

## **APPENDIX 6**

### **Generic event trees generated by MIMAH**

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## CRITICAL EVENTS RETAINED ACCORDING TO THE EQUIPMENT TYPE AND THE SUBSTANCE STATE

**EQ1**                      **Mass solid storage**

**STAT1**                      **Solid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Mass solid storage	EQ1	X	X	X	X	X							
Solid	STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>							

**EQ2**                      **Storage of solid in small packages**

**STAT1**                      **Solid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Storage of solid in small packages	EQ2					X					X		
Solid	STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>						<b>X</b>					<b>X</b>		

**EQ3**                      **Storage of fluid in small packages**

**STAT2**                      **Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Storage of fluid in small packages	EQ3					X	X	X			X		
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>		<b>X</b>			<b>X</b>		

**EQ3 Storage of fluid in small packages**

**STAT3 Two-phase**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Storage of fluid in small packages	EQ3					X	X	X			X		
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>	<b>X</b>	<b>X</b>			<b>X</b>		

**EQ3 Storage of fluid in small packages**

**STAT4 Gas / Vapour**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Storage of fluid in small packages	EQ3					X	X	X			X		
Gas / Vapour	STAT4					X	X			X	X		
<b>Results</b>						<b>X</b>	<b>X</b>				<b>X</b>		

**EQ4 Pressure storage**

**STAT3 Two-phase**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pressure storage	EQ4					X	X	X	X	X	X		
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		

**EQ4 Pressure storage**

**STAT4 Gas / Vapour**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pressure storage	EQ4					X	X	X	X	X	X		
Gas / Vapour	STAT4					X	X			X	X		
<b>Results</b>						<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ5 Padded storage**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Padded storage	EQ5					X		X	X		X	X	
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	

**EQ6 Atmospheric storage**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Atmospheric storage	EQ6					X		X	X		X	X	X
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>

**EQ7 Cryogenic storage**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Cryogenic storage	EQ7					X	X	X	X	X	X	X	
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	

**EQ7 Cryogenic storage**

**STAT3 Two-phase**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Cryogenic storage	EQ7					X	X	X	X	X	X	X	
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		

**EQ8 Pressure transport equipment**

**STAT3 Two-phase**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pressure transport equipment	EQ8					X	X	X	X	X	X		
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		

**EQ8 Pressure transport equipment**

**STAT4 Gas / Vapour**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pressure transport equipment	EQ8					X	X	X	X	X	X		
Gas / Vapour	STAT4					X	X			X	X		
<b>Results</b>						<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ9 Atmospheric transport equipment**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Atmospheric transport equipment	EQ9					X		X	X		X	X	
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	

**EQ10 Pipe**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pipe	EQ10					X			X	X			
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>			<b>X</b>				

<b>EQ10</b>	<b>Pipe</b>
<b>STAT3</b>	<b>Two-phase</b>

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pipe	EQ10					X			X	X			
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>			<b>X</b>	<b>X</b>			

<b>EQ10</b>	<b>Pipe</b>
<b>STAT4</b>	<b>Gas / Vapour</b>

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Pipe	EQ10					X			X	X			
Gas / Vapour	STAT4					X	X		X	X	X		
<b>Results</b>						<b>X</b>				<b>X</b>			

<b>EQ11</b>	<b>Intermediate storage equipment integrated in the process</b>
<b>STAT1</b>	<b>Solid</b>

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Intermediate storage equipment integrated in the process	EQ11	X	X	X	X	X	X	X	X	X	X	X	X
Solid	STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ11 Intermediate storage equipment integrated in the process**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Intermediate storage equipment integrated in the process	EQ11	X	X	X	X	X	X	X	X	X	X	X	X
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						X		X	X		X	X	X

**EQ11 Intermediate storage equipment integrated in the process**

**STAT3 Two-phase**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Intermediate storage equipment integrated in the process	EQ11	X	X	X	X	X	X	X	X	X	X	X	X
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						X	X	X	X	X	X		

**EQ11 Intermediate storage equipment integrated in the process**

**STAT4 Gas / Vapour**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Intermediate storage equipment integrated in the process	EQ11	X	X	X	X	X	X	X	X	X	X	X	X
Gas / Vapour	STAT4					X	X			X	X		
<b>Results</b>						X	X			X	X		



