

## Kevin Ramsey

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**From:** Kevin Ramsey  
**Sent:** Thursday, January 08, 2009 10:36 AM  
**To:** FCSS\_Document\_Processing Resource  
**Cc:** Matthew Bartlett; Gregory Chapman  
**Subject:** Summary of Open Meeting on 11/20/08  
**Attachments:** NFS slides from 2008-11-20 meeting.pdf

Please add this message and the attached slides to ADAMS by 1/12/09. I'll put a 665 in your box.

On November 20, 2008, an open meeting was conducted with Nuclear Fuel Services to discuss pre-application issues associated with renewing the NFS license. The following individuals participated:

Kevin Ramsey, NRC  
Matthew Bartlett, NRC  
Greg Chapman, NRC

Jennifer Wheeler, NFS  
Rik Droke, NFS  
R. Jason Faddis, NFS  
Michael C. Tester, NFS

Although the meeting was open to the public, no members of the public participated. Slides used by NFS are attached.

NFS began with a general discussion of the pending license renewal. The NFS license will expire on July 31, 2009. NFS plans to submit a request to renew the license by June 30, 2009. The request will comply with new format and content guidance. An updated environmental report is being prepared. Several existing plans will require no changes. NFS intends to schedule several more focus group meetings. This meeting will focus on the radiation protection chapter only.

During the discussion, NRC noted that effluent monitoring reports will still be required under 10 CFR 70.59. The annual updates to Part II of the license application will end because the format will change from a two-part license to a one-part license. With regard to the renewal period, the primary difference between NRC reviews of 20-year and 40-year license applications is the evaluation of environmental impacts. The NFS environmental report must address how its operations will impact the environment over the term of the license. Estimating the impacts over 40 years can be difficult. NFS noted that it may limit its request to 20 years.

With regard to license amendments pending when the renewal is submitted, NRC stated that it would strive to carry all amendment requests forward into the new license. After the license is renewed, administrative changes will be governed by the provisions of 10 CFR 70.32 and 70.72.

After the general discussion, NFS provided a briefing on the changes it intends to make to its radiation protection chapter. NFS intends to format the chapter to match the latest guidance in NUREG-1520. A crosswalk will be prepared to document how provisions of the existing license are addressed in the new license. An outline of the new radiation protection chapter was reviewed.

Kevin M. Ramsey  
Senior Project Manager  
Fuel Manufacturing Branch  
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301-492-3123

# **SNM-124 License Renewal**

November 20, 2008

## **Agenda**

- Overview of One-Part License Structure
- Logistics/Questions
- Overview of new Chapter 4 – Radiation Protection

## **Overview and Logistics**

Jennifer K. Wheeler, P.E.  
Licensing & ISA Manager

### **Introduction**

- Expiration Date – July 31, 2009
- Planned Submittal Date – June 30, 2009
- Current format follows the Two Part license structure
- Last renewal occurred prior to issuance of NUREG-1520

## **Outline of Chapters**

Follows chapter structure laid out in NUREG-1520

1. General Information
2. Organization and Administration
3. Integrated Safety Analysis
4. Radiation Protection
5. Nuclear Criticality Safety
6. Chemical Process Safety
7. Fire Safety
8. Emergency Management
9. Environmental Protection
10. Decommissioning
11. Management Measures

## **Other Documents**

- Environmental Report
  - Currently being updated
- FNMC Plan, Physical Protection Plan, Emergency Plan
  - No updates anticipated due to License Renewal

## **Focus Groups**

- Chapter 4 (Nov 2008)
  - Radiation Protection
- Chapters 1, 2, 3, and 11 (Q1 2009)
  - General Info, Organization, ISA, Mgt. Measures
- Chapters 6 and 7 (Q1 2009)
  - Chemical, Fire
- Chapter 5 (Q1 2009)
  - NCS
  
- Chapters 8, 9, and 10
  - No focus groups planned at this time due to minimal changes

## **Logistics/Questions**

- Current License Conditions
  - Will be incorporated into Chapters where appropriate
  - Part 2 Annual Update is eliminated
  - Requirement for submitting Environmental/Radiological data?
- Renewal period
  - 20 year vs. 40 year – difference in NRC reviews?
- Submittal of Chapters
  - Not currently planning to utilize margin marking to show changes due to renumbering effort
- Tracking of Changes during NRC Review Period
  - Will Amendments (if any) issued on current license version also be approved for new license version?
- After NRC Approval – Living with a One-Part License
  - How will administrative changes be approved (e.g. current Part 2 Annual Update)?

# **SNM-124 License Renewal**

**Michael C. Tester, CHP**  
Senior Manager Radiological Control

November 20, 2008

## **Background**

- **Special Nuclear Material License SNM-124**
  - Expiration date July 31, 2009
  - Current Two-Part License Format
  - Last Renewal Predated NUREG 1520
- **Radiation Protection Chapter(s)**
  - Chapter 3 Conditions Section
  - Chapter 12 Demonstration Section
  - Chapter 2 Organization & Administration
- **Recent Amendment History**
  - Amendment 40 8/03 Internal Dosimetry
  - Amendment 58 1/05 Air Sampling
  - Amendment 75 1/07 Radiological Monitoring & Exposure Control

## **Radiation Protection Amendments**

- Amendment 40
  - 10 CFR 20 DACs/ALIs based on ICRP 26/30
  - ICRP 60/68 Biokinetic Models/Dose Conversion Coefficients
- Amendment 58
  - Air Sampling Program
  - Regulatory Guide 8.25/NUREG 1400 Compliant
- Amendment 75
  - NUREG 1520 Compliant
  - Radiation Work Permit Program
  - Contamination Control Program
  - Radiological Monitoring Program
  - Exposure Control Program

## **10 CFR Part 20 Exceptions**

- Internal Dosimetry
  - 10 CFR 20.1204 Determination of Internal Exposure
  - Use of ICRP 68 Biokinetic Models/Dose Conversion Coefficients
- Radiological Postings
  - 10 CFR 20.1902 (e) Radioactive Materials Area
  - Global Posting of Restricted Area
- Radiological Labeling
  - 10 CFR Part 20.1904 (a) Radioactive Material Containers
  - Every Container or Vessel in this Area May Contain....

