



# THREE-YEAR SECTOR SAFETY REVIEW REPORT

## ICMS Document Number APS\_2170085

Review Number	Review Title	Review Date
PSC-2020-TYSSR-S10	Three Year Sector Safety Review of MR-CAT Sector 10	September 11, 2020
Scope / Agenda		Review Team
MR-CAT      ES&H Plan Implementation Sector 10 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 LOM 433-B office areas, laboratories Sector 10 beamlines, control areas, egress aisles	John Connolly Nena Moonier Paul Rossi Mike Fries Patti Pedergrana Liz Schmidt Steve Davey Ken Belcher Merrick Penicka Beth Heyeck  Carlo Segre	
Review Chair	ESH/QA Representative	Responsible Manager
Nena Moonier	Paul Rossi	John Connolly
<b>Executive Summary:</b>		
MR-CAT's Three-Year Sector Safety Review was held on September 11, 2020. The group does a good job with safety communication. No major issues were noted during the review.		

**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	June 15, 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.	Carlo Segre presented the MR-CAT Safety Presentation.	Presentation will be uploaded into 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 MR-CAT safety plan has been reviewed and approved by P. Rossi and N. Moonier. The Plan is in ICMS: APS_2169861	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 modifications to MR-CAT beamlines since the previous 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	There are none at this time.	None
12.	RSS component survey and alignment worksheets	Sector 10 was last surveyed during the Dec 2019/Jan 2020 shutdown.	None
13.	RSS interface Document	10-BM ICMS Content ID APS_1218065 10-ID ICMS Content ID APS_1218066	None
14.	PSS user requirements specification	10-BM ICMS Content ID APS_1123471 10-ID ICMS Content ID APS_1123868	None
15.	Sector floor plan, including egress aisles and work areas	10-BM ICMS Content ID APS_1239448 (Pages 1-2) 10-ID ICMS Content ID APS_1440034	None
16.	Beamline layouts showing major radiation safety shielding components	10-BM ICMS Content ID APS_1239448 (Pages 3-4) 10-ID ICMS Content ID APS_1440035	None
17.	Synchrotron and Bremsstrahlung ray trace drawings for all operating modes	See Ray Trace Drawings folios in ICMS: 10-BM ICMS Content ID APS_1407883 10-ID ICMS Content ID APS_1413683	None
18.	Design drawings of RSS components that show functionality, shielding and aperture dimensions, and shielding material	See Component Reference Tables: 10-BM ICMS Content ID APS_1256301 10-ID ICMS Content ID APS_1426498	None
19.	Thermal analysis for RSS components connected to PSS water flow	10-BM ICMS Content ID APS_1256118 10-ID ICMS Content ID APS_1428524	None
20.	Assembly drawings for x-ray shielded enclosures	10-BM-A,B APS_TECKNIT1741 10-ID-A APS_TECKNIT1792 10-ID-B APS_TECKNIT1794	None
21.	Date of last Health Physics routine survey	10-BM-A, B and 10-ID-A,B were surveyed on May 28, 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 of Sector 10 was completed on January 20, 2020. No major issues were noted.	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:**

- MR-CAT Sector 10 Three-Year Sector Safety Review Notification Letter (APS\_2170080)
- MR-CAT Sector 10 Three-Year Sector Safety Review Agenda (APS\_2170081)
- MR-CAT Sector 10 Three-Year Sector Safety Review Meeting Minutes (APS\_2170082)
- MR-CAT Sector 10 Three-Year Sector Safety Review Presentation (APS\_2170083)