**EQ12 Equipment devoted to the physical or chemical separation of substances**

**STAT1 Solid**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment devoted to the physical or chemical separation of substances EQ12					X	X	X	X	X	X		
Solid STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>					<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ12 Equipment devoted to the physical or chemical separation of substances**

**STAT2 Liquid**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment devoted to the physical or chemical separation of substances EQ12					X	X	X	X	X	X		
Liquid STAT2					X		X	X		X	X	X
<b>Results</b>					<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>		

**EQ12 Equipment devoted to the physical or chemical separation of substances**

**STAT3 Two-phase**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment devoted to the physical or chemical separation of substances EQ12					X	X	X	X	X	X		
Two-phase STAT3					X	X	X	X	X	X		
<b>Results</b>					X	X	X	X	X	X		

**EQ12 Equipment devoted to the physical or chemical separation of substances**

**STAT4 Gas / Vapour**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment devoted to the physical or chemical separation of substances EQ12					X	X	X	X	X	X		
Gas / Vapour STAT4					X	X			X	X		
<b>Results</b>					X	X			X	X		

**EQ13 Equipment involving chemical reactions**

**STAT1 Solid**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment involving chemical reactions EQ13					X	X	X	X	X	X		
Solid STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>					X	X			X	X		

**EQ13 Equipment involving chemical reactions**

**STAT2 Liquid**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment involving chemical reactions EQ13					X	X	X	X	X	X		
Liquid STAT2					X		X	X		X	X	X
<b>Results</b>					<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>		

**EQ13 Equipment involving chemical reactions**

**STAT3 Two-phase**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment involving chemical reactions EQ13					X	X	X	X	X	X		
Two-phase STAT3					X	X	X	X	X	X		
<b>Results</b>					<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		

**EQ13 Equipment involving chemical reactions**

**STAT4 Gas / Vapour**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment involving chemical reactions EQ13					X	X	X	X	X	X		
Gas / Vapour STAT4					X	X			X	X		
<b>Results</b>					<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ14 Equipment designed for energy production and supply**

**STAT2 Liquid**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment designed for energy production and supply EQ14					X	X	X	X	X	X		
Liquid STAT2					X		X	X		X	X	X
<b>Results</b>					<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>		

**EQ14 Equipment designed for energy production and supply**

**STAT3 Two-phase**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment designed for energy production and supply EQ14					X	X	X	X	X	X		
Two-phase STAT3					X	X	X	X	X	X		
<b>Results</b>					<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		

**EQ14 Equipment designed for energy production and supply**

**STAT4 Gas / Vapour**

	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Equipment designed for energy production and supply EQ14					X	X	X	X	X	X		
Gas / Vapour STAT4					X	X			X	X		
<b>Results</b>					<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ15 Packaging equipment**

**STAT1 Solid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Packaging equipment	EQ15			X	X	X			X	X			
Solid	STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>				<b>X</b>	<b>X</b>	<b>X</b>				<b>X</b>			

**EQ15 Packaging equipment**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Packaging equipment	EQ15			X	X	X			X	X			
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>			<b>X</b>				

**EQ15 Packaging equipment**

**STAT3 Two-phase**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Packaging equipment	EQ15			X	X	X			X	X			
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>			<b>X</b>	<b>X</b>			

**EQ15 Packaging equipment**

**STAT4 Gas / Vapour**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Packaging equipment	EQ15			X	X	X			X	X			
Gas / Vapour	STAT4					X	X			X	X		
<b>Results</b>						<b>X</b>				<b>X</b>			

**EQ16 Others facilities**

**STAT1 Solid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Others facilities	EQ16					X	X	X	X	X	X		
Solid	STAT1	X	X	X	X	X	X			X	X		
<b>Results</b>						<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

**EQ16 Others facilities**

**STAT2 Liquid**

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Others facilities	EQ16					X	X	X	X	X	X		
Liquid	STAT2					X		X	X		X	X	X
<b>Results</b>						<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>		

**EQ16** Others facilities

**STAT3** Two-phase

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Others facilities	EQ16					X	X	X	X	X	X		
Two-phase	STAT3					X	X	X	X	X	X		
<b>Results</b>						<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		

**EQ16** Others facilities

**STAT4** Gas / Vapour

		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Others facilities	EQ16					X	X	X	X	X	X		
Gas / Vapour	STAT4					X	X			X	X		
<b>Results</b>						<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>		

