

CHAPTER 11 RADIATION SAFETY IMPROVEMENT PROGRAM

1.0 PURPOSE

The purpose of this chapter is to provide guidance in the implementation of the Radiation Safety Improvement Program. This program provides a record of observed radiological deficiencies and opportunities for improvement, a method for reporting these items to management for action, and a means to trend radiological performance. The Radiation Safety Improvement Program may also be used as a self-assessment tool, providing a method to encourage continual improvement of the radiation safety program.

2.0 SCOPE

This chapter applies to all personnel involved in the performance of radiological work at the University of Georgia. Any radiation worker may use this program as a means of reporting concerns or improvement opportunities directly to the management of the radiation safety program (Radiation Safety Officer and Committee).

3.0 ACRONYMS / DEFINITIONS

RSIP – Radiation Safety Improvement Program

RSIPR –Radiation Safety Improvement Program Report

RSC - Radiation Safety Committee

RSO - Radiation Safety Officer

Responsible Individual(s) – as used in this chapter, the responsible individual(s) is that person or persons who have primary responsibility or involvement for any incident, event, item, or occurrence detailed in a RSIPR

4.0 RESPONSIBILITIES

The **Radiation Safety Committee** is responsible for supporting specific elements of this program; including evaluation and development of plans for improvement.

The **Radiation Safety Officer** is responsible for development and implementation of this program; including reviewing all RSIPRs, determining the category and tracking codes, performing any required notifications, and assisting in development of appropriate corrective actions and improvement plans.

The **Radiation Safety staff** is responsible for assisting in the identification of opportunities for improvement and supporting implementation of corrective actions.

The **Authorized User** and all **Radiation Workers** are responsible for participation and support of this program.

5.0 RADIATION SAFETY IMPROVEMENT PROGRAM REPORT

5.1 RSIPR Initiation

- 1) A RSIPR may be generated by any person working under the UGA Radiation Safety Program.
- 2) The RSIPR should be initiated promptly after the discovery of any significant radiological occurrence.
- 3) RSIPRs are initiated by completing only section "A" of the form and forwarding the document to the RSO for review.
- 4) RSIPRs may be generated to document opportunities for improvement including, but not limited to, the following:
 - Radiation Safety Manual non-compliance
 - violations of RMP (license) conditions
 - radiological posting or labeling violations
 - poor radiological work practices
 - radiation safety training deficiencies
 - recommendations for significant improvements to the radiation safety program
- 5) The RSIPR should not be used to document conditions or occurrences that are trivial or problems that can be remedied on the spot. The exception to this would be a repetitious occurrence where tracking or trending of the situation would be beneficial to the radiation safety program.
- 6) A RSIPR must be documented in a responsible, factual, and professional manner. Hearsay, opinions, or accusations are never appropriate. Placing blame is never the goal, making improvements in radiation safety is the desired outcome.
- 7) RSIPRs should not be used to document conditions or occurrences that have already been documented through some other corrective action program (such as the lab inspection program), unless the other corrective action program has not been effective in achieving a satisfactory outcome.
- 8) In the event that a RSIPR is submitted for a condition or occurrence that has already been identified and/or a correction plan is already in effect, this situation should be described on the RSIPR and the RSIPR may be considered closed.

5.2 RSO Review and Classification

The RSO will review the RSIPR for legibility, clarity, and to ensure that it is relevant to radiological safety. If the RSIPR does not meet acceptable standards for these criteria, the RSIPR initiator will be notified. The RSIPR initiator and RSO should discuss the RSIPR. Inappropriate RSIPRs may be rejected by the RSO. If the RSIPR initiator is not satisfied with the resolution of the issue, the RSIPR may be transmitted directly to the attention of the RSC.

If the RSIPR is acceptable, the RSO or designee shall initiate section "B" as follows:

- 1) Assign the RSIPR tracking number. Each RSIPR is numbered in the following format; where XX-001 represents the first RSIPR for the year XX.
- 2) Determine the category in accordance with the following table, and document on the RSIPR in the space provided.

RSIPR Category	DNR Notification Requirement	Description
I	Immediate notification	Violations and/or deficiencies that require immediate notification to the DNR in accordance with the requirements of Rule .03(15) of the Rules and Regulations for Radioactive Materials Chapter 391-3-17
II	Notification within 24 hours after the discovery of the event	Violations and/or deficiencies that require notification within 24 hours after the discovery of the event to the DNR in accordance with the requirements of Rule .03(15) of the Rules and Regulations for Radioactive Materials Chapter 391-3-17
III	Notification within 30 days after the discovery of the occurrence	Violations and/or deficiencies that require notification within 30 days after the discovery of the occurrence to the DNR in accordance with the requirements of Rule .03(15) of the Rules and Regulations for Radioactive Materials Chapter 391-3-17
IV	None	All other occurrences or opportunities for improvement

NOTE: If a category I or II is determined, the immediate notification of the RSC chairman and initiation of an investigation is warranted. If the RSIPR is determined to be valid, the remaining RSC members should be notified.

- 3) Reference the appropriate regulatory document and article, Radiation Safety Manual chapter number, or other technical document identifier associated with the description. Document this information on the RSIPR in the space labeled ‘Reference Documents’.
- 4) If appropriate, notify the RSC chairman and implement any necessary immediate corrective actions.

5.5 Improvement or Corrective Action Evaluation

- 1) If the RSIPR is a Category I or II, a critique will be performed by the RSC. A corrective action plan will be developed and documented.
- 2) If the RSIPR is a Category III, the RSO and RSC chairman should develop and document an appropriate corrective action plan. The remaining RSC members should be notified no later than the next scheduled RSC meeting.
- 3) When practical, a root cause analysis should be performed to determine why an incident or deficiency occurred.
- 4) When completed, the improvement plan will be attached to the RSIPR. The RSO should note that the plan is attached by completing the space provided on the RSIPR.
- 5) The target date for completion of the improvement plan shall also be determined and noted on the RSIPR in the space provided.
- 6) Category IV RSIPRs shall be handled as follows:
 - The RSO should determine what corrective actions or improvements (if any) are needed and should consult with the responsible individual(s) and other involved parties when necessary. The improvement plan will be attached to the RSIPR.

- The RSO should prepare a time line to implement any recommended improvements or corrective actions. This information should be recorded on the RSIPR in the space indicating the completion target date.
- The RSO will notify the responsible individual(s) in writing of the recommended corrective actions or improvements and of the proposed time line for implementation.
- If the responsible individual(s) and the RSO disagree in regards to the recommended actions, each contributor may document their recommendations on a separate sheet and attach a copy to the RSIPR. The issues will be presented to the RSC for resolution.
- If an improvement plan target completion date is overdue, the RSO should notify the responsible individual in writing. The responsible individual's supervisor or department head and the RSC chairman should also be notified of the overdue response.
- In the case where an Authorized User is the responsible individual, access to procurement of radioactive materials may be denied if a RSIPR response is overdue.
- If an improvement plan target completion date remains overdue following written notification to the responsible individual(s), the RSIPR will be turned over to the RSC for resolution.

5.6 RSIPR Closure

When all issues related to the RSIPR are resolved and documented, the RSO and RSC chairman will sign and date the RSIPR in the space provided. The original copy of the RSIPR should be maintained with radiation safety program records. A RSIPR summary will be provided to the RSC at quarterly meetings.

6.0 ATTACHMENTS

Radiation Safety Improvement Program Report (example)