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Number of TCs containing MCOs processed during preclosure period	Identify initiating event			
TC-MCO	INIT-EVENT	#	XFER-TO-RESP-TREES	
	Drop of Cask	1	OK	
	Tipover	2	T => 2	RESPONSE-TCASK1
	Side Impact	3	T => 2	RESPONSE-TCASK1
	Unplanned CarrierMovement	4	T => 2	RESPONSE-TCASK1
	Drop On Cask	5	T => 2	RESPONSE-TCASK1
	Two Block Drop	6	T => 2	RESPONSE-TCASK1
		7	T => 2	RESPONSE-TCASK1

CRCF-ESD03-MCO - Upending and Transfer of TC with MCO to CTT

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Source: Original

Figure A5-13. Event Tree CRCF-ESD03-MCO – Upending and Transfer of Transportation Cask with MCO to the CTT

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Number of TCs containing TADs processed during preclosure period	Identify initiating events		
TC-TAD	INIT-EVENT	#	XFER-TO-RESP-TREE
		1	OK
		2	T => 2
		3	T => 2
		4	T => 2
		5	T => 2
		6	T => 2
		7	T => 2
CRCF-ESD03-TAD - Upending and Transfer of TC with TAD to the CTT		2007/10/30 Page 13	

Source: Original

Figure A5-14. Event Tree CRCF-ESD03-TAD – Upending and Transfer of Transportation Cask with TAD Canister to the CTT

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Number of TCs containing DPCs processed during preclosure period	Identify initiating events		
TC-DPC	INIT-EVENT	#	XFER-TO-RESP-TREE
Drop of cask 2 T => 2 RESPONSE-TCASK1 Cask tips over 3 T => 2 RESPONSE-TCASK1 Side impact 4 T => 2 RESPONSE-TCASK1 Drop on cask 5 T => 2 RESPONSE-TCASK1			OK

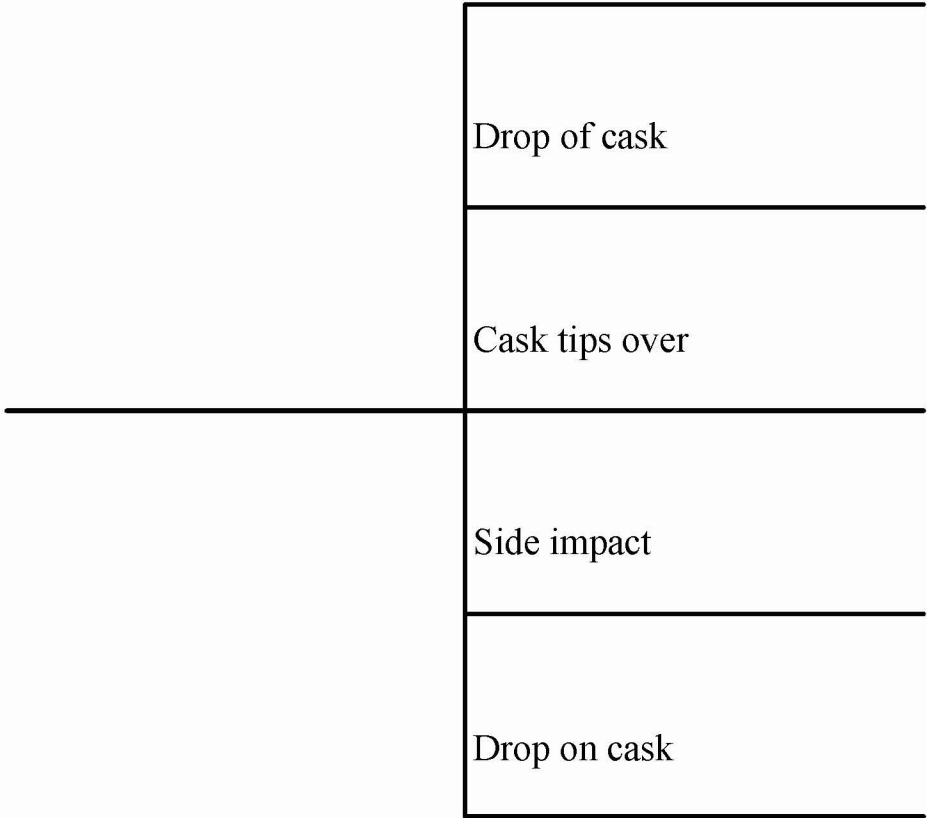
CRCF-ESD04-DPC - TC with DPC Preparation Activities

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Source: Original

Figure A5-15. Event Tree CRCF-ESD04-DPC – Transportation Cask with DPC Preparation Activities

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Number of TCs containing DOE Std. Canisters moved during preclosure period	Identify initiating events		
TC-DSTD	INIT-EVENT	#	XFER-TO-RESP-TREE
		1	OK
		2 T => 2	RESPONSE-TCASK1
		3 T => 2	RESPONSE-TCASK1
		4 T => 2	RESPONSE-TCASK1
		5 T => 2	RESPONSE-TCASK1
CRCF-ESD04-DSTD - TC with DSTD Preparation Activities		2007/12/17 Page 15	

Source: Original

Figure A5-16. Event Tree CRCF-ESD04-DSTD – Transportation Cask with DOE Std. Canister Preparation Activities

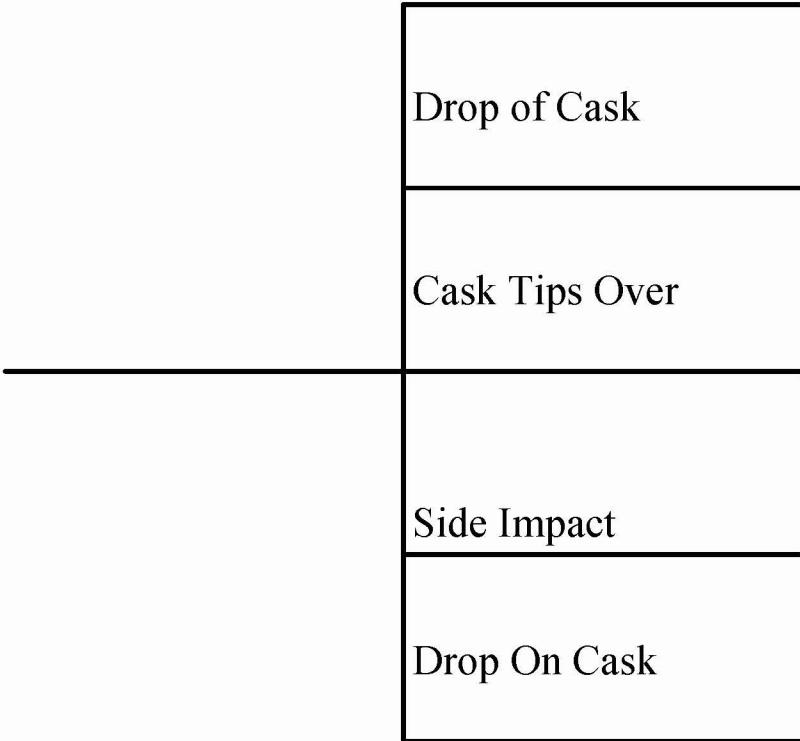
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Number of TCs containing HLW Canisters moved during preclosure period	Identify initiating events		
TC-HLW	INIT-EVENT	#	XFER-TO-RESP-TREE
		1	OK
		2 T => 2	RESPONSE-TCASK 1
		3 T => 2	RESPONSE-TCASK 1
		4 T => 2	RESPONSE-TCASK 1
		5 T => 2	RESPONSE-TCASK 1
CRCF-ESD04-HLW - TC with HLW Canister Preparation Activities		2007/10/11	Page 16

Source: Original

Figure A5-17. Event Tree CRCF-ESD04-HLW – Transportation Cask
with HLW Canister Preparation Activities

