



# THREE-YEAR SECTOR SAFETY REVIEW REPORT

## ICMS Document Number APS\_2168211

Review Number	Review Title	Review Date
PSC-2020-TYSSR-S26	Three Year Sector Safety Review of XSD-CNM Sector 26	August 4, 2020
Scope / Agenda		Review Team
XSD-CNM    ES&H Plan Implementation Sector 26 Specific Safety Issues PSC/AES    Configuration Control Records RSS Component Survey & Alignment Update RSS Interface Identification PSS User Requirements Specification Ray Traces, Operational Envelope, Design Reviews Health Physics Survey Records ES&H Inspection Records ES&H Walk-Through CNM Building 440 office areas, laboratories Sector 26 beamlines, control areas, egress aisles	John Connolly Nena Moonier Paul Rossi Mike Fries Cassandra Hayden Patti Pedergrana Liz Schmidt Shane Flood Steve Davey Ken Belcher Merrick Penicka Beth Heyeck  Martin Holt Hua Chen	
Review Chair	ESH/QA Representative	Responsible Manager
Nena Moonier	Mike Fries	John Connolly

**Executive Summary:**

The TYSSR for CNM was held on August 4, 2020. There have been some personnel changes since the last review in 2017. Ilke Arslan is the CNM Division Director. Martin Holt has assumed the role of Interim Group Leader and continues to serve as the Beamline Director. Hua Chen remains the Safety Coordinator for CNM. There is regular safety communication at CNM. Regular safety inspections are done and there are currently no outstanding action items.

**Section 1: TYSSR criteria are based upon APS User Safety Policies and Procedures, APS Procedure 3.1.102, Section Beamline Facilities Reviews (Formerly AP&P 3.1.18, APS document number APS\_118581)**

	Agenda Items / Review Criteria	Discussion / Objective Evidence	Action Required
1.	Date of last TYSSR	March 29, 2017	None

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Agenda Items / Review Criteria		Discussion / Objective Evidence	Action Required
2.	Beamline management presents a summary of the ES&H program and notes changes, if any, since the last TYSSR.	Martin Holt presented the XSD-CNM TYSSR Safety Presentation.	Presentation will be uploaded to ICMS
3.	Committee records concerns raised by Sector Personnel	None	None
4.	Committee reports outstanding action items, if any, from last TYSSR	None	None
5.	Each partner user group operating a beamline shall:	<i>See sub-items.</i>	
6.	Review beamline safety program and ES&H plan at least once every thirty-six months; revise them, as needed, and provide ES&H plan to APS User Safety Officer for approval.	The XSD Beamline Safety Plan is in ICMS, Content ID APS_1270900, and was last reviewed on September 1, 2017. The Plan is valid until September 2020.	None
7.	Review beamline safety assignments annually and reassign responsibilities or create new roles, as needed; notify USO of changes in personnel assigned to ES&H roles.	Communicated through monthly data check of Beamline HR Admin application.	None
8.	The committee verifies that the following records are on file and consistent with the beamline:	<i>See sub-items.</i>	
9.	Review/approval records for modifications to beamline safety systems since last TYSSR	There have been no beamline modifications since the 2017 TYSSR.	None
10.	Configuration control list	Current as of the beginning of the last run.	None

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Agenda Items / Review Criteria		Discussion / Objective Evidence	Action Required
11.	Administrative Restrictions	The beamline cannot run with an undulator gap lower than 16mm. There are several CCWPs that require a Type C Survey at closed gap. Type C surveys were completed with a gap of 16mm.	Type C surveys must be completed if the beamline wishes to run with a gap lower than 16mm.
12.	RSS component survey and alignment worksheets	26-ID was last surveyed during the Dec 2015/Jan 2016 shutdown.	None
13.	RSS interface Document	ICMS Content ID APS_1218097	None
14.	PSS user requirements specification	ICMS Content ID APS_031312	None
15.	Sector floor plan, including egress aisles and work areas	ICMS Content ID APS_1192688	None
16.	Beamline layouts showing major radiation safety shielding components	ICMS Content ID APS_1192688	None
17.	Synchrotron and Bremsstrahlung ray trace drawings for all operating modes	ICMS Content ID APS_1413716	None
18.	Design drawings of RSS components that show functionality, shielding and aperture dimensions, and shielding material	See the Beamline Component Reference Table in ICMS, Content ID APS_1308317 See also the FDR in ICMS, Content ID APS_131466 Appendix III (page 28) lists all component drawing numbers	None
19.	Thermal analysis for RSS components connected to PSS water flow	ICMS Content ID APS_1435884 See also M26-A1, -A2, -A3, & PS26-A APS_130965 M26-B1, -B2: APS_056679	None
20.	Assembly drawings for x-ray shielded enclosures	Auto CAD as-built record drawings of 26-ID-A, B, C are on BRC share drive and also grouped in a zip archive in ICMS, Content ID APS_1435887	None
21.	Date of last Health Physics routine survey	The last HP routine survey for 26-ID-A, B, C was conducted on 7/1/2020. There were no issues of note.	None

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Agenda Items / Review Criteria		Discussion / Objective Evidence	Action Required
22.	ES&H coordinator provides recent ES&H inspection reports and identifies open safety issues, if any.	The last safety walk-through for Sector 26 was completed on October 14, 2019. There were no issues of note.	None
23.	Committee and beamline personnel discuss opportunities for improving the process	None	None

**Section 2: Safety walk-through was not held on the day of the review. Review held virtually due to the Lab operating in Limited Operations.**

**ICMS Workflow Approvals Required**

Nena Moonier (Assessment Team Leader)  
 Paul Rossi (Assessment Team Member)  
 Mike Fries (Assessment Team Member)  
 Patti Pedernana (Assessment Team Member)  
 Elizabeth Schmidt (Assessment Team Member)  
 John Connolly (Responsible Manager)

**File / Distribution:** PSC Deputy Assoc. Lab Director - Operations (Approver)  
 CAT or XSD Division Director  
 Sector Personnel and Safety Coordinator  
 User Safety Officer  
 PSC ESH/QA Representative  
 User Experiment Oversight  
 APS User Technical Interface  
 AES-EFO Group

**Supporting Documents:**

- XSD-CNM Sector 26 Three-Year Sector Safety Review Notification Letter (APS\_2168207)
- XSD-CNM Sector 26 Three-Year Sector Safety Review Agenda (APS\_2168208)
- XSD-CNM Sector 26 Three-Year Sector Safety Review Meeting Minutes (APS\_2168209)
- XSD-CNM Sector 26 Three-Year Sector Safety Review Presentation (APS\_2168210)