

Table 1 - Suggested risk evaluations from basic parameter input for RAST BP Texas City Case Study - continued

Version		Equipment Loaded		< Equipment Table		LOPA Worksheet >		Step 7			
2.0		Rafinatte Splitter		Sort	Reset Filters	Create User Scenario	Modify User Scenario	Duplicate Scenario	Sum		
Scenario	Cross Ref	Scenario Type	Initiating Event General Description	Loss Event	Outcome	Outcome Descriptors	Consequence	Tolerable Frequency Factor	Gap in Layers of Protection	Worst Case Scenario for Further Analysis	
12.01		Overflow - Flooding or Plugging	BPCS Instrument Loop Failure	Equipment Rupture at Operating Temperature	Flash Fire or Fireball	Modeled as Instantaneous Release at a Distance to Severe Flammable Impact (0.5 LFL, BLEVE, or Dust Fireball) of 1060 m	Severity Level-5	6	5	High TF & IPL	
13.01		Overflow - Flooding or Plugging	BPCS Instrument Loop Failure	Equipment Rupture at Operating Temperature	Vapor Cloud Explosion	Modeled as Instantaneous Release impacting on site personnel at a Explosion Distance to 1psi Overpressure of 563 m including Explosion Overpressure at Low Strength Occupied Bldg 1 (psi) of 3.2	Severity Level-5	6	5	High TF & IPL	
12.02		Overflow - Flooding or Plugging	Mechanical Failure	Equipment Rupture at Operating Temperature	Flash Fire or Fireball	Modeled as Instantaneous Release at a Distance to Severe Flammable Impact (0.5 LFL, BLEVE, or Dust Fireball) of 1060 m	Severity Level-5	6	5	High TF & IPL	
13.02		Overflow - Flooding or Plugging	Mechanical Failure	Equipment Rupture at Operating Temperature	Vapor Cloud Explosion	Modeled as Instantaneous Release impacting on site personnel at a Explosion Distance to 1psi Overpressure of 563 m including Explosion Overpressure at Low Strength Occupied Bldg 1 (psi) of 3.2	Severity Level-5	6	5	High TF & IPL	
10.01		Overflow - Flooding or Plugging	BPCS Instrument Loop Failure	Overfill Release	Vapor Cloud Explosion	impacting on site personnel at a Explosion Distance to 1 psi Overpressure of 291m including Explosion Overpressure at Low Strength Occupied Bldg 1 (psi) of 1.9 psi	Severity Level-5	6	5	High TF & IPL	
10.02		Overflow - Flooding or Plugging	Mechanical Failure	Overfill Release	Vapor Cloud Explosion	impacting on site personnel at a Explosion Distance to 1 psi Overpressure of 291m including Explosion Overpressure at Low Strength Occupied Bldg 1 (psi) of 1.9 psi	Severity Level-5	6	5	High TF & IPL	