SNS ASRC Triennial Assessment

2016 Plan of Action (updated July 25, 2016)

Objective: To assess accelerator safety program elements specified in the Contractor Requirements Document (CRD) portion of DOE Order 420.2C *Safety of Accelerator Facilities* and other key areas related to accelerator safety, to ensure compliance with DOE Order 420.2C, and to focus SNS management attention on improvements necessary for continued safe operations. At a minimum, the following accelerator safety program elements should be assessed for compliance with 420.2C requirements:

1. ASE
2. SAD
3. USI Process
4. ARR Program
5. Roles and Responsibilities
6. Inventory listing of accelerator facilities

ASRC Membership: Members of the SNS ASRC are listed in Table below.

Name	Affiliation	Phone Number	Email Address
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Scope: The scope of the assessment is to be focused on accelerator specific safety requirements as promulgated in DOE Order 420.2C.

Methodology: ASRC members (see Attachment 1) will perform the assessment through a combination of document reviews, staff interviews, facility walk-downs and task observations, as appropriate. The specific assessment topics and individual responsibilities of the ASRC members are defined in Attachment 1. ASRC members will provide a summary of their assessments for inclusion in the final assessment report.

Conduct of Assessments: Assessments evaluate conformance to established requirements. The ASRC members examine objective evidence that demonstrates activities, procedures, instructions, and records are being properly executed and documented.

Assessment criteria are derived from the DOE Order 420.2C *Safety of Accelerator Facilities* including facility specific policies and procedures used to implement requirements from DOE Order 420.2C.

During the assessment, verify that documentation called out by SNS procedures is accurate and complete. All concerns should be brought to the attention of the person responsible for the area for possible resolution or correction prior to the completion of the assessment. No corrective action is required for any deficiency satisfactorily resolved prior to the completion of the assessment. However, a record of the finding must be included in the assessment report and acknowledged as having been resolved.

Documentation: Topical assessment reports shall include Findings, Recommendations, Noncompliances, and Noteworthy Practices, which are defined as follows:

Findings - Results of the evaluation of the collected assessment evidence compared with the agreed assessment criteria. Assessment findings provide the basis for the report. While all findings of nonconformity must be documented, findings of conformity may also be documented.

Recommendations (opportunities for improvement) - A suggested means of improving an activity or fulfilling the intent of a requirement.

Noncompliance - An activity, attribute, or document, which fails to comply with established requirements, and may lead to a condition having an adverse effect on environment, health and safety, operations or Credited Controls. If observed, it must be documented in the assessment.

- Major noncompliance - A lack of an element, procedure, or a non-fulfilled requirement that puts the process/system at jeopardy, and could lead to significant impact on environment, health and safety, operations or Credited Controls.

- Minor noncompliance - An observed lapse in a program, process, procedure, or requirement, usually single incidents that do not have a significant impact on environment, health and safety, operations or Credited Controls.

Noteworthy Practices - An assessment result that constitutes a condition or practice which exceeds expectations or common practice worthy of bringing to the attention of management.

Schedule: The onsite SNS ASRC Triennial Assessment will be conducted July 26 through 28, 2016. A closeout meeting with SNS management will be held on Thursday, July 28 2016 at a mutually agreed upon time.

A report addressed to Kevin Jones, SNS Operations Manager, with findings and recommendations will be prepared at the completion of the on-site reviews and finalized by August 15, 2016.

ASRC Work Plan: A breakdown of the review topics is provided in Attachment 1.

Assessment Topics	Werbeck	Evans	Floyd	May	Kelsey	Schaefer	Anderson
I. Required Topics from Order 420.2C							
1. ASE – Assess compliance with 420.2C Requirements	X				X		L
2. SAD – Assess compliance with 420.2C Requirements	X				L		X
3. USI Process – Assess compliance with 420.2C Requirements		X			L		
4. ARR Program – Assess Compliance with 420.2C				L			
5. Clearly defined roles and responsibilities – Assess Compliance with 420.2C		X	L				
6. Inventory listing of accelerator facilities - Compliance with 420.2C Requirements			L				
II. Other Topics for Review							

7. Assess adequacy of configuration management related to accelerator safety:
 7.1. PPS failure event
     7.1.1.   Evaluate appropriateness of management response
     7.1.2.   Evaluate appropriateness of identified corrective actions
     7.1.3.   Evaluate appropriateness of progress
 7.2. Arising from PPS failure event - Configuration Management Review of CECs (October 2014) – review and comment on response plan and progress to date
 7.3. Assess shielding configuration control and change management
 7.4. Document control (e.g. safety documents, procedures, training, records, etc.)
 7.5. Software QA
	X		X	L	X	X	

8. Assess administrative processes related to accelerator safety (e.g. training, procedures, etc.) 8.1. Training and qualification 8.2. Procedures and procedure revision process 8.3. Work Control Improvement Project Plan – review and comment		L					X
9. Assess User safety processes 9.1. Safety review programs (e.g. Experiment Safety Summary, experiment work planning and feedback) for user experiments and changes to experiments.		L	X				

Assessment Topics	Werbeck	Evans	Floyd	May	Kelsey	Schaefer	Anderson
9.2. User training 9.3. Sample handling							

10. New facilities and major facility changes
   10.1.   Inner Reflector Plug and RFQ replacement – review and comment plans for ensuring readiness for resumption of operations following replacements
   10.2.   Beam Test Facility – status update
   10.3.   Proton power upgrade and second target station- update on planned approach to safety basis, ARR strategy
   10.4.   Gas injection regulatory strategy
	X			X		L	

11. Assess Credited Controls to ensure compliance with FSAD and ASE requirements				X			L

L = Lead reviewer responsible for write up

X = Associate reviewer