## EVENT TREES

STAT1 Solid

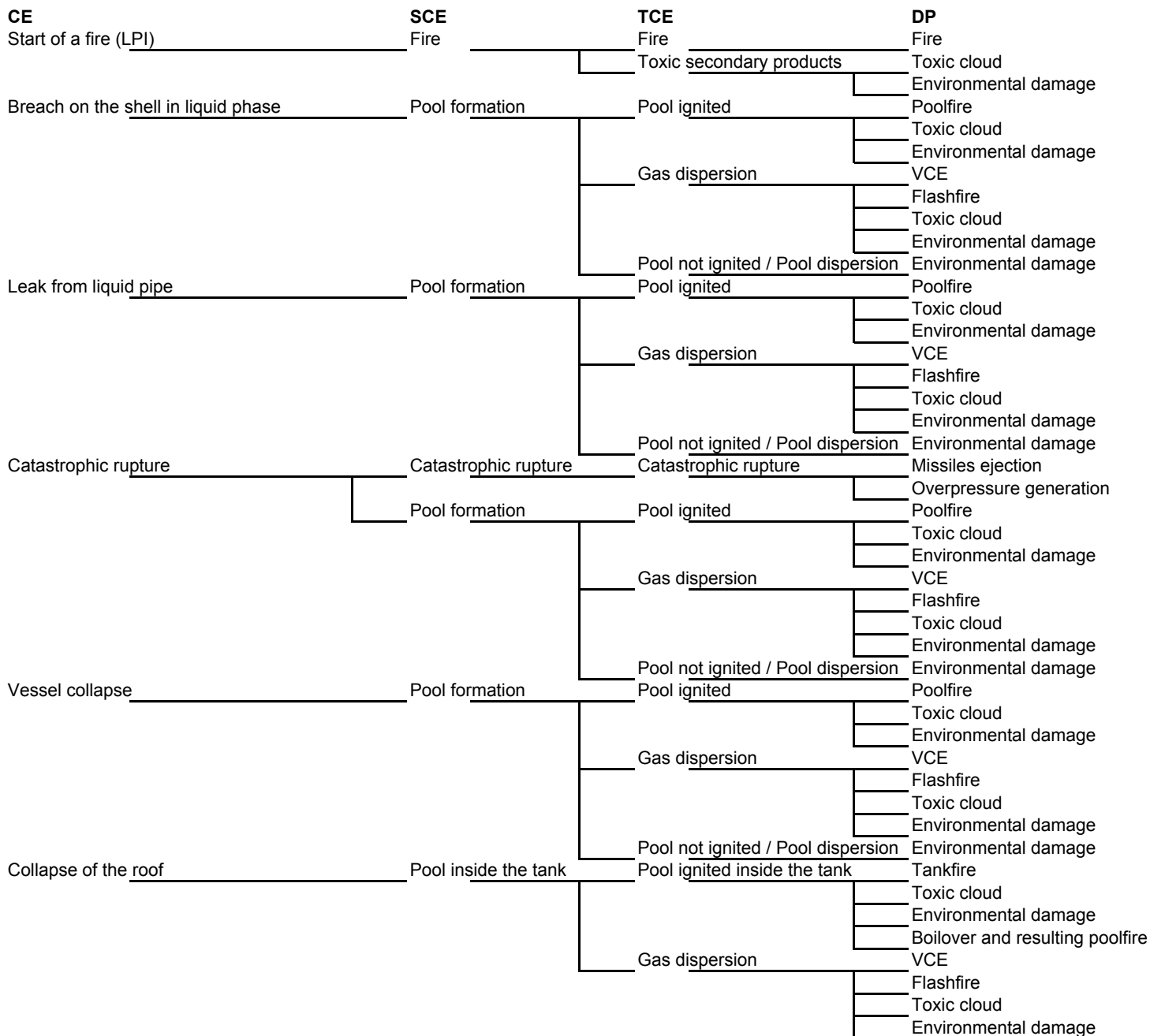
		CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Solid	STAT1	X	X	X	X	X	X			X	X		