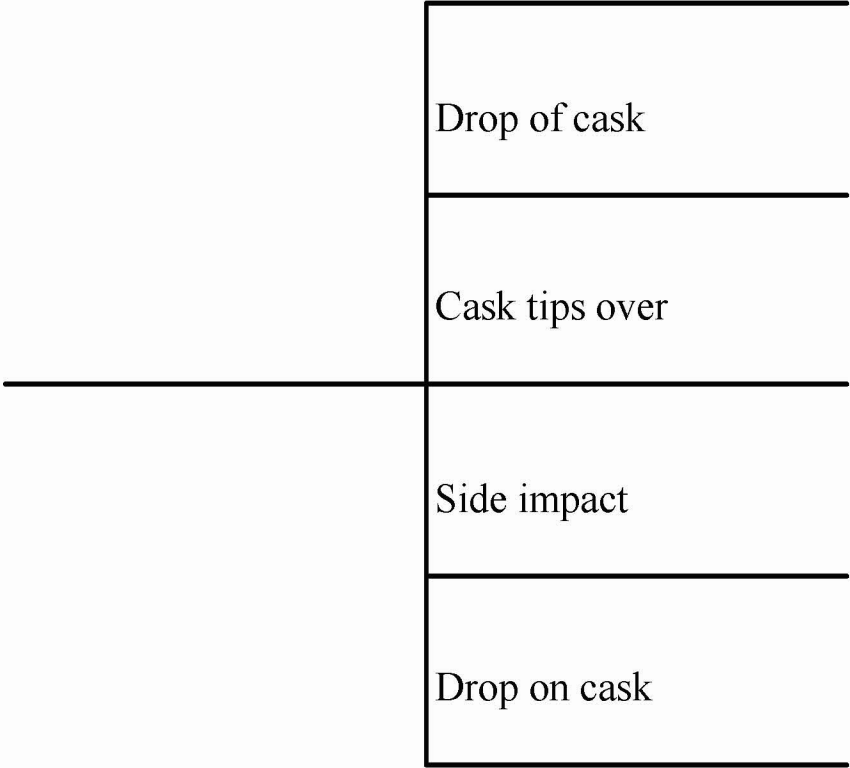
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Number of TCs containing MCOs moved during preclosure period	Identify initiating events		
TC-MCO	INIT-EVENT	#	XFER-TO-RESP-TREES
		1	OK
		2 T => 2	RESPONSE-TCASK1
		3 T => 2	RESPONSE-TCASK1
		4 T => 2	RESPONSE-TCASK1
		5 T => 2	RESPONSE-TCASK1
CRCF-ESD04-MCO - TC with MCO Preparation Activities		2007/11/06	Page 17

Source: Original

Figure A5-18. Event Tree CRCF-ESD04-MCO – Transportation Cask
with MCO Preparation Activities

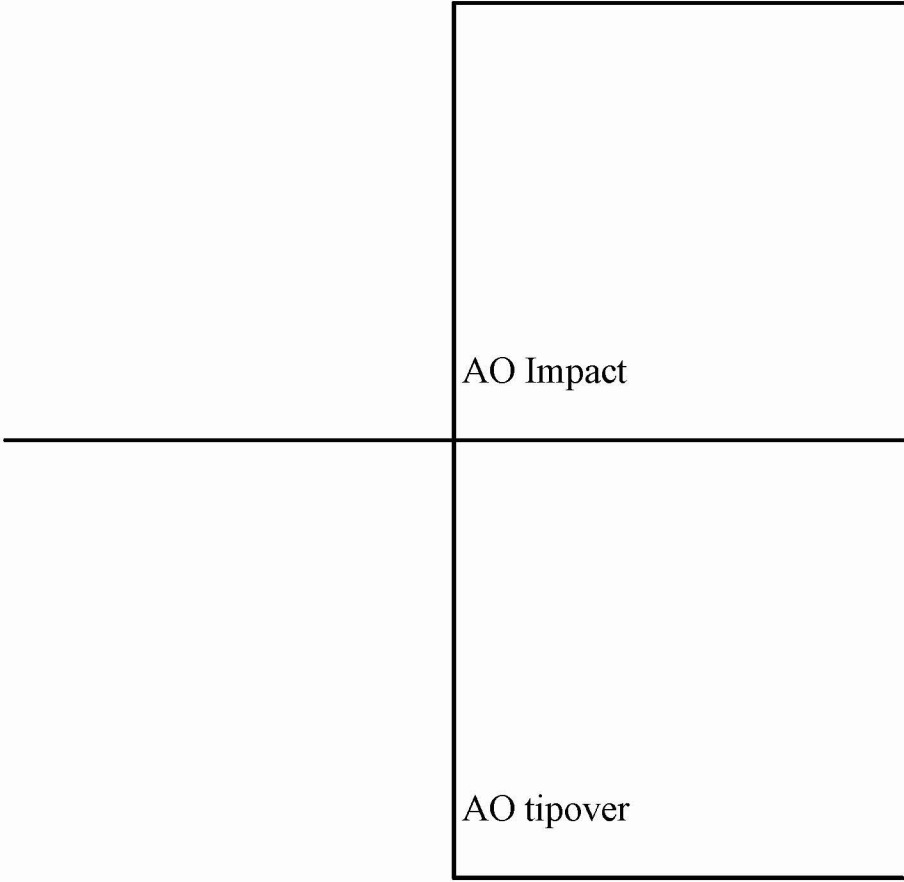
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Number of TCs containing TADs moved during preclosure period	Identify initiating events		
TC-TAD	INIT-EVENT	#	XFER-TO-RESP-TREE
		1	OK
		2 T => 2	RESPONSE-TCASK1
		3 T => 2	RESPONSE-TCASK1
		4 T => 2	RESPONSE-TCASK1
		5 T => 2	RESPONSE-TCASK1
CRCF-ESD04-TAD - TC with TAD Preparation Activities		2007/10/30 Page 18	

Source: Original

Figure A5-19. Event Tree CRCF-ESD04-TAD – Transportation Cask
with TAD Canister Preparation Activities

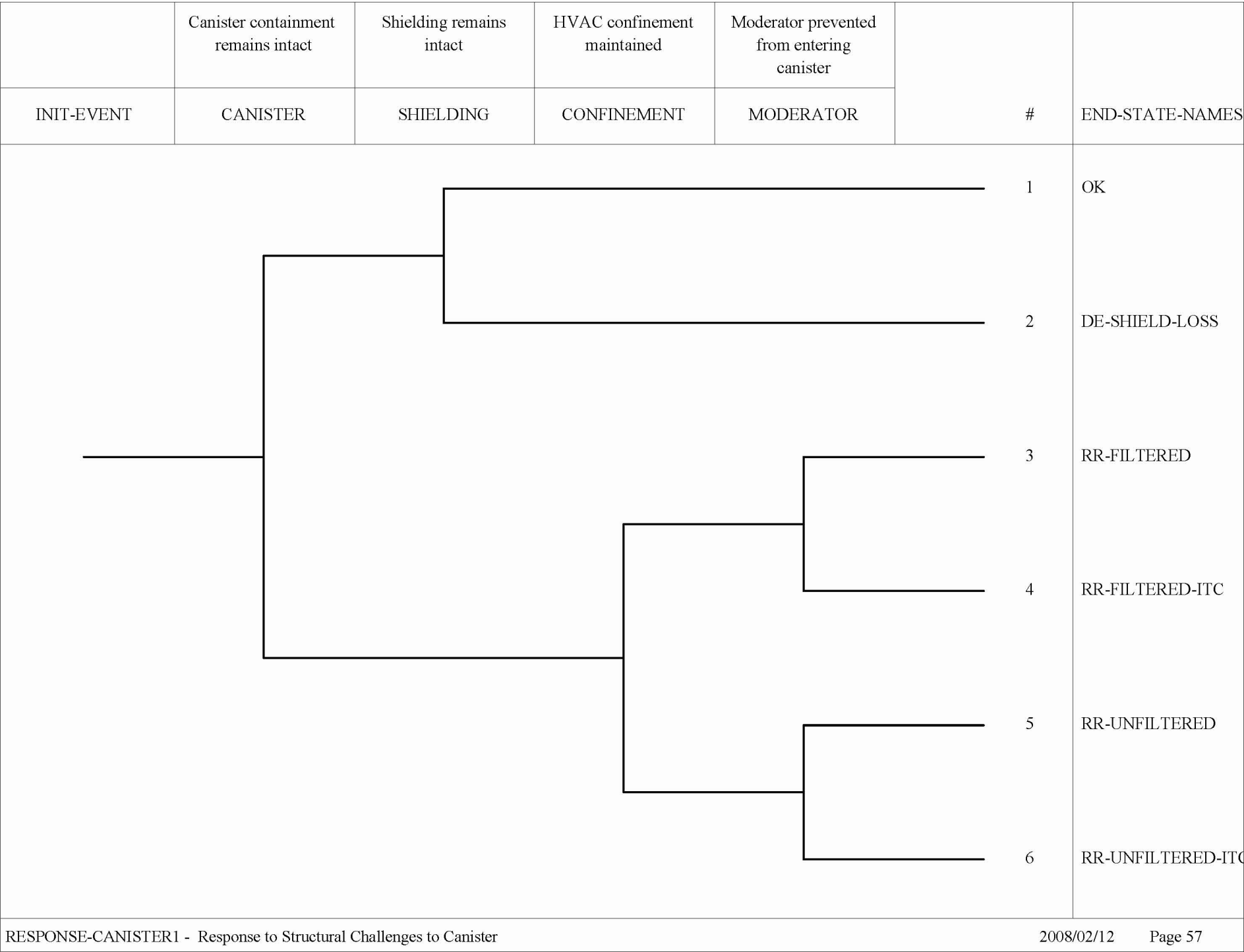
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Number of AOs containing TADs processed during preclosure period	Identify initiating events		
AO-TAD	INIT-EVENT	#	XFER-TO-RESP-TREE
		1	OK
		2	T => 20 RESPONSE-CANISTER1
		3	T => 20 RESPONSE-CANISTER1
CRCF-ESD05-TAD - AO with TAD Preparation Activities		2007/10/30 Page 19	

