

Unreviewed Safety Issue (USI) Evaluation Form

Title _____

 USI Report # _____-E
[to be provided by ESH once Form submitted]

USI Evaluation Questions

Part 1 – Review for Credited Control & ASE Violation

The following questions will determine if Credited Controls are/were affected, and if the ASE was violated. Answer all questions below associated with USI Screening Questions 1-8 answered “yes” or “unknown”. Include justification/discussion/comments for responses to questions. Attach additional documents as needed.

USI Evaluation Part 1 Questions			
1.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Is the affected facility or soil specified as Credited Control within the SAD/ASE?
2.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Is the affected movable shielding specified as Credited Control within the SAD/ASE?
3.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Is the affected fencing specified as Credited Control within the SAD/ASE?
4.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Is the affected RSIS component specified as a Credited Control within the SAD/ASE?
5.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Is the affected ODH Safety System component specified as a Credited Control within the SAD/ASE?
6.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Were the operation authorization documents specified as a Credited Control within the SAD/ASE?
7.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Was accelerator operator staffing specified as a Credited Control within the SAD/ASE?
8.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Were the operational parameters specified as a Credited Control or the basis for a Credited Control within the SAD/ASE?

<input type="checkbox"/> yes	<input type="checkbox"/> no	If any of the above questions are answered “yes” – Is the system affected permanent, or was it affected during accelerator operations?
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<input type="checkbox"/> yes	<input type="checkbox"/> no	If an answer to the previous question is “yes” – was accelerator operations permitted after determining that the affected system was specified as Credited Control within the SAD/ASE?
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Part 1 Questions Justification/Discussion/Comment

Part 2 – Review for Accelerator Specific Hazards

The following questions will determine if the change could introduce new accelerator specific hazards not previously evaluated in the SAD, or change the risk categorization of a previously evaluated hazard to a Category I or II. Answer all questions below associated with USI Screening Questions 9-10 answered “yes” or “unknown”. Include justification/discussion/comments for responses to questions. Attach additional documents as needed.

USI Evaluation Part 2 Questions			
9.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Will increased volume of cryogenics affect the ODH Posting Classification? Or change the risk evaluation to an unacceptable level of I or II for an accident previously evaluated in the SAD? Or will a different type of accident than previously evaluated in the SAD be introduced that would have a Risk Category of I or II?
10.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Will new device introduce a new worst-case beam loss? Or change the risk evaluation to an unacceptable level of I or II for an accident previously evaluated in the SAD? Or will a different type of accident than previously evaluated in the SAD be introduced that would have a Risk Category of I or II?

<input type="checkbox"/> yes	<input type="checkbox"/> no	If any of the above questions are answered “yes” – Will any Credited Controls need to be modified, or new Credited Controls identified?
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Part 2 Questions Justification/Discussion/Comments

Part 3 – Review for Non-Accelerator Specific Hazards

The following questions will determine if the change could introduce new non-accelerator specific hazards not previously evaluated in the SAD, or change the risk categorization of a previously evaluated hazard to a Category I or II. Answer all questions below associated with USI Screening Questions 11 answered “yes” or “unknown”. Include justification/discussion/comments for responses to questions. Attach additional documents as needed.

USI Evaluation Part 3 Questions			
11.a	<input type="checkbox"/> yes	<input type="checkbox"/> no	Is the hazard evaluated in the SAD?
11.b	<input type="checkbox"/> yes	<input type="checkbox"/> no	Will the hazard change the risk evaluation to an unacceptable level of I or II?
11.c	<input type="checkbox"/> yes	<input type="checkbox"/> no	If 11.a is “no” <u>or</u> 11.b is “yes” – Is the hazard safely managed by other DOE approved applicable safety and health programs and/or processes? (Including ISM programs such as FESHM & FRCM.)
11.d	<input type="checkbox"/> yes	<input type="checkbox"/> no	If 11.c is “yes” – Could the hazard initiate or contribute to other evaluated accelerator accidents?
11.e	<input type="checkbox"/> yes	<input type="checkbox"/> no	If 11.c is “no” <u>or</u> 11.d is “yes” – will additional Credited Controls be required to mitigate risk to acceptable levels of III or IV, and included in the ASE?