CE	SCE	TCE	DP
Decomposition	Explosion	Explosion	Missiles ejection
	Decomposition	Toxic secondary products	Overpressure generation
			Toxic cloud
Explosion	Explosion	Explosion	Environmental damage
			Missiles ejection
			Overpressure generation
Materials set in motion (entrainment by air)	Materials entrained in air	Dust cloud ignited	Dust explosion
		Dust dispersion	Toxic cloud
			Environmental damage
Materials set in motion (entrainment by a liquid)	Materials entrained by a liquid	Pool not ignited / Pool dispersion	Environmental damage
Start of a fire (LPI)	Fire	Fire	Fire
		Toxic secondary products	Toxic cloud
			Environmental damage
Breach on the shell in vapour phase	Materials entrained in air	Dust cloud ignited	Dust explosion
		Dust dispersion	Toxic cloud
			Environmental damage
Leak from gas pipe	Materials entrained in air	Dust cloud ignited	Dust explosion
		Dust dispersion	Toxic cloud
			Environmental damage
Catastrophic rupture	Catastrophic rupture	Catastrophic rupture	Missiles ejection
	Materials entrained in air	Dust cloud ignited	Overpressure generation
		Dust dispersion	Dust explosion
			Toxic cloud
			Environmental damage



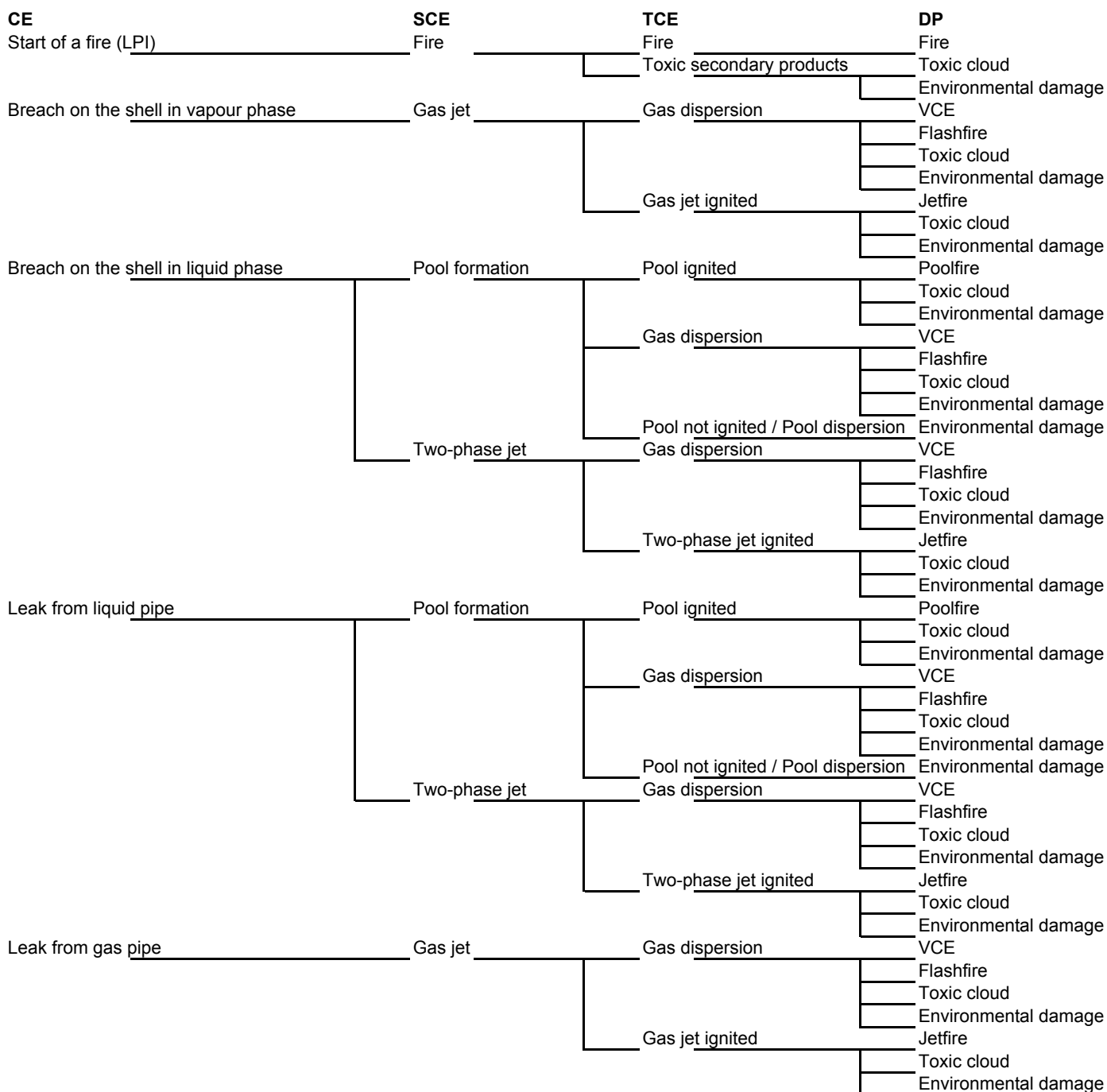
**STAT2 Liquid**

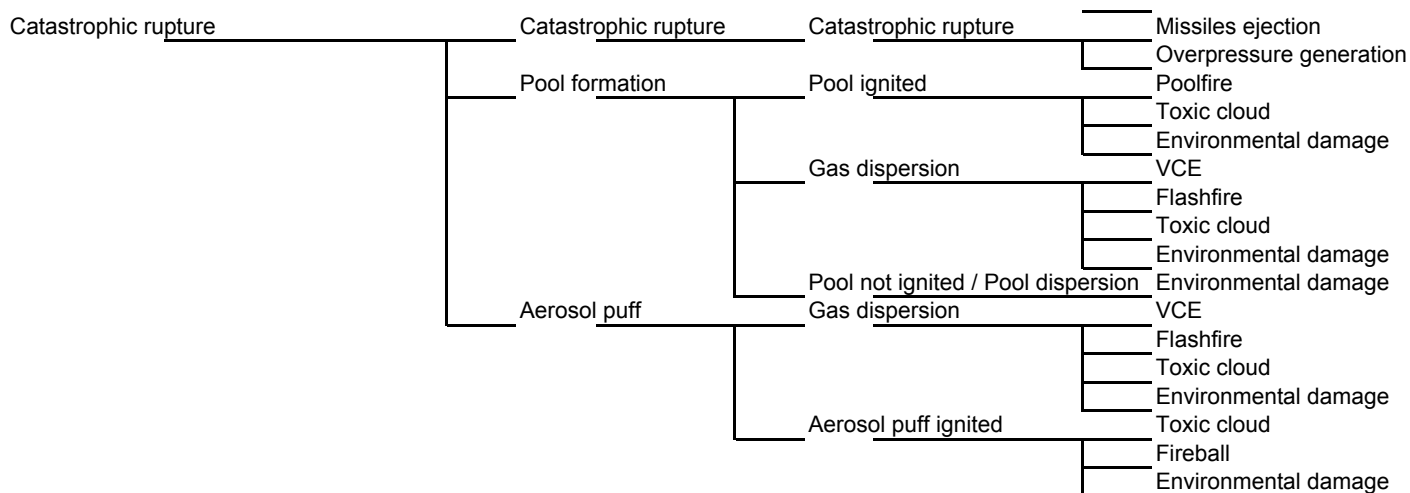
	CE 1 Decomposition	CE 2 Explosion	CE 3 Materials set in motion (entrainment by air)	CE 4 Materials set in motion (entrainment by a liquid)	CE 5 Start of a fire (LPI)	CE 6 Breach on the shell in vapour phase	CE 7 Breach on the shell in liquid phase	CE 8 Leak from liquid pipe	CE 9 Leak from gas pipe	CE 10 Catastrophic rupture	CE 11 Vessel collapse	CE 12 Collapse of the roof
Liquid					X		X	X		X	X	X
STAT2												



<b>STAT3</b>	<b>Two-phase</b>
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Two-phase	STAT3	CE 1	Decomposition
		CE 2	Explosion
		CE 3	Materials set in motion (entrainment by air)
		CE 4	Materials set in motion (entrainment by a liquid)
		CE 5	Start of a fire (LPI)
		CE 6	Breach on the shell in vapour phase
		CE 7	Breach on the shell in liquid phase
		CE 8	Leak from liquid pipe
		CE 9	Leak from gas pipe
		CE 10	Catastrophic rupture
		CE 11	Vessel collapse
		CE 12	Collapse of the roof
Results			





**STAT4 Gas / Vapour**

