2	L	r2		MDP-Jaruwat P.
More/HighFlow	More of	c3													MDP-Jaruwat P.
No Flow	None	c4													MDP-Jaruwat P.
Reverse Flow	Reverse	c5													MDP-Jaruwat P.
MLess/Low Pressure	Less of	c6													MDP-Jaruwat P.
More/High Pressure	More of	c7													MDP-Jaruwat P.