

August 25, 2006

MEMORANDUM TO: Stephen Koenick  
Project Manager  
Division of New Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: Timothy Frye/**RA**/  
Health Physics Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF POTENTIAL IMPACTS TO NUREG-0800 CHAPTERS 11  
AND 12

This memorandum provides a summary of potential changes for NUREG-0800, *Standard Review Plan (SRP)*, Chapter 11, "Radioactive Waste Management" and Chapter 12, "Radiation Protection" as completion of our initial scoping effort.

The changes identified in the enclosure will be used to perform the update of the subject SRP chapters. In addition, the changes should be considered by your organization to determine the type of reviews needed by the Committee to Review Generic Requirements and the Advisory Committee on Reactor Safeguards, as well as whether which chapters or sections will be issued for public comment. It is also my understanding that this information may be shared with external stakeholders to inform them of the types of changes which will be considered during SRP updates to minimize regulatory uncertainty in preparation of Design Certification and Combined License applications pursuant to 10 CFR Part 52.

If additional changes are identified during the update process, IHPB will supplement the enclosure as necessary.

Note that these two SRP chapters involve operational programs involving the control and monitoring of liquid and gaseous effluents and radioactive waste, and operational radiation protection.

Enclosure:  
As stated

CONTACT: Jean-Claude Dehmel, NRR/DIRS  
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301-415-3162

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<b>DATE</b>	08/22/2006	08/22/2006	08/25/2006

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## IHPB Summary of Changes for NUREG-0800, Standard Review Plan (SRP)

### Chapter 11 - Radioactive Waste Management

1. Update Section 11.2 (Liquid Waste Management System), Section 11.3 (Gaseous Waste Management System), and Section 11.4 (Solid Waste Management) to address the use of mobile waste treatment systems connected to permanent plant systems. Such systems include, for example, skid-mounted wet waste treatment systems, solid waste processing systems, spent-resin processing systems, and chemical and detergent waste neutralization and treatment systems.
2. Update the guidance to clarify the performance criteria for ion exchange and charcoal adsorbent media. The guidance does not require that a specific type of media, such as brand name and specifications, be identified in the application. However, an applicant has the option of using commercially general purpose nuclear grade media that matches the performance criteria of the guidance, or use media with yet better performance, taking into account the specific characteristics of effluent wastes to be treated and released.
3. Update, as needed, the review procedures addressing Part 52, ITAAC, and COL action items in light of the above items.
4. Update the guidance in SRP Sections 11.2 to 11.4 to include the requirements 10 CFR 20.1406 with respect to plant design features and operational procedures that will minimize contamination of the facility and the environment, facilitate decommissioning, and minimize, to the extent practicable, the generation of radioactive waste, and unmonitored and uncontrolled releases.
5. In SRP Sections 11.4 and 11.5, update the requirements from Chapter 16 Tech Specs and RETS to those identified in Generic Letter 89-01, as implemented under the guidance of NUREG-1301 (PWR) and NUREG-1302 (BWR).
6. Update references to current Regulatory Guides (RG) and industry standards, as is applicable, and assess implications of newly revised regulatory guides on whether the SRP needs to be updated, for example see updates of RG 1.140 (2001) and RG 1.97 (2006).
7. Update references to current branch designations and confirm assignments of primary and secondary technical responsibilities.
8. Miscellaneous reviews, corrections, and updates of various items, such as typos, internal cross-references, criteria and limits expressed in both conventional and SI radiological units, etc.

Chapter 12 - Radiation Protection [Sections 12.1, 12.2 and 12.3 - 12.4. A summary of changes to SRP Section 12.5 was provided to ACRS by memo dated July 14, 2005]

1. Revise the AREAS OF REVIEW, ACCEPTANCE CRITERIA, REVIEW PROCEDURES, and EVALUATION OF FINDINGS, for Sections 12.1(Assuring that Occupational Radiation Exposures are As Low As Is Reasonably Achievable), 12.2 (Radiation Sources), and 12.3 - 12.4 (Radiation Protection Design Features), to reflect several changes made to 10 CFR 20 since the 1981 version of the SRP. Most significant of these was the 1991 major revision to Part 20 (56 FR 23391, May 21, 1991, as revised at 60 FR 20185, April 25, 1995), which changed the basis of the radiation dose limits (e.g., Effective Dose), added several new requirements (i.e., dose limits for embryo/fetus, planned special exposures, a lower dose limit for members of the public, etc.) and completely renumbered the paragraphs of the part.
2. Revise the AREAS OF REVIEW, ACCEPTANCE CRITERIA, REVIEW PROCEDURES, and EVALUATION OF FINDINGS, in Section 12.3 - 12.4 (Radiation Protection Design Features), to address new requirements in 10 CFR 20.1406, "Minimization of Contamination" (63 FR 39088, July 21, 1997).
3. Add TECHNICAL RATIONALE to Sections 12.1, 12.2, and 12.3 - 12.4 to give the technical basis for each of the acceptance criteria in these sections.
4. Update the REFERENCES to Sections 12.1, 12.2, 12.3 - 12.4 to remove outdated or withdrawn Regulatory Guides, NUREGs, and industry standards; add references to new industry standards that supercede the withdrawn standards; and add the Regulatory Guides issued in support of the 1991 revision to 10 CFR 20.
5. Add paragraph to REVIEW PROCEDURES in Section 12.3 - 12.4 to insure that the SRP Chapter 12 reviewer coordinate with the NRR I&C technical staff concerning the adequacy of the applicants categorization of area radiation and airborne monitoring instrumentation consistent with the 2006 revision to Regulatory Guide 1.97, "Criteria For Accident Monitoring Instrumentation For Nuclear Power Plants."