Source: Original

Figure A5-20. Event Tree CRCF-ESD05-TAD – Aging Overpack with
TAD Canister Preparation Activities

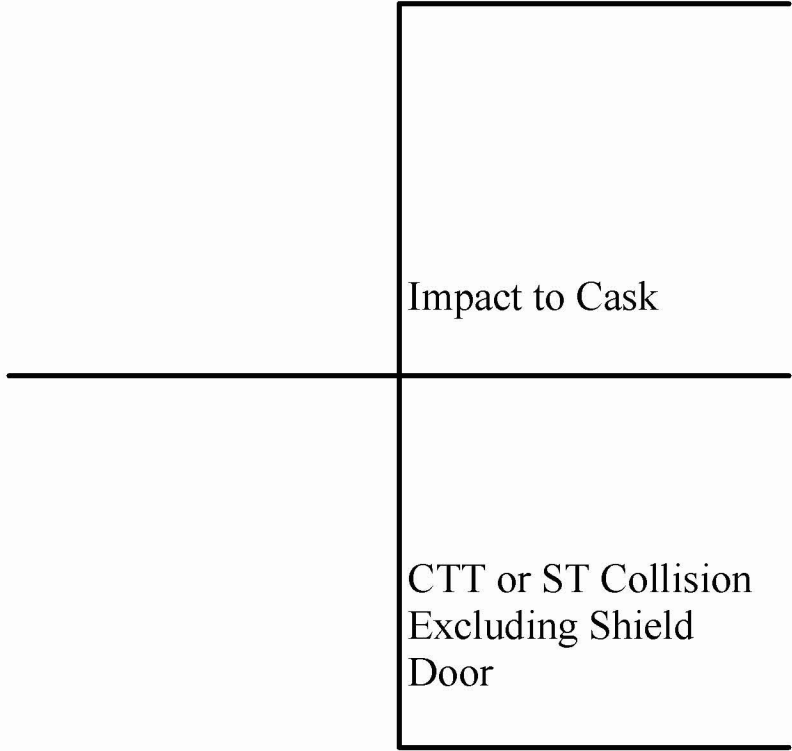
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Figure A5-21. Event Tree RESPONSE-CANISTER1 – Response to Structural Challenges to Canister

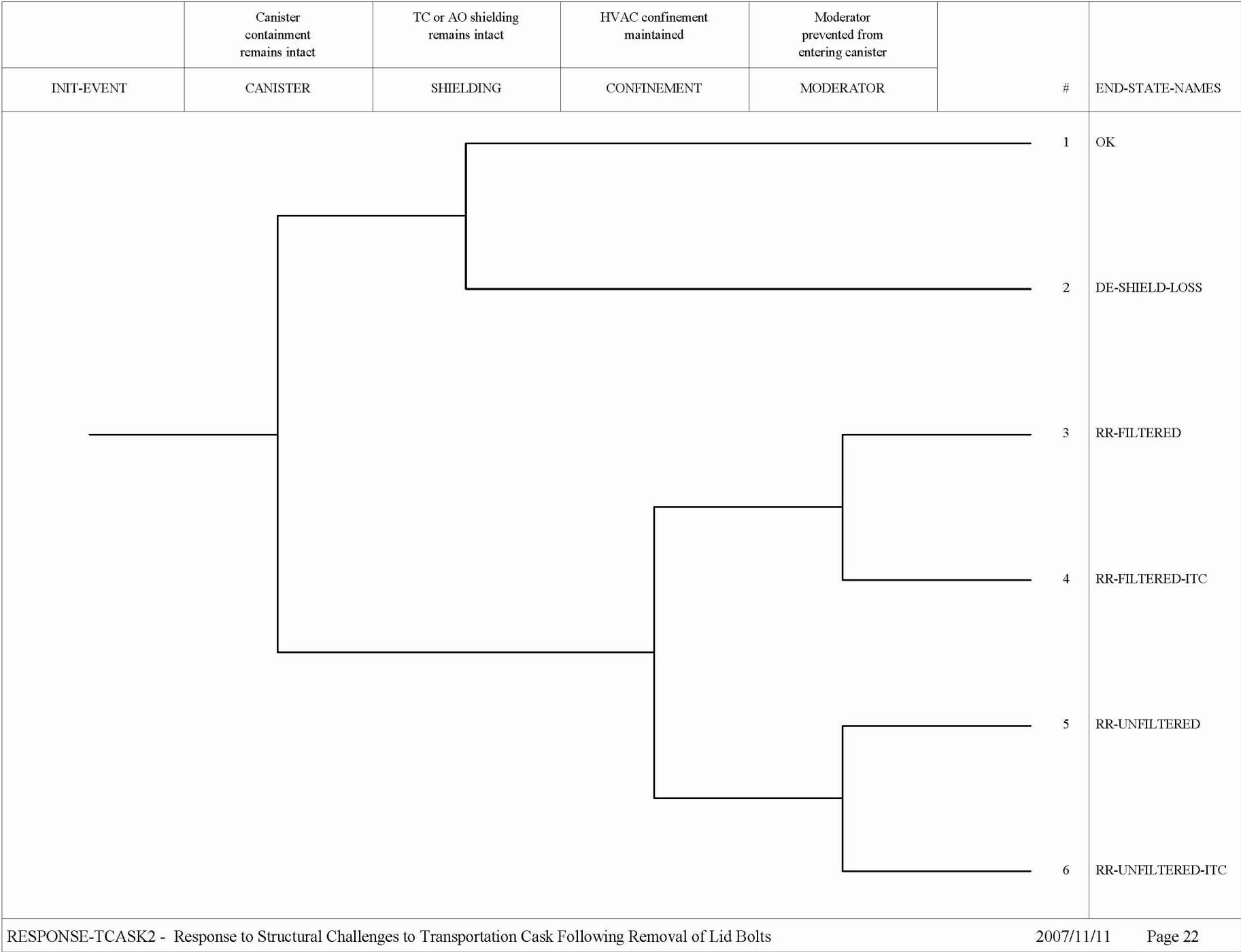
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Number of TCs containing DPCs moved during preclosure period	Identify initiating events		
TC-DPC	INIT-EVENT	#	XFER-TO-RESP-TREE
		1	OK
		2 T => 22	RESPONSE-TCASK2
		3 T => 22	RESPONSE-TCASK2
CRCF-ESD06-DPC - Transfer of TC with DPC from Cask Preparation Area to Cask Unloading Room		2007/10/11	Page 21

Source: Original

Figure A5-22. Event Tree CRCF-ESD06-DPC – Transfer of Transportation Cask with DPC from Cask Preparation Room to Cask Unloading Room

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Source: Original

Figure A5-23. Event Tree RESPONSE-TCASK2 – Response to Structural Challenges to Transportation Cask Following Removal of Lid Bolts

