

Segmentation and Downgrade of the SRS C Reactor Spent Fuel Basin

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The 105-C Reactor Building is identified in Appendix K, "Facilities to be Decommissioned", of the Federal Facility Agreement (FFA 1993). However, parts of the building continue to store legacy moderator. This moderator cannot be dispositioned in a cost effective manner at this time. The 105-C Reactor facility is considered a Hazard Category 2 Nuclear facility. The 105-C reactor disassembly spent fuel basin is a subunit of the 105-C Reactor Building. The basin is no longer used to store nuclear fuel but does retain ~ 3 million gallons water. A proposal to dewater and grout the basin was put forth to eliminate the potential for ground water release. While this task could be accomplished within the current safety basis a proposal to segment and down grade the disassembly spent fuel basin was identified as a cost effective alternative. Segmentation of the disassembly basin and categorization as a Radiological Facility eased work control and design requirements in accordance with the reduced risk. This approach was well accepted by the DOE as a solution to reducing risk and maintaining the required safety basis posture for an existing Hazard Category 2 facility. A segmentation and downgrade of the C-Area disassembly spent fuel basin was approved and implemented in November of 2011. Work on the dewatering and grouting of the basin continues with the completion of all activities expected in September of 2012.