

## REGION III MANUAL

REGIONAL PROCEDURE 9902RADIATION PROTECTION PROGRAM FOR INSPECTORSScope

This procedure implements the requirements of the NRC Manual Chapter - 0524 "Standards for Protection Against Ionizing Radiation" in Region III. It provides for protection against ionizing radiation hazards arising out of activities conducted by the NRC including those hazards incurred by NRC staff members during the licensing, inspection and enforcement activities associated with the NRC regulatory program. In addition, training to satisfy generic training requirements for unescorted access to licensee radiologically controlled areas, including security training, will be provided to selected staff members. The security requirements for unescorted access to protected and vital areas will be covered in RP 9905, Appendix I.

References

IE Manual Chapter 1240 "Inspector Access to Power Facilities"  
 NRC Manual Chapter, 0524, "Standards for Protection Against Ionizing Radiation"  
 10 CFR 19  
 10 CFR 20

Regional Procedure 9907, Laboratory Facilities Control  
 Regional Procedure 9908, Personal Dosimetry  
 Regional Procedure 9905, Appendix I. RIII Personnel Access Lists at Power Reactors (not yet issued)  
 Draft "Radiation Safety Handbook for NRC Employees"

Responsibility

- A. Safety and Health Officer - Collateral duty assigned by Regional Administrator. Responsible for the overall occupational Safety and Health of Region III employees. Ensures that there is a designated Radiation Safety Officer and a program to implement MC 0524.
- B. Chief, Emergency Preparedness and Radiological Protection Branch - Responsible for the Region III Radiation Protection Program. Develops and implements a program consistent with the guidance in MC 0524, Part 7, Guidance for Radiation Protection Programs for NRC Offices. Reviews this program annually and documents results of the review. Responsible for reports required by MC 0524, Part 5.B, C and D, Records, Reports and Notifications.
- C. Chief, Independent Measurement and Environmental Protection Section - Responsible for developing radiation safety procedures for use of radioactive material in the Region; reviews these procedures annually and documents results of the review. Responsible for assuring that personnel

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who are granted unescorted access to the Region III laboratory are adequately trained in radiological safety.

- D. Chief, Facilities Radiation Protection Section - Responsible for personal dosimetry procedures. Provide technical training assistance to DRMA. Reviews personal dosimetry procedures annually and documents results of the reviews.
- E. Chief, Emergency Preparedness Section - Responsible for procedures to implement NRC MC 0524, Part 6, Guidance for Emergency Exposure During Rescue and Recovery Activities.
- F. Chief, Physical Security Section - Responsible for providing technical training assistance to DRMA.
- G. Division of Resource Management and Administration - Responsible for administration of regional employee training, including maintenance of training records and medical certificates for respirator users, and issuance of training identification cards.
- H. Section Chief, All Sections Whose Staff Routinely Visit Operational Reactor Facilities

Responsible for identifying members of their staff who should attend Region III presented annual training to fulfill generic requirements for unescorted access to licensee radiologically controlled areas. The Section Chief should provide the names of the members identified to the Administrative Management Branch, DRMA.

Responsible for identifying members of their staff who should receive medical screening for respirator usage. The Section Chief should provide the names of the members identified to the Personnel Staff, DRMA. The Section Chief should also identify members who no longer require certification for respirator usage.

After an employee has successfully completed the RIII unescorted access training, the Section Chief should determine if the individual has had sufficient onsite experience and is adequately familiar with nuclear power stations to be expected to properly conduct himself/herself in licensee radiologically controlled areas. If the Section Chief considers the individual adequately experienced/familiar, a request should be submitted to the Administrative Management Branch for inclusion of the employee's name on the list supplied to power reactor licensees. The determination of whether the employee is adequately experienced/familiar must not be based solely upon successful completion of the RIII unescorted access training.