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Number of TCs containing DOE Std. Canisters moved during preclosure period	Identify initiating events		
TC-DSTD	INIT-EVENT	#	XFER-TO-RESP-TREE
<pre>graph TD Start(()) --> Branch1[Impact to Cask] Start --> Branch2[CTT Collision Excluding Shield Door] Start --> Branch3[] Branch1 --> Box1[1 OK] Branch2 --> Box2[2 T => 22 RESPONSE-TCASK2] Branch3 --> Box3[3 T => 22 RESPONSE-TCASK2]</pre>		1	OK
		2	T => 22 RESPONSE-TCASK2
		3	T => 22 RESPONSE-TCASK2
CRCF-ESD06-DSTD - Transfer of TC with DSNF from Cask Preparation Area to Cask Unloading Room		2007/11/15 Page 23	

Source: Original

Figure A5-24. Event Tree CRCF-ESD06-DSTD – Transfer of Transportation Cask with DOE SNF from Cask Preparation Room to Cask Unloading Room

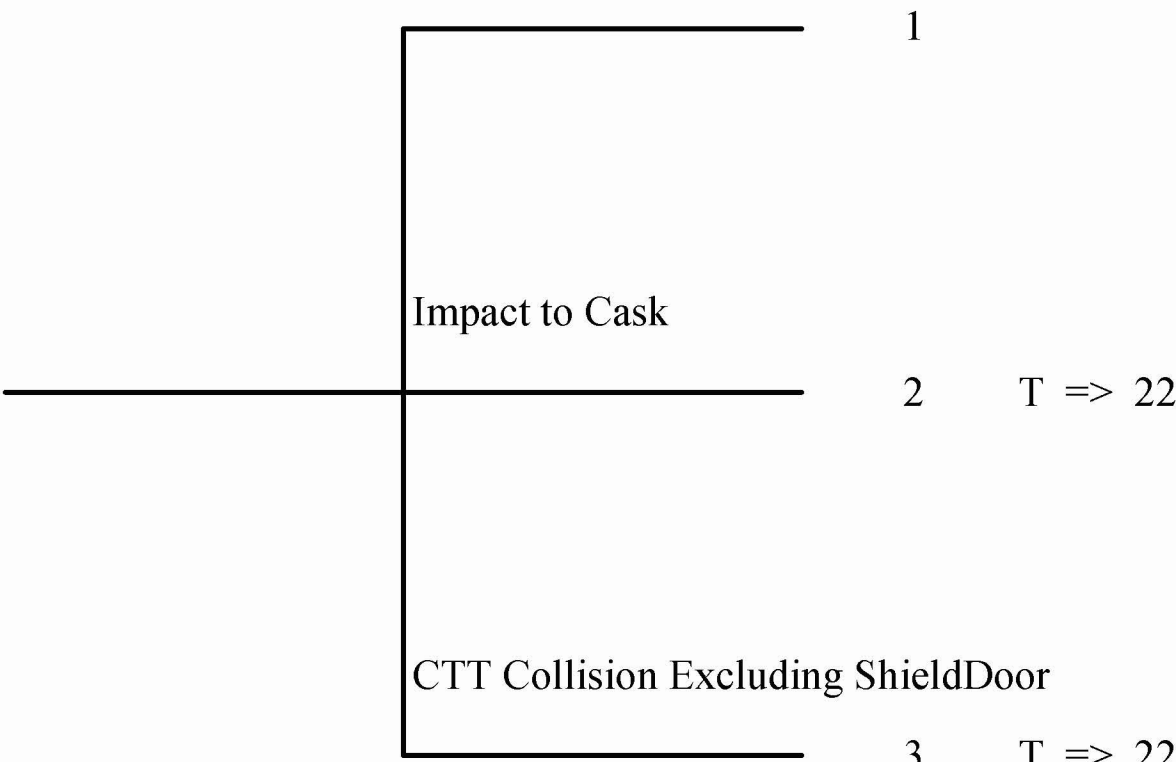
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Number of TCs containing HLW Canisters moved during preclosure period	Identify initiating events		
TC-HLW	INIT-EVENT	#	XFER-TO-RESP-TREE
	Impact to Cask	1	OK
	CTT Collision Excluding Shield Door	2	T => 22
		3	T => 22

Source: Original

Figure A5-25. Event Tree CRCF-ESD06-HLW – Transfer of Transportation Cask with HLW Canister from Cask Preparation Room to Cask Unloading Room

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Number of TCs containing MCOs moved during preclosure period	Identify initiating events		
TC-MCO	INIT-EVENT	#	XFER-TO-RESP-TREES
		1	OK
		2	T => 22 RESPONSE-TCASK2
		3	T => 22 RESPONSE-TCASK2
CRCF-ESD06-MCO - Transfer of TC with MCO from Cask Preparation Area to Cask Unloading Room		2007/11/15 Page 25	

Source: Original

Figure A5-26. Event Tree CRCF-ESD06-MCO – Transfer of Transportation Cask with MCO from Cask Preparation Room to Cask Unloading Room

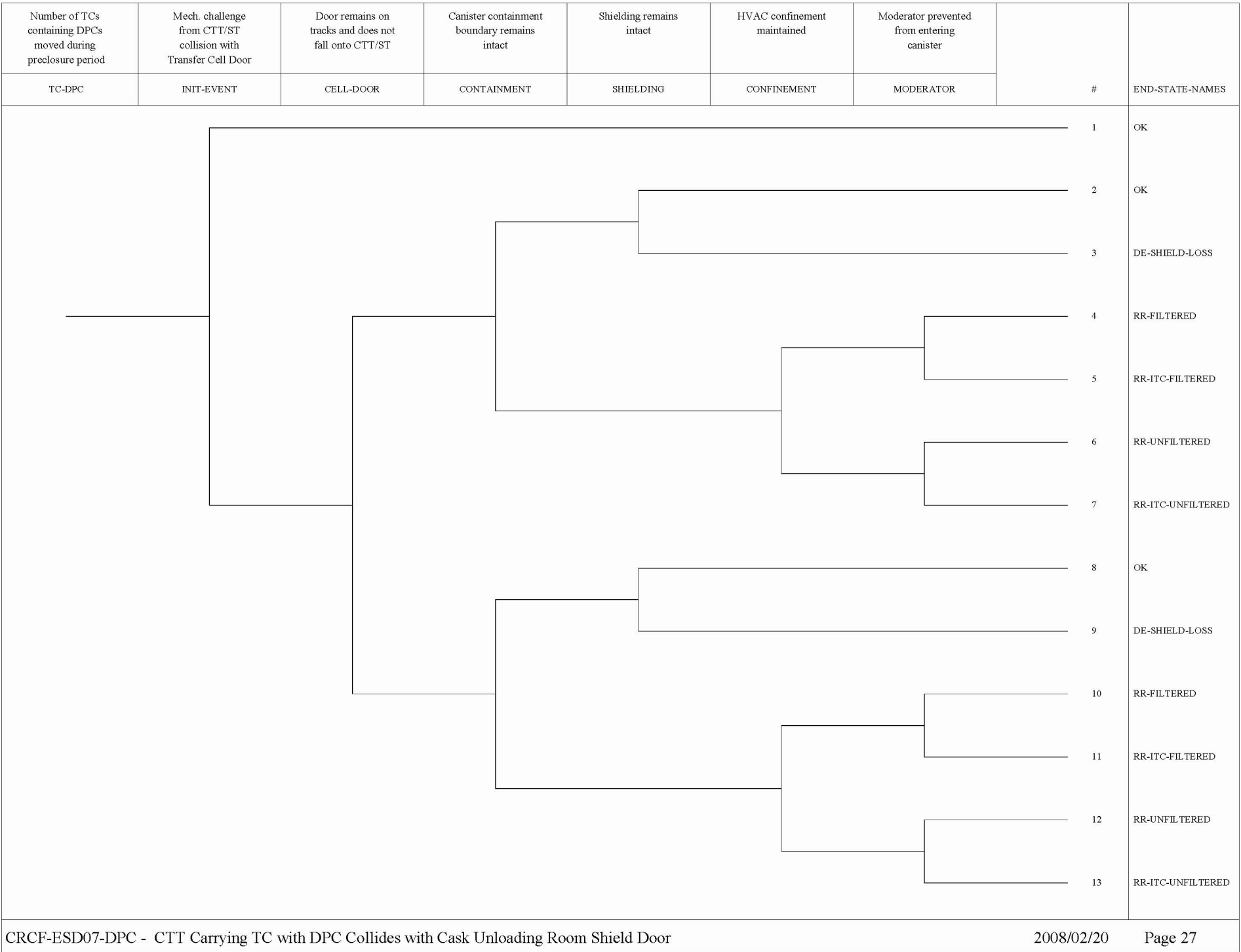
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Number of TCs and AOs containing TADs moved during preclosure period	Identify initiating events		
TC-AO-TAD	INIT-EVENT	#	XFER-TO-RESP-TREE
<pre>graph LR; Root[] --- E1[Impact to Cask]; Root --- E2[Impact to AO]; Root --- E3[CTT Collision Excluding ShieldDoor]; Root --- E4[ST Collision Excluding ShieldDoor]; Root --- E5[ST Collision Excluding ShieldDoor]; E1 --> T1[T => 22]; E2 --> T2[T => 22]; E3 --> T3[T => 22]; E4 --> T4[T => 22]; E5 --> T5[T => 22];</pre>		1	OK
		2	T => 22 RESPONSE-TCASK2
		3	T => 22 RESPONSE-TCASK2
		4	T => 22 RESPONSE-TCASK2
		5	T => 22 RESPONSE-TCASK2
CRCF-ESD06-TAD - Transfer of TC or AO with TAD from Cask Preparation Area to Cask Unloading Room		2007/11/15 Page 26	

