

**1988
Rationale for Revisions**

**Part W
Radiation Safety Requirements for Wireline
Service Operations and Subsurface Tracer Studies**

Introduction

The changes to Part W in this revision of the Suggested State Regulations for Control of Radiation (SSRCR) were made to maintain compatibility with 10 CFR Part 39 and to address the Matters for Future Consideration from the Part W Rationale of the last edition of the SSRCR.

Specific Provisions

W.1 Purpose. In the first sentence of Section W.1, the word "persons" was taken out as Part W also addresses equipment.

W.3 Definitions

"Logging assistant" (new). The definition of "logging assistant" from 10 CFR Part 39 was added to Part W to become compatible with the U.S. Nuclear Regulatory Commission (NRC) regulations.

"Logging supervisor". The definition of "logging supervisor" was revised to become compatible with NRC regulations in 10 CFR Part 39.

"Temporary jobsite". The definition of "temporary jobsite" was revised to become compatible with NRC regulations in 10 CFR Part 39.

"Uranium sinker bar" (new). The definition of "uranium sinker bar" from 10 CFR Part 39 was added to Part W to become compatible with the NRC regulations.

"Well-logging". The definition of "well-logging" was revised to become compatible with the definition in 10 CFR Part 39.

W.104 Radiation Survey Instruments. Subparagraph W.104(b)(2) was expanded to give better instructions for calibration, as the statement "at energies and radiation levels appropriate for use" is vague. Wording identical to 10 CFR 39.33(c)(2) was used.

W.105 Leak Testing of Sealed Sources. The last sentence of Paragraph W.105(d) was revised for compatibility with NRC regulations in 10 CFR 39.35(d)(2).

W.110 Inspection and Maintenance. Paragraph W.110(c) was added to give specific instructions for licensees not to perform any operation such as drilling, cutting, or chiseling on source holders. The wording is compatible with 10 CFR 39.43(d).

W.202 Operating and Emergency Procedures. The word "use" was added to Paragraph W.202(i) to require licensees to provide instructions in the use of source holders, logging tools, source handling tools, storage containers, transport containers, and injection tools. This change was made to maintain compatibility with 10 CFR Part 39. In addition, Paragraphs W.202(1), (m), (n), and (o) were added. The wording is identical to 10 CFR 39.63(i), (j), (n), and (o).

W.203 Personnel Monitoring. Two additional sentences were added at the end of Paragraph W.203(a) for compatibility with Section 39.65 of 10 CFR Part 39.

W.401 Radiation Surveys. Paragraph W.401(a) of the SSRCR was reworded to maintain compatibility with 10 CFR 39.67(a).

W.401 Radiation Surveys. Paragraph W.401(b) of the SSRCR was revised for compatibility with NRC regulations in 10 CFR 39.67 by deleting "calculations."

W.401 Radiation Surveys. Paragraph W.401(c) was reworded to maintain compatibility with 10 CFR 39.67(c).

W.402 Documents and Records Required at Field Stations. Paragraph W.402(j) requiring training records was added to maintain compatibility with 10 CFR 39.73(i).

W.403 Documents and Records Required at Temporary Jobsites. Paragraph W.403(e) requiring shipping papers for the transportation of radioactive material was added to maintain compatibility with 10 CFR 39.75(d).

W.501 Notification of Incidents, Abandonment, and Lost Sources. Subparagraph W.501(b)(2) was changed to be compatible with 10 CFR 39.77(a). Subparagraph W.501(c)(3) was changed to be compatible with 10 CFR 39.77(d).

Appendix A Subjects to be Included in Training Courses for Logging Supervisors. Under "I. Fundamentals of Radiation Safety", another training course subject was added as "F." to require instruction on radiation safety practices including prevention of contamination and methods of decontamination. This change was made for compatibility with 10 CFR 39.61(e)(1)(vi).

Matters for Future Consideration

1. In reference to Paragraph W.104(a), additional discussion is needed regarding the necessity for survey meters at temporary jobsites.
2. In reference to Section W.102 on Storage Precautions, concern was expressed that there are no security or storage precautions on accelerators and that they might be clandestinely activated.

3. "Calibration sources" are not defined under Section W.3 Definitions. It appears to be needed based on Section W.102 on Storage Precautions.
4. In reference to Section W.108, certification documents may be difficult to be produced by the user.
5. In Section W.302, a low-activity calibration source should be defined (e.g., less than or equal to 1 millicurie).
6. Under the subpart heading, "Precautionary Procedures in Logging and Subsurface Tracer Studies", there appears to be no coverage of mineral logging and radioactive marker applications (e.g., mineral logging might have precautionary notation on aquifer zone penetration and radioactive marker on well-hole record keeping).
7. In Section W.401, if the logging tool detector can be used in lieu of a survey meter, consideration should be given to the effect that this might have on Paragraph W.104(a).
8. Section W.403 should be clarified to indicate whether sealed source leak tests and certification records are required at temporary jobsites.
9. In Appendix B, it is suggested that consideration be given to revising the wording on the plaque similar to the following: Contact the "Radiation Control Agency" before any attempt to reenter well.
10. Should the portion of the definition of "Logging supervisor" in 10 CFR 39.2 which reads "...and who is responsible to the licensee for assuring compliance with the requirements of the Commission's regulations and the conditions of the license..." be added to the definition of "Logging supervisor" in Section W.3 of the SSRCR?
11. Section W.4 on Prohibition of the SSRCR does not contain all of the requirements of 10 CFR 39.15. Should Section W.4 contain comparable requirements as 10 CFR 39.15?
12. Should Section W.104 (Radiation Survey Instruments) of the SSRCR include a paragraph which parallels (b) of 10 CFR 39.33 which reads as follows?

"(b) The licensee shall have available additional calibrated and operable radiation detection instruments sensitive enough to detect the low radiation and contamination levels that could be encountered if a sealed source ruptured. The licensee may own the instruments or may have a procedure to obtain them quickly from a second party."
13. Should Section W.110 of the SSRCR on Inspection and Maintenance contain certain provisions of 10 CFR 39.43 that are currently deleted? Examples include requirements to keep records of equipment defects and actions taken to correct those defects and requirements to develop and obtain approval of written procedures for the removal and maintenance of sealed sources.
14. Section W.201 (Training Requirements) does not require logging supervisors or logging assistants to successfully complete written tests. Also, Section W.201 does not require licensees to provide safety

reviews for logging supervisors and logging assistants at least once during each calendar year. The equivalent parts of 10 CFR 39 require the above. Should Part W of the SSRCCR include these requirements?

15. Section W.202 on Operating and Emergency Procedures of the SSRCCR does not specifically require written operating and emergency procedures. 10 CFR 39.63 requires written operating and emergency procedures. Should Part W of the SSRCCR include this requirement?
16. Section W.401 (Radiation Surveys) does not include a provision comparable to 10 CFR 39.67(d) which reads:

"(d) If the licensee has reason to believe that, as a result of any operation involving a sealed source, the encapsulation of the sealed source could be damaged by the operation, the licensee shall conduct a radiation survey, including a contamination survey, during and after the operation."

Should Section W.401 include a comparable provision?