ProceduresA. Training

1. When available in final, all new and current Region III employees who may be exposed to radiation or radioactive material will be provided with copies of the Radiation Safety Handbook for NRC Employees. The employees shall be instructed to familiarize themselves with contents of the handbook.
2. Additional training, to satisfy generic training requirements for unescorted access to licensee radiologically controlled areas, will be provided to selected staff members. This training will be provided annually and as needed for new employees. This training is described in the appendix to this procedure. For those completing the training, annual refresher training will be provided.
3. The Division of Radiation Safety and Safeguards will be responsible for ensuring that all persons who are granted unescorted access to the Region III laboratory are adequately trained in radiological safety.
4. Training records will be maintained by the Personnel Staff, DRMA.

B. Personal Dosimetry

1. NRC licensees are legally responsible for limiting workers' exposures to radioactive material in their possession in accordance with 10 CFR 20. This responsibility includes visitors as well as their own employees. Therefore, the licensee has the primary responsibility of providing personal dosimetry, if needed, to NRC employees who enter their facilities.
2. As provided for in MC 0524, NRC will provide personal dosimetry equipment to be used by Region III personnel who visit licensee facilities where radioactive material is stored or used. These dosimeters will provide backup to licensee dosimeters, will be the primary dosimeter in the case of incident response, and will be the primary dosimeter in NRC facilities.
3. The Region III dosimetry program will be implemented and maintained in accordance with Regional Procedure 9908.
4. Except for emergencies, Region III employees are limited to 1.25 rems/quarter whole body dose. Because of this limit, NRC Forms 4, Occupational External Radiation Exposure History will not be routinely used.

C. Laboratory Safety

1. Region III maintains a radioanalytical laboratory. Because of the very sensitive nature of instruments used, background radiation levels must be maintained low. Small quantities of radioactive standards, check sources, and analytical samples will be the only material maintained in the laboratory. Therefore, personal dosimetry and respiratory protection will not be required for anyone who enters the laboratory and follows the safety rules found posted in the laboratory and in Regional Procedure 9907.
2. The quantity of unsealed radioactive material in the Region III laboratory is limited to the Type A quantities shown in Table 2 of the Draft Radiation Safety Handbook for NRC Employees except that source material may be possessed and used up to the generally licensed small quantities defined in 10 CFR 40.22. Sealed sources in excess of Type A quantities can be used in the laboratory provided that no gamma field in excess of 2 mR/hr is created in any occupiable area in the laboratory.
3. All laboratory activities will be conducted in accordance with Regional Procedure 9907 and the Region III Laboratory Procedure Manual.

D. Emergency Response Radiation Protection

The Region III Emergency Response Implementing Procedures provide for the protection of Region III employees who respond to an accident and implement MC 0524, Part 6.

E. Radiation Safety Procedures and Unescorted Access to Radiologically Controlled Areas at Licensee Facilities

NRC licensees are required to adhere to the standards for protection against radiation hazards specified in 10 CFR 20 and the standards for notices, instructions, and reports regarding radiological working conditions specified in 10 CFR 19. These requirements apply to all individuals who enter NRC licensed facilities. The standards, which are designed for the protection of workers from radiological hazards, require NRC licensees to make every reasonable effort to maintain radiation exposures as low as is reasonably achievable. NRC licensee compliance with the safety requirements of 10 CFR 19 and 10 CFR 20 will ensure conformance to the safety requirements of MC 0524 for NRC personnel.

Inasmuch as Region III Division of Radiation Safety and Safeguards inspectors routinely audit NRC licensees for compliance with the requirements of 10 CFR 19 and 10 CFR 20, licensee radiation safety programs will be relied upon to provide for the protection of NRC employees and contrac-

tors while such personnel are on licensee sites, unless such licensee programs are found inadequate by the Division of Radiation Safety and Safeguards.

All Region III employees who enter a licensee's restricted area shall follow all licensee radiation protection procedures. If an inspector believes any licensee rule or procedure is forcing him to perform an inadequate inspection he should discuss this problem with Region III management.

For Region III staff members who have received Region III provided generic training or retraining for unescorted access to licensee radiologically controlled areas, licensee requirements for site specific training shall be complied with. Names of RIII staff members who have completed the generic training at Region III will be provided to licensees by the Chief, Administrative Management Branch in accordance with RP 9905. All Region III staff members who have not received the Region III generic training or retraining (within the past year), shall fully comply with the licensee's procedures for orientation training or be escorted while onsite.