Source: Original

Figure A5-27. Event Tree CRCF-ESD06-TAD – Transfer of Transportation Cask or Aging Overpack with TAD Canister from Cask Preparation Room to Cask Unloading Room

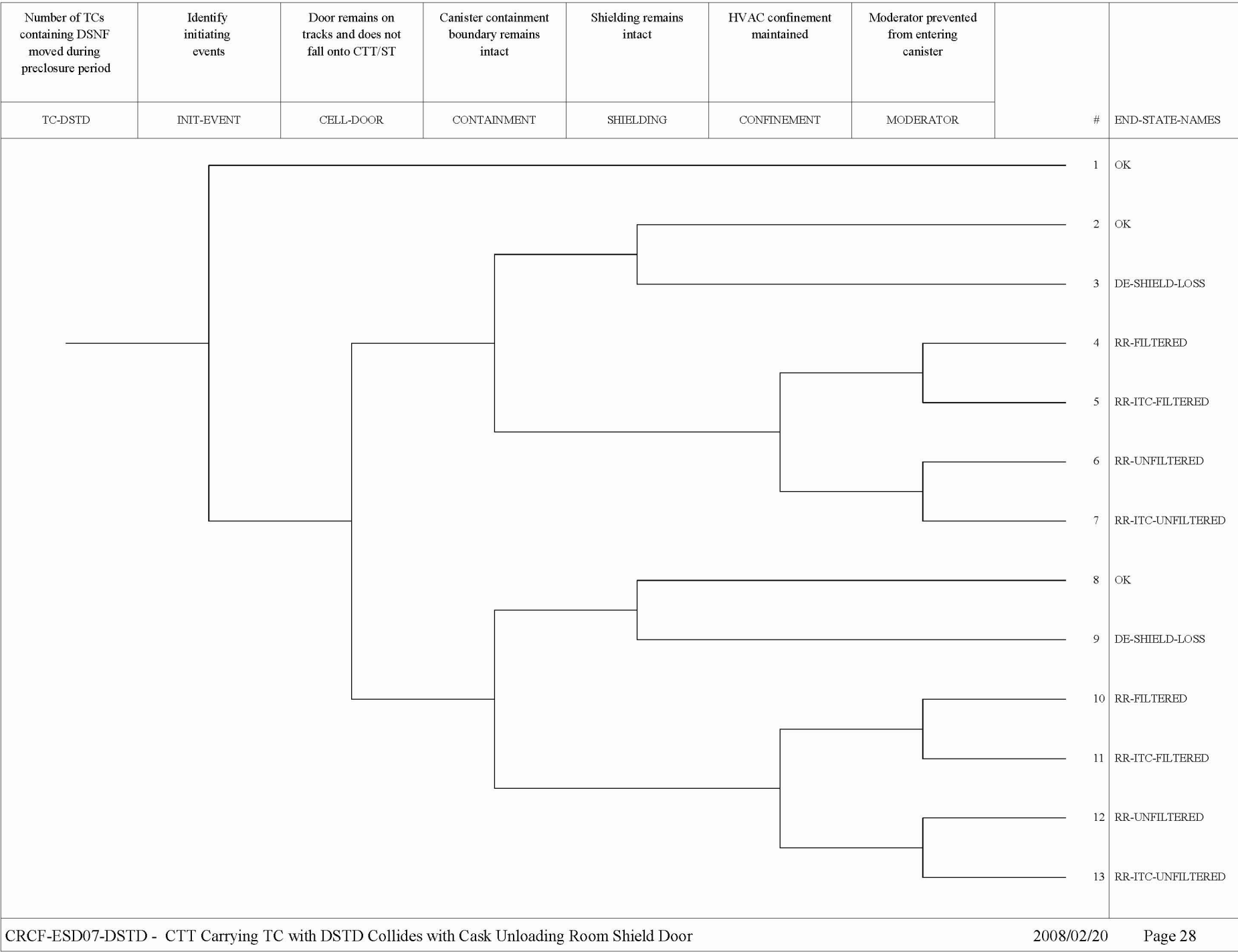
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Source: Original

Figure A5-28. Event Tree CRCF-ESD07-DPC – CTT Carrying Transportation Cask with DPC Collides with Cask Unloading Room Shield Door

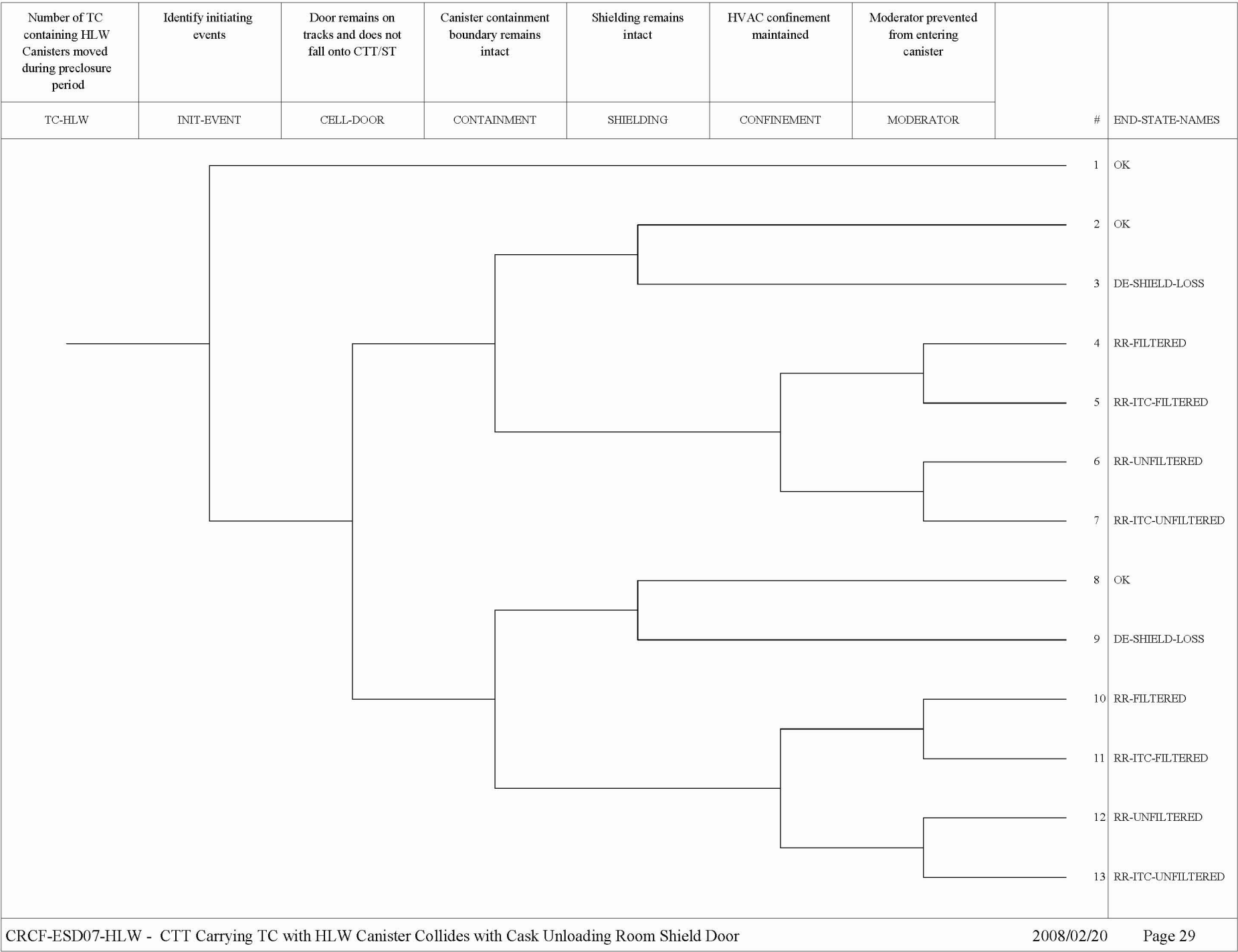
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Source: Original

