

Self-Assessment of Radioactive Source Use and Storage

Start Date	End Date	Area Assessed	
September 2020	October 2020	Buildings where radioactive sources are used and	
		stored	

Assessment Team

Name	Role ¹ (L, A, O)	Fermi ID#
Steve Carrigan	A	2980N
Dan Curatolo	A	15611N
Kathy Graden	Lead	08304N

¹ Role on assessment team: L=Lead, A=Assessor, O=Observer

<u>Interviewees</u>

Name	Title		
Source Monitors	Various		

Assessment Type

QA Assessment	Tripartite Assessment
Line Organization Self-assessment	Triennial Assessment
Management System Assessment	FESHCom Assessment
	Other:



Report

Title

Same as above.

Scope

This self-assessment reviewed source monitor training, condition of sources, source listing cross-check, access log entries, radiological postings, and source box locations

Criteria

10 CFR Part 835.1202, FRCM Chapter 4, Part 3.

Report

All locations where sealed radioactive sources are used and stored were evaluated using Review Checklist for Sealed Source Use and Storage (R.P. Form # 106). Items reviewed include the following items taken directly from R.P. Form # 106:

- 1. Does the sealed source inventory list match the actual inventory of sources in the box, in use, or installed in equipment? *No discrepancies were identified.*
- 2. Are tags/labels attached to sources intact and clearly visible? *No discrepancies were identified.*
- 3. Are sources being signed in and out on the source access log correctly? Several locations do not have sources in source boxes due to limited operations mode, maximum telework.
- 4. Source monitor names & Fermi IDs who are making entries to access log & verify training is current. *Several discrepancies were identified*.
- 5. Are radiological postings on equipment with sources installed correct? *No discrepancies were identified.*
- 6. Are radiological postings on the source box and in the area correct? *No discrepancies were identified.*
- 7. Are you able to observe an individual using a sealed source? The source technician observed several source users using sources. No discrepancies were identified.
- 8. Is location of source box co-mingled with eating or drinking areas? *No discrepancies were identified.*



Results

(Describe items found and categorize according to definitions below.)

Item Types

<u>Non-conformance</u> - The nonfulfillment of a specified requirement. This is limited to substantive issues that are worthy of being addressed. Word them as **statements of fact** rather than instructions.

<u>Management Concern</u> - An issue that management has identified as a concern requiring action to be taken to mitigate associated risk.

<u>Recommendation</u> - A suggestion or proposal for the best course of action to take on the identified topic.

Opportunity for Improvement - Suggestion on how to improve the identified topic.

<u>Best Practice</u> – A positive example of a work process or innovative approach with the potential to be the basis for significant operational improvements or cost savings.

<u>Lesson Learned</u> – A best practice that is captured and shared to promote repeat application, or an adverse work practice or experience that is captured and shared to prevent recurrence.

Non-Conformances

None

Management Concerns

None

Recommendations

- 1. Contact individuals via email regarding updating their Radioactive Source training (FN000048). Source monitors were teleworking and did not use radioactive sources during the period that training was expired. Recommendation closed.
- 2. Contact individuals via email regarding updating their Radiological Worker Practical Factors training (FN000471). Individuals have since completed this training. Personnel were teleworking and did not use radioactive sources during the period that training was expired. Recommendation closed.
- 3. Contact individual regarding updating their Radiological Worker online training (FN000470). Individual has since completed this training. This person was teleworking and did not use radioactive sources during the period that training was expired. Recommendation closed.
- 4. Remove individuals from source monitor list who are retired or no longer work at Fermilab on a regular basis. The source monitor log was revised, source monitor tags



were updated, and tags were placed on source boxes during the month of October 2020. Recommendation closed.

Opportunities for Improvement

None

Best Practices

None

Documents Reviewed

(List procedures, manuals, forms, etc. reviewed.)

- 1. Fermilab Sealed Radioactive Source Access Log (R.P. Form # 37).
- 2. Persons Qualified to Use Radioactive Sources list to verify training.
- 3. Fermilab Radioactive Source Inventory Field Copy dated 9/23/2020.