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Controls simply state the requirement from the procedure (e.g., Inspect the integrety of the shielding prior to							
Controls simply state the requirement from the procedure (e.g., Inspect the integrety of the shielding prior to	19	ASE Apendix A	8	Credited Passive	Movable Shielding Surveillance: This CC should not refer personnel back to a procedure. This should		
initial start up of the accelerator facility and every 12 months.				1			
				<u> </u>	initial start up of the accelerator facility and every 12 months).		

	DOCUMENT	PAGE	<u>Section</u>	Comment/Issue	FERMI Comment/Issue Response	DOE Disposition
20	ASE Apendix A	8	Credited Passive	Penetrating Shielding Control: This CC is vague, can be interperted differently and needs clarity such as		DOL DISPOSITION
20	ASE Apendix A	8	Controls	listing the penetrations that can be tracked in configuration management process and also labled as cc.		
21	ASE Apendix A	8 of 15	Credited Passive	Control section: Only list the minimum required shielding for the specific facility here. Any deviation		
	ASE Apendix A	0 01 13	Controls: Permanent	from the ASE (sink hole of earthen berm or overburden) will be considered an ASE violation.		
			shielding & labyrinths	Them the ASE (Sink hole of earther serin of overburden) will be considered an ASE violation.		
22	ASE Appendix A	8 of 15	Credited Passive	Control section: Only list the minimum required shielding for the specific facility here, in this case		
	ASE Appendix A	0 01 13	Controls: Movable	Spinquest.		
			shielding	Spiriquest.		
23	ASE Appendix A	8 of 15	Credited Passive	Control section: Only list the minimum required shielding for the specific facility here, in this case		
	, to E , tope that , r	0 01 13	Controls: Penetration	Spinquest.		
			shielding			
24	ASE Appendix A	8 of 15	Credited Passive	Surveillance Section: The penetration surviellance requirements need to be defined in this section. Do		
	The state of the s	0 0 1 20	Controls: Penetration	not point the reader to another document.		
			shielding			
25	ASE Apendix A	9	Credited Passive	Radiation Fencing: This CC is ONLY applicable to radiation areas. What controls are in place for		
	,		Controls	controlled areas? Since FERMI is open to the public, this CC needs to be more broad and include		
				controls that ensure minors/members of the public and untrained employess do not receive 100mrem		
				in a year.		
26	ASE Apendix A	9	Credited Passive	Radiation fencing Surveillance: This CC should not refer personnel back to a procedure. This should		
			Controls	simply state the requirement from the procedure (e.g., Inspect the integrety of the shielding prior to		
				initial start up of the accelerator facility and every 12 months).		
27	ASE Apendix A	9	Credited Active	Radiation Safety Interlock ControlSafety Envelope- Surveillance: This CC is vague and needs clarity.		
			Engineered Controls	Additionally, the control needs to specify where interlocks are located to prevent beam during		
			Ŭ	inadvertant accesses; ie are they located at all gates/doors/windows/emergency exit hatches/etc. An		
				example could be the following - Access controls- During beam opertions, where beam is present to		
				the access controls system must prevent enrty to the		
28	ASE Appendix A	9 of 15	Credited Active	Control Section: The statement " All circuits are designed in such a way that if a circuit fails, the failure		
				would most likely initiate a system shutdown resulting in a safe condition." needs to be clarified. The		
			RSIS	wording "would most likely initiate" implies there is a chance the circuits are not fail safe.		
29	ASE Appendix A	10 of 15	Credited Administrative	Control: List the specific elements that are captured in the Beam Permit and Running Condition for		
			Controls: Accelerator	clarification. Each element and associated admin control needs to be clearly stated in the ASE. Ie. List		
			Operational Approvals	the beam power & operating parameters for Spinquest and required admin control. List theree are		
				CDCs for Spinquest and associated administrative credited control in ASE. Do not point reader to an		
				internal procedure. Summarize/define these in the ASE.		
30	ASE Appendix A	10 of 15	Credited Administrative	Safety Envelope: List the number of required Operators for Spinquest and their required location in		
			Controls: Accelerator	ASE, in the remote control room or MCR?		
			Operations Staffing			
31	ASE Apendix A	11	Credited Administrative	Accelerator Beam Intensity Limits - Safety Envelope: The CC states in part that beam intensities are		
			Controls	monitored. Who monitors the beam intensities? If monitoring is being performed then it appears as		
				though an added CC should be for personel oversight where you list the # of operators required in the		
				control room during operations.		
32	ASE Appendix A	11 of 15		Why are all limits listed in this ASE for Spinquest? Only list the intensity limits for the Spinquest		
				beamline that is being reviewed.		
			Beam Intensity Limits			
33	ASE Appendix A	12 of 15	ASE Violation	This section is confusing. The statement "Determining whether a condition is a violation of the ASE		
			Determination and	may be subjective." contradicts the statement on Page 7 that states "Variations beyond these limits are		
			Actions	a violation of the ASE." This section needs to be clarified to state that any variations from the bounds		
				defined in this ASE is an ASE violation. This section needs to list the actions that will be taken if an ASE		
				violation is identified (e.g., stop the activity causing the violation, work with DOE, etc). Do not point		
	ACE Assessed A	40 -545	ACEN//-I-I	readers to an internal procedure, list the steps in the ASE specific to Spinquest.		<u> </u>
34	ASE Appendix A	12 of 15	ASE Violation	Clarification is needed. This statement, "Any deficiencies found in a credited control that are not an		
			Determination and	ASE violation are handled in accordance with FESHM and FRCM requirements." contradicts the		
25	CAD Cubosittala	Through	Actions	statement on Page 7 "Variations beyond these limits are a violation of the ASE."		
35	SAD Submittals	Throughout	Throughout	While DOE does not approve SADs, it should be understood that DOE needs to support the SAD		
				otherwise there will be issues identified in the ASE. The contractor should benchmark how other		
				laborationies document there SADs, consider having seperate SADs and ASEs for each accelerator		
3.0	CAD Cubmittala	Throughout	Throughout	operations.		
36	SAD Submittals	Throughout	Throughout	Having one SAD and one ASE is problematic. It causes the reader confusion and also leads to the		
				development of CC's that are generic and vague. As noted in comments 1-34 there are issues with the		
27	CAD Cubmittala	Throughout	Throughout	major portions of the ASE, including each of the listed CC's. The content in each of the SADs that were reviewed was bread. It lacked specific details explaining the		
37	SAD Submittals	Throughout	Throughout	The content in each of the SADs that were reviewed was broad. It lacked specific details explaining the		
				facility, operational aspects, and function. They frequently referenced back to procedures/policies that may provide some or all of the details.		
38	SAD Submittals	Throughout	Throughout	There was no reference to configuration management in the ASE and/or SAD's. This practice would		
38	SAD SUBITIILLAIS	Throughout	Timougnout	prove useful (e.g., shielding set up, etc.).		
			l	prove aseral (e.g., silicialing set up, etc.).		

	DOCUMENT	PAGE	Section Comment/Issue	FERMI Comment/Issue Response	DOE Disposition
20			Throughout Diagon playify how the LICI process is implemented when only an internal procedure is referenced in the	<u>FERIVII Comment/Issue Response</u>	DOE DISPOSITION
39	ASE and SAD Submittals	Throughout	Throughout Please clarify how the USI process is implemented when only an internal procedure is referenced in the SAD and/or ASE as the method to control a hazard and no specific details are documented.		
			SAD and/or ASE as the method to control a hazard and no specific details are documented.		
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