Figure A5-29. Event Tree CRCF-ESD07-DSTD – CTT Carrying Transportation Cask with DOE Std. Canister Collides with Cask Unloading Room Shield Door

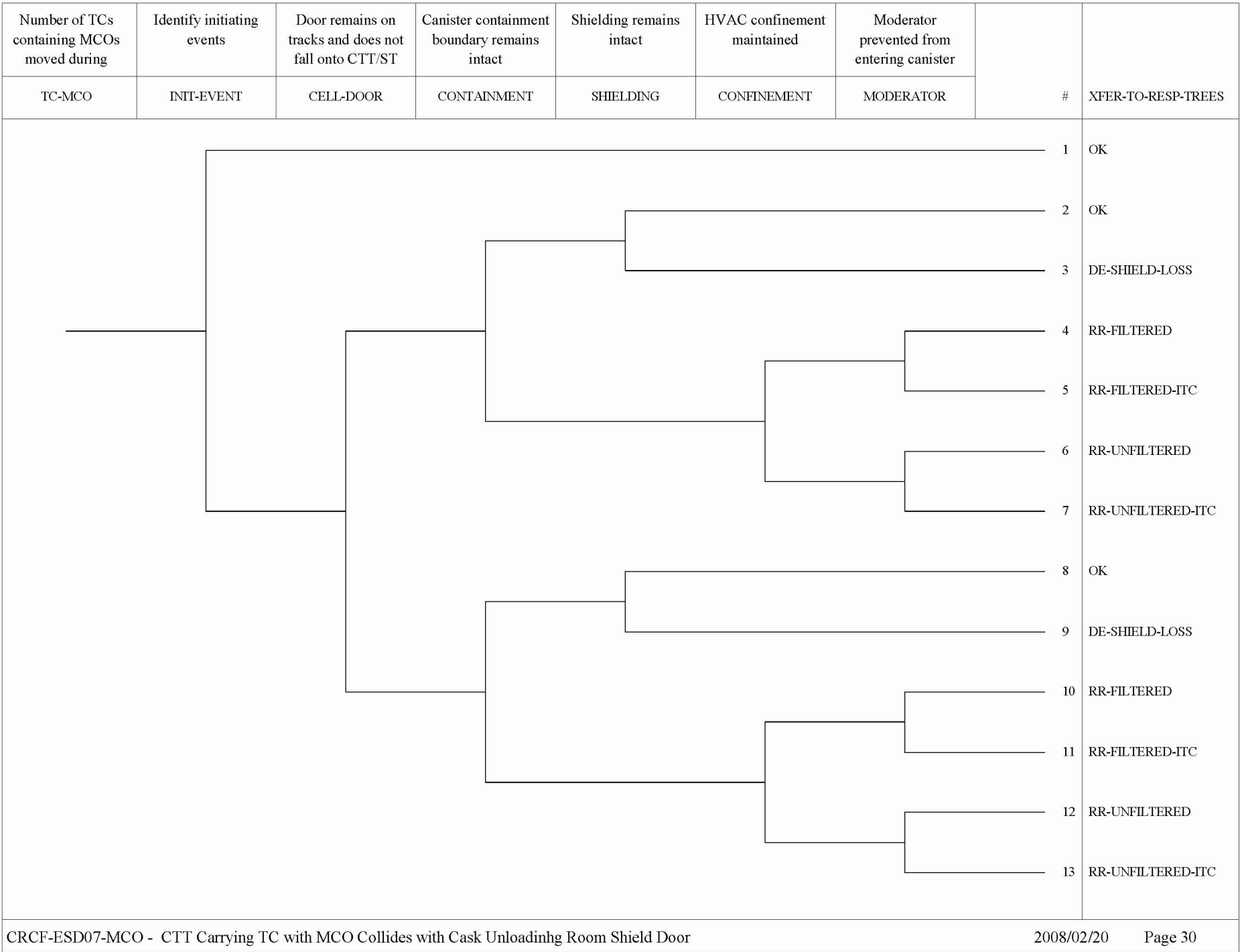
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Source: Original

Figure A5-30. Event Tree CRCF-ESD07-HLW – CTT Carrying Transportation Cask with HLW Canister Collides with Cask Unloading Room Shield Door

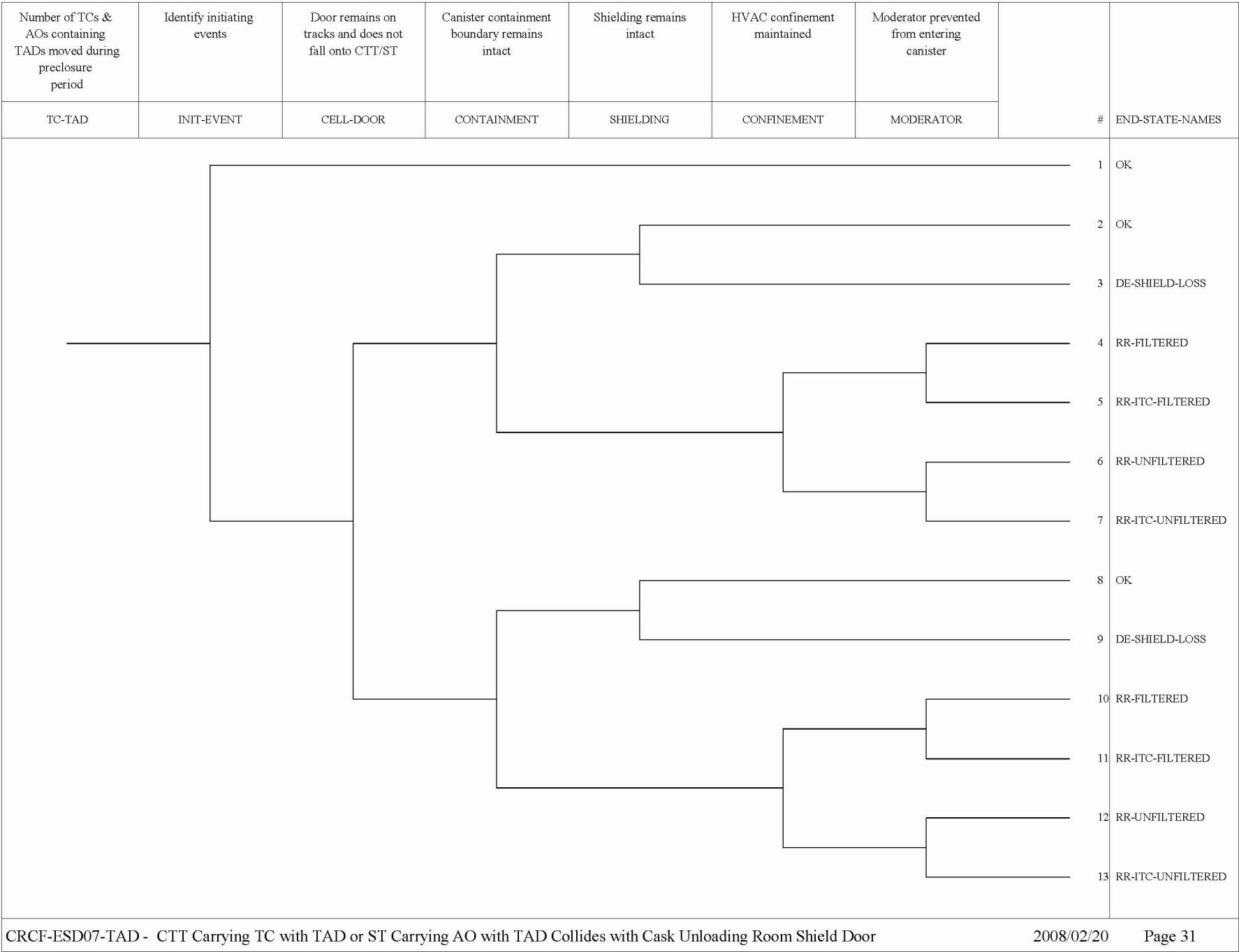
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Figure A5-31. Event Tree CRCF-ESD07-MCO – CTT Carrying Transportation Cask with MCO Collides with Cask Unloading Room Shield Door

