

TABLE A.6
Summary Sheet for Continuing Example 1b: Fatality Frequency Method
(Method 3 of Chapter 3)

Scenario Number	Equipment Number	Scenario Title: Hexane Surge Tank Overflow. Spill contained by the dike	
Date:	Description	Probability	Frequency (per year)
Consequence Description/Category	Release of hexane inside the dike due to tank overflow with potential for ignition and fatality.		
Risk Tolerance Criteria (Category or Frequency)	Maximum Tolerable Risk of a Serious Fire Maximum Tolerable Risk of a Fatal Injury		<1 × 10 ⁻⁴ <1 × 10 ⁻⁵
Initiating Event (typically a frequency)	Loop failure of BPCS LIC. (PFD from Table 5.1)		1 × 10 ⁻¹
Enabling Event or Condition		–	
Conditional Modifiers (if applicable)	Probability of ignition	0.1	
	Probability of personnel in affected area	0.1	
	Probability of fatal injury	0.5	
	Others	N/A	
Frequency of Unmitigated Consequence			5 × 10⁻⁴
Independent Protection Layers	SIF (to be added – see Actions)	1 × 10 ⁻²	
Safeguards(non-IPLs)	Human action not an IPL as it depends upon BPCS generated alarms. Cannot be used as BPCS failure is initiating event (Approach A)		
Total PFD for all IPLs		1 × 10 ⁻²	
Frequency of Mitigated Consequence			5 × 10⁻⁶
Risk Tolerance Criteria Met? (Yes/No): Yes, with added SIF.			
Actions Required to Meet Risk Tolerance Criteria	Add SIF with PFD of 1 × 10 ⁻² . Responsible Group/Person: Plant Technical/ J. Doe June 2002 Maintain dike as an IPL (Inspection, maintenance, etc.)		
Notes	Add action items to action tracking database.		
References (links to originating hazard review, PFD, P&ID, etc.):			
LOPA analyst (and team members, if applicable):			