# Radiation Protection Chapter 4 Strategy

- NUREG 1520 Standard Review Plan
  - Crosswalk of Chapters 3 & 12 Current License
  - Content vs Format Challenges
- Restructure Current Text
  - Combination of Chapters 3 & 12
  - Removal of Duplicate Information
  - Reorganized Text to Improve Presentation & Flow
  - Housekeeping of Tables, Figures, Acronyms, References
- Quality Assurance
  - NUREG 1520 Crosswalk Chapter 4 Proposed License
  - Peer Review Technical Content & Presentation
  - Presentation to NFS Safety & Safeguards Review Council

## Example Crosswalk

Radiation Protection Compliance Matrix					
Item	NUREG 1520 Standard Review Plan	SNM-124 Part I	SNM-124 Part II	New SNM-124	NFS Procedure
1	4.3 (1) Establish, maintain, & implement a radiation protection program	Section 2.2.3.2	Section 12.1	Sections 3.3.4.2, 4.1	NFS-GH-908
2	4.3 (2) Keep occupational exposures to radiation as low as reasonably achievable (ALARA)	Section 3.1.1	Sections 12.1.4, 12.31	Sections 4.1.2, 4.1.2.1, 4.1.2.2	NFS-GH-932
3	4.3 (3) Appoint radiological protection staff who are suitably qualified and trained in radiation protection procedures	Sections 2.3.3.2, 2.3.3.2.1, 2.3.3.2.2	Sections 11.2.4.8, 11.2.4.9, 11.2.4.8, 11.2.4.7	Section 2.5.3.2, 2.5.3.2.1, 2.5.3.2.2, 2.4.4.8, 2.4.4.9, 2.4.4.8, 2.4.4.7	NFS-GH-908
4	4.3 (4) Prepare written radiation protection procedures and radiation work permits (RWPs)	Sections 1.7.5, 2.3.3.2.2.1, 2.12.4, 3.1.1, 3.1.2, 3.1.3	Sections 11.7, 12.1.1, 12.1.3	Sections 1.7.5, 2.3.3.2.2, 2.6.4, 2.6.4.1, 4.1.2, 4.1.3, 4.1.1, 2.6.4.1, 4.1.1, 4.1.3	NFS-GH-908 NFS-GH-03
5	4.3 (5) Train employees in radiation protection, including the health protection problems associated with exposure to radiation, procedures and procedures to minimize exposure, and the purposes and functions of protective devices employed	Section 2.6, 2.12.2, 3.1.5, 3.2.1	Sections 11.6, 12.8.2, 12.11	Sections 2.6.3, 2.6.3.1, 4.1.1, 4.5, 4.1.4.1, 4.1.2.2	NFS-GH-908 NFS-GH-919 NFS-TN-008 NFS-GH-39
6	4.3 (6) Design and implement programs to control airborne concentrations of radioactive material by using ventilation systems, containment systems, and respirators	Section 2.4, 2.7.3, 2.12.1.2, 3.2.2	Sections 10C-100, 12.9, 12.11, 12.14.5	Sections 2.6.1, 2.6.1.1, 2.12.1.2, 4.7, 1C-10, 4.1.4, 4.5.3	NFS-GH-908 NFS-ENG-001 NFS-GH-07 NFS-GH-44 NFS-GH-932
7	4.3 (7) Conduct radiation surveys and monitoring programs to document radiation levels, concentrations of radioactive materials in the facility, and occupational exposure to radiation by workers	Sections 3.1.2, 3.2.1, 3.2.3, 3.2.9, 3.2.8	Sections 12.3, 12.4, 12.8, 12.11, 12.12, 12.13, 12.14	Sections 4.1.3, 4.9, 4.4.4.8.2.1, 4.5.2, 4.4.5, 4.3, 4.2, 4.1.2.2, 4.4.4, 4.4.4.8	NFS-GH-908 NFS-GH-07 NFS-GH-08 NFS-GH-11 NFS-GH-16 NFS-GH-26 NFS-GH-28

## **Radiation Protection Chapter 4 Outline**

- Section 4.1 Radiation Protection Program
  - Safety Procedures
  - ALARA Program
  - Safety (Radiation) Work Permits
  - Respiratory Protection Program
- Section 4.2 Posting and Labeling
- Section 4.3 Radiological Monitoring
  - Workplace Monitoring
  - Worker Monitoring
  - Environmental Monitoring
  - Data Management
  - Records and Reports

## **Radiation Protection Chapter 4 Outline (cont)**

- Section 4.4 Radiation Exposure Control
  - Occupational Exposure
  - Administrative Action Levels
  - Exposure Assessment
  - Internal Exposure Monitoring
  - External Exposure Monitoring
- Section 4.5 Contamination Control
  - Area Classification
  - Surface Contamination Monitoring
  - Action Guidelines
  - Survey Practices
  - Area Contamination Control Practices
  - Personnel Contamination Control
  - Unrestricted Release

## **Radiation Protection Chapter 4 Outline (cont)**

- Section 4.6 Instrumentation
  - Equipment Description & Types
  - Maintenance and Calibration
  - Criticality Accident Alarm System
  
- Section 4.7 Ventilation
  - Occupied Area Ventilation
  - Process Enclosures
  - Hoods and Glove Boxes
  - Filtration Specifications