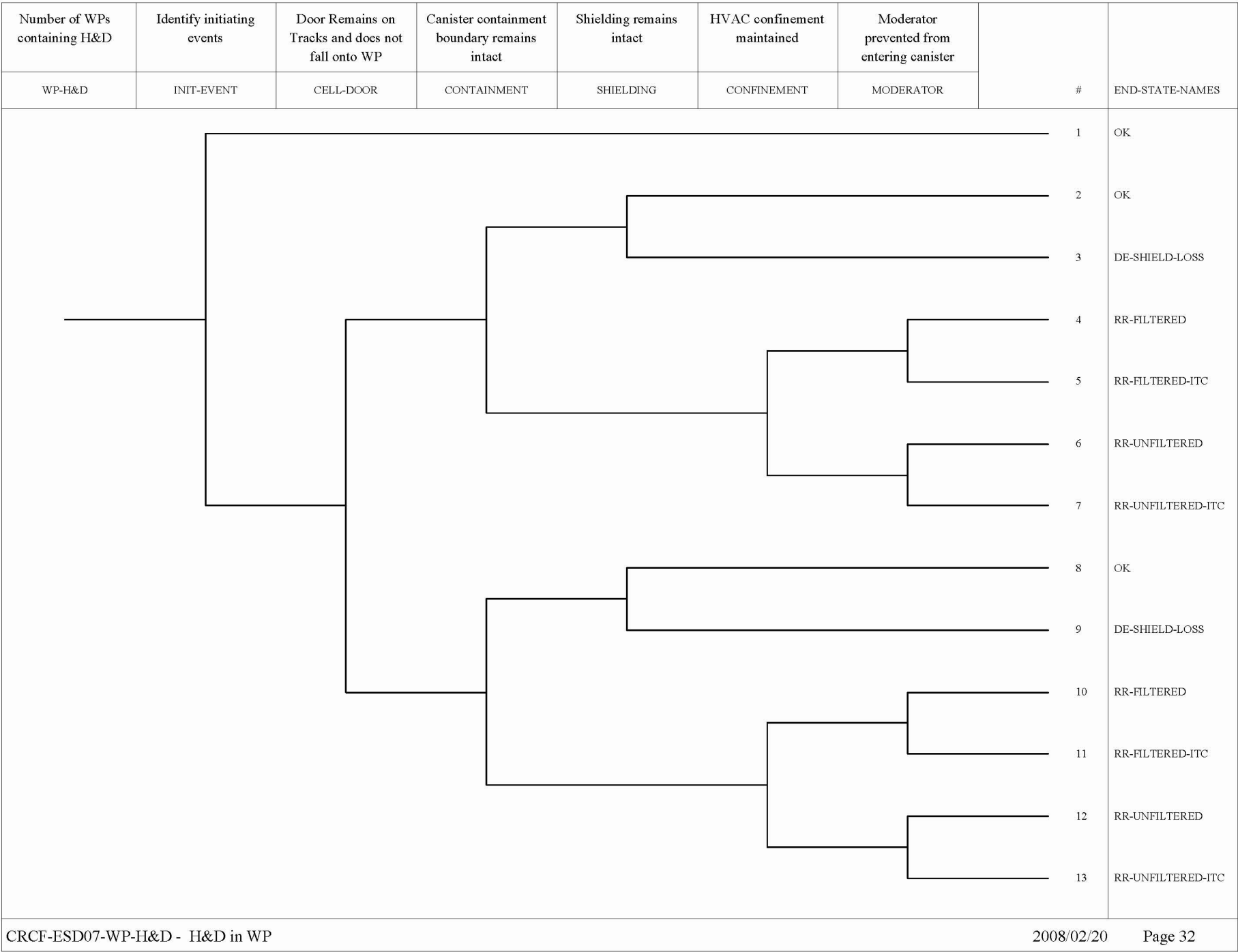
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Source: Original

Figure A5-32. Event Tree CRCF-ESD07-TAD – CTT Carrying Transportation Cask with TAD Canister or Site Transporter Carrying Aging Overpack with TAD Canister Collides with Cask Unloading Room Shield Door

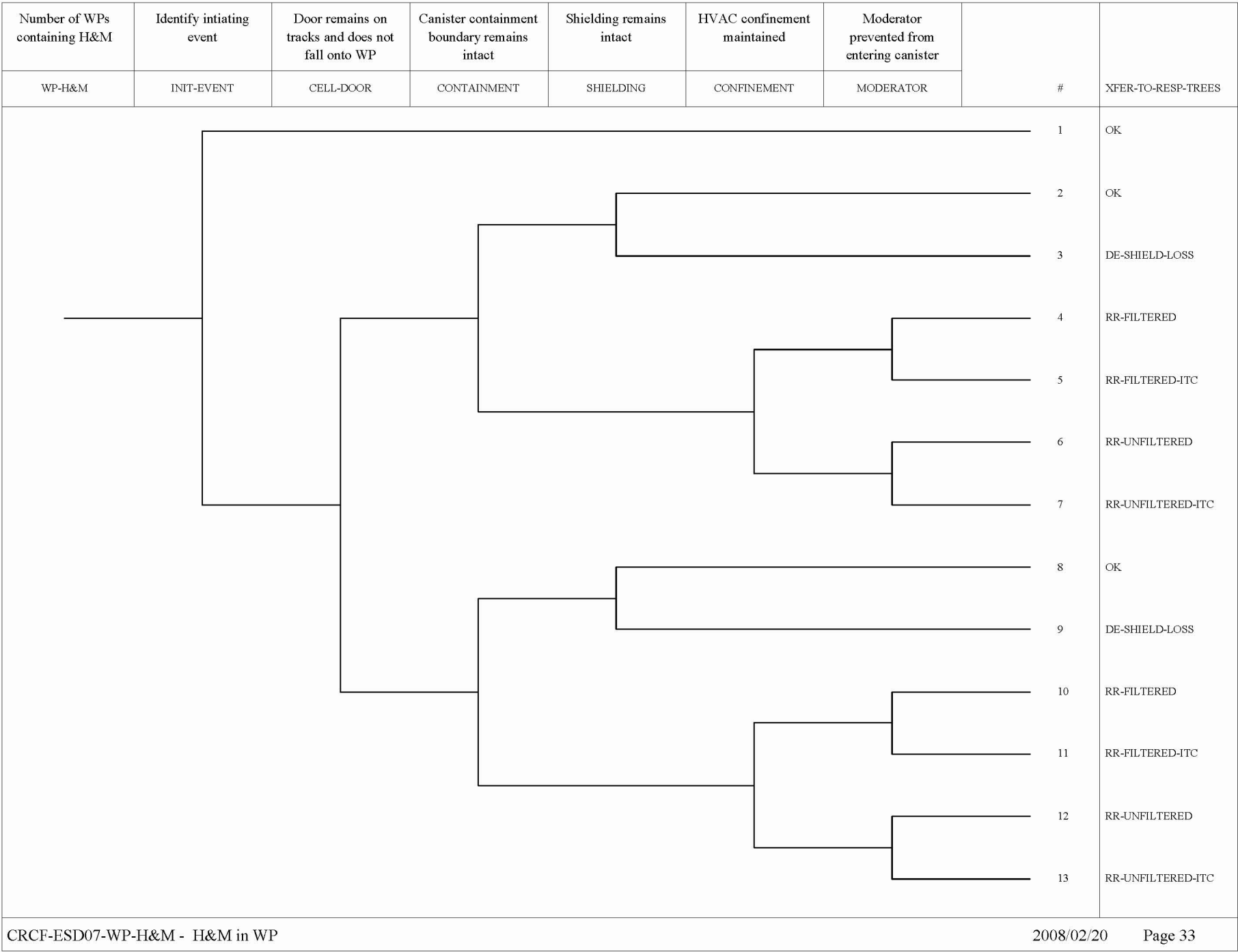
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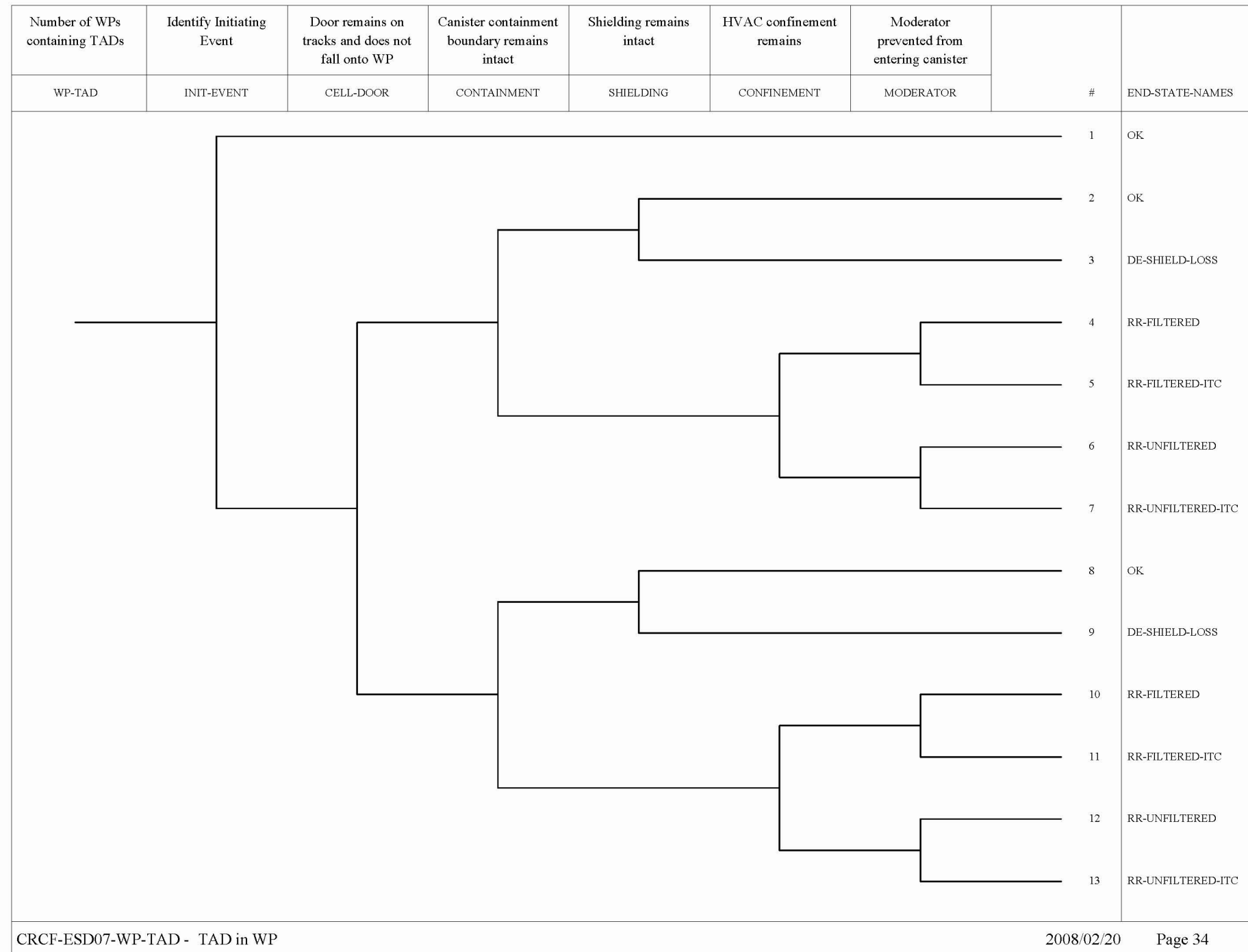
Source: Original

