


		Hazop Worksheet						
<i>Project Company</i>		API Manufacturing Plant Sterling Chemical Malta Ltd			<i>Session n°</i>			
<i>Unit</i>		Raw material and waste storage (External Inflammable Warehouse)			<i>Date</i>		05/11/2013	
<i>System/Section Description</i>		Unloading Waste IBC on the VAN			<i>Chairman/secretary</i>		Taviani Cristiano	
<i>Facility</i>		Waste IBC			<i>Team members</i>		Sgrò Giuseppe (Sterling); Topa Fabrizio (Trecon); Paci Andrea (Trecon), Bolognini Mauro (Trecon).	
<i>Hazardous characteristics</i>		Inflammable substance presence			<i>Drawings</i>		38-06-537 External Flammable Warehouse Plan & Section S1 & S2	

Key word	Deviation	Cause	Deviation detection	Possible effects/consequences	Provided protection	Top Event identified
More/High	Temperature substance (liquid) in IBC	Ambient temperature rise due to abnormal / excessive solar radiation	None	Increase volume liquid	None	None
				Increase evaporation liquid		
	trasported load	Error evaluation of the operator	None	Uncontrolled spill out the bund containment	Loading/unloading goods instruction operative or procedure. Training operator with driving license	Top Event 1
Less/Low	Tank liquid level	Tank-bottom valve leak (for wear)	Frequent visual inspection of the outside of the tank with visual level system	Uncontrolled spill out the bund containment	Spill prevention control and countermeasures with constant visual control by operator for all time loading. Spill response equipment located on site loading/anloading is inspected to ensure that all items are in place, in sufficient quantity to control a minor release, and in good condition. Used, broken, damaged, missing or inoperative items are replaced.	Top Event 1
		damage to storage tanks due to accidental damage to the tanks caused by bursting, splitting, rupture				
Other	Tank Dispose incorrectly on pallet, forklift and van.	Error evaluation of the operator	None	Uncontrolled spill out the bund containment	Loading/unloading goods instruction operative or procedure. Training operator with driving license	Top Event 1
	Error substance identification	Error evaluation of the operator for failure or unclear labeling substance	None	Do shipment mix incompatble Waste together may cause uncontrolled chemical reactions	Defining a step-by-step procedure for creating Legally adequate warning label-products and waste	Top Event 5