TABLE A.5
Summary Sheet for Continuing Example 1a: Fatality Frequency Method (Method 3 of Chapter 3)

Scenario Number	Equipment Number	Scenario Title: Hexane Surge Tank Overflow. Spill not contained by the dike
1a		

Date:	Description	Probability	Frequency (per year)
Consequence Description/Category	Release of hexane outside the dike due to tank overflow and failure of dike 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		$<1 \times 10^{-4}$ $<1 \times 10^{-5}$
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	1	
	Probability of personnel in affected area	0.5	
	Probability of fatal injury	0.5	
	Others	N/A	
Frequency of Unmitigated Consequence			2.5×10^{-2}
Independent Protection Layers	Dike intended to contain spill (existing) (PFD from Table 6.3)	1×10^{-2}	
	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^{-4}	
Frequency of Mitigated Consequence			2.5×10^{-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):			