Figure A5-33. Event Tree CRCF-ESD07-WP-H&D – H&D in Waste Package

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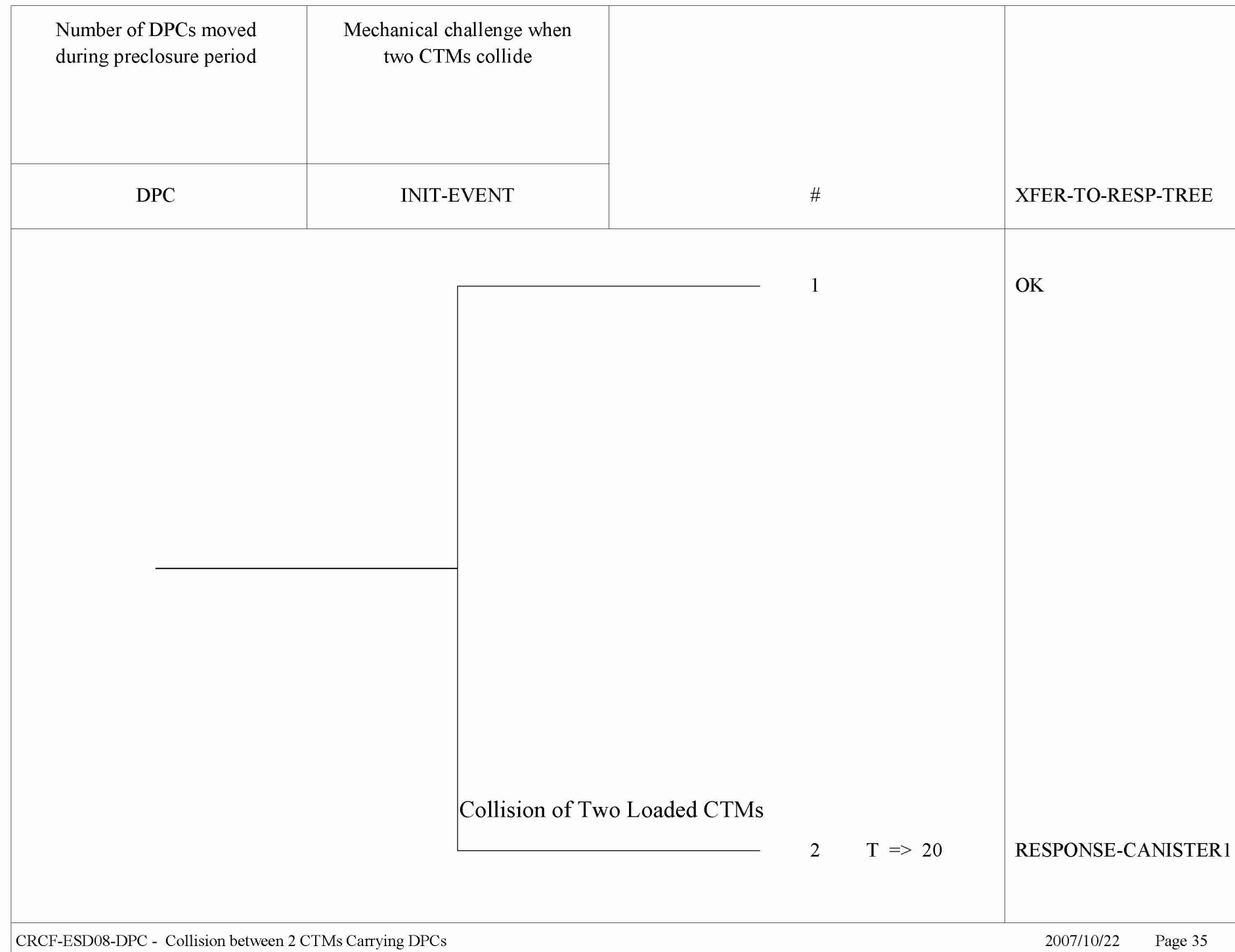
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Source: Original

Figure A5-35. Event Tree CRCF-ESD07-WP-TAD – TAD Canister in Waste Package

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Source: Original

Figure A5-36. Event Tree CRCF-ESD08-DPC – Collision between 2 CTMs Carrying DPCs

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Number of Std. canisters moved during preclosure period	Mechanical challenge when two CTMs collide		
DSTD	INIT-EVENT	#	XFER-TO-RESP-TREE
			OK RESPONSE-CANISTER1

CRCF-ESD08-DSTD - Collision between 2 CTMs Carrying DSTD

2007/11/06

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Source: Original

Figure A5-37. Event Tree CRCF-ESD08-DSTD – Collision between 2 CTMs Carrying DOE Std. Canister