Part 3 Questions Justification/Discussion/Comments

Part 4 – Review for Documentation Related to Accelerator Operation

The following questions will determine if the change to documents that are related to accelerator operation remain within the bounds of the SAD, or if SAD updates are required. Answer all questions below associated with USI Screening Questions answered “yes” or “unknown”. Include justification/discussion/comments for responses to questions. Attach additional documents as needed.

USI Evaluation Part 4 Questions			
12.a	<input type="checkbox"/> yes	<input type="checkbox"/> no	Were document updates purely editorial in nature? (i.e., updating organizational names or job titles, fixing typos, etc.)
12.b	<input type="checkbox"/> yes	<input type="checkbox"/> no	If 12.a is “no” – were roles or responsibilities, or procedural steps modified in a way that is different than what is stated in the SAD?

Part 4 Questions Justification/Discussion/Comments

Part 5 – Review for Miscellaneous Items

The following questions look at the proposed activity or discovered condition as a whole. Answer all questions below. Include justification/discussion/comments for responses to questions. Attach additional documents as needed.

USI Evaluation Part 5 Questions			
13.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Did/will a new accelerator, accelerator segment, and/or beamline be introduced?
14.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Did/will an existing accelerator, accelerator segment, and or beamline be decommissioned?
15.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Could the proposed activity or discovered condition change the risk categorization (either by increasing the probability of an occurrence or by increasing the consequence) to a Category I or II for an accident previously evaluated in the SAD?
16.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Could the proposed activity or discovered condition change the risk categorization (either by increasing the probability of an occurrence or by increasing the consequence) to a Category I or II for a malfunction of a Credited Control identified in the ASE?
17.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Could the change create the possibility of a different type of accident than previously evaluated in the SAD that would have a Risk Category of I or II?
18.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Could the change increase the possibility of a different type of malfunction of a Credited Control identified in the ASE?
19.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Will the SAD need to be updated?
20.	<input type="checkbox"/> yes	<input type="checkbox"/> no	Will an ASE need to be updated?

Part 5 Questions Justification/Discussion/Comments

Additional Discussion/Justification/Comment

USI Evaluation Determination

Based on responses to evaluation questions above, utilize the following color coding to make final determination.

Color Codes:	Is NOT a USI	Is a USI	Is a USI & affects the SAD/ASE	Is a USI and an ASE violation
Approvals:	ESH ASD	+ SRSO or CSO	+ Director & FSO* (*ASE only)	FSO

- The proposed activity/discovered condition: *[select one]*
- is NOT a USI, activity may commence *[all ?s answered green]*
 - IS a USI, requires SRSO or CSO approval prior to commencing *[any ? answered gold with no red or purple]*
 - IS a USI that affects the SAD/ASE, requires: SRSO or CSO; Director; and FSO Manager* (*for ASE only) approval prior to commencing *[any ? answered red with no purple]*
 - IS a USI and an ASE violation, requires accelerator operations to be terminated immediately, requires: SRSO or CSO; Director; and FSO Manager approval prior to commencing *[any ? answered purple]*

Identified Actions for USIs

Identify and specify relevant documents that need to be created or modified:

<input type="checkbox"/>	Shielding Assessment	
<input type="checkbox"/>	ODH Analysis	
<input type="checkbox"/>	SAD Chapter	
<input type="checkbox"/>	ASE	
<input type="checkbox"/>	Other	
<input type="checkbox"/>	Other	

Identify any additional actions necessary:

<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Approvals

The following approvals are required based on the determination above. Once approvals are received, issue is determined to be a Reviewed Safety Issue and the activity and/or operations may resume and/or commence.

All Issues

Machine Owner

[Name, Fermilab ID # & Date]

ESH Accelerator Safety Department Head

[Name, Fermilab ID # & Date]

All Issues Determined to be USIs

Senior Radiation Safety Officer (SRSO)

[Name, Fermilab ID # & Date]

OR

Chief Safety Officer (CSO)

[Name, Fermilab ID # & Date]

All Issues That Affect the SAD and/AE

Fermilab Director

[Name, Fermilab ID # & Date]

FSO Manager* *only if ASE affected*

[Name, Fermilab ID # & Date]

All Issues Found to Have Violated the ASE

FSO Manager

[Name, Fermilab ID # & Date]

Submit the completed USI Evaluation Form to the ES&H Division Accelerator Safety Department for appropriate records retention and notifications.