In addition to the protected and vital area access lists, each power reactor licensee will be supplied the names of inspectors needing unescorted access to licensee radiologically controlled areas. These access lists will be issued by the Chief, Administrative Management Branch in accordance with RP 9905. There will be two categories of radiological unescorted access authorized by Region III. The first category list will include those NRC employees needing access to all plant radiological areas. These employees should be granted unescorted access to all plant radiological areas following completion of licensee site specific training and security badging (about 1 hour). This category list will be limited to those inspectors who routinely need access to all radiologically controlled plant areas, including contaminated, airborne radioactivity, and high radiation areas, and who have successfully completed the RIII generic unescorted training and are adequately experienced as determined by their Section Chief.

To minimize the number of persons authorized unescorted access to radiological hazardous areas, a second category will include those NRC employees needing unescorted access to the plant, but who do not routinely need unescorted access to contaminated, airborne radioactivity, and high radiation areas. The employees in this category must have also successfully completed the RIII generic unescorted training and be adequately experienced as determined by their Section Chief. Although not required to do so, licensees may require an NRC employee in the category to attend additional training or be escorted before granting unescorted access to contaminated, airborne radioactivity, and high radiation areas.

Each employee who has completed the generic training and has been designated for unescorted access will be issued an identification card by the DRMA. The card will specify the training expiration date and which level of radiological access has been granted.

F. Respiratory Protection Program and Bioassay

1. Licensees that routinely use respiratory protection have an NRC inspected respiratory protection program. Because of the large number of respirator types available, it is not practical to qualify Region III personnel on all types of respirators. Therefore, the goal of the Region III respiratory protection program will be to assure that each Region III employee who may need to use respiratory protection equipment receives an annual medical review and basic introductory training in respiratory protection. Region III employees will normally receive site specific training and any required fit testing at licensee facilities for respirator types actually used.
2. Bioassay will be provided as needed. Region III personnel entering licensee facilities will comply with licensee whole body counting procedures when both entering and leaving the facility.

Attachment: Appendix A

APPENDIX ARadiation/Contamination Protection Training Schedule  
For Region III Based Inspectors

Training, to satisfy the generic training requirements for unescorted access to licensee radiologically controlled areas, will be provided to selected Region III staff members. The training consists of about six hours of videotaped lecture, presentations by radiation and physical security specialists, and a written examination. Passing grade for the exam is 90 percent except that all questions in Part B must be answered correctly. The following is a brief outline and schedule for the training presentation:

8:00 a.m. - 8:50 a.m. (Videotape No. 1)	Introduction Radiation Terms Sources of Radiation
8:50 a.m. - 9:00 a.m.	Discussion
9:10 a.m. - 10:05 a.m. (Videotape No. 2)	Biological Effects of Radiation Methods of Protection
10:05 a.m. - 10:15 a.m.	Discussion
10:25 a.m. - 11:15 a.m. (Videotape No. 3)	10 CFR 19 and 20 Typical Plant Layout and Posting
11:15 a.m. - 11:25 a.m.	Discussion
11:30 a.m. - 12:00 p.m. Security Representative	Physical Security Briefing
12:00 p.m. - 12:45 p.m.	Lunch
12:45 p.m. - 1:15 p.m. (Videotape No. 4)	Personnel Monitoring Devices Conduct in Radiation/ Contamination Area
1:15 p.m. - 1:20 p.m.	Discussion
1:30 p.m. - 1:55 p.m. Videotape Fertile Female	Working with Radiation - Fertile Female Reg. Guide 8.13
1:55 p.m. - 2:40 p.m. Lecture	NRC 4s & 5s Posting High Rad Area, Extremely High Rad Area, and Airborne Rad Area RWPs Various, from outline

2:40 p.m. - 2:50 p.m.

Discussion

3:00 p.m. - 3:30 p.m.

Don and Remove Protective  
Clothing  
Personal Contamination  
Monitoring

3:30 p.m. - 4:00 p.m.

Emergency Response While  
Onsite

4:00 p.m. - 4:30 p.m.

Written Exam