U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
Protecting People and the Environment

NRC Highlights and Insights

For RETS-REMP Workshop, Colorado, 2013

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Outline

- Decommissioning Planning
- 10 CFR 20.1301(e) [40 CFR 190]
- NUREG on 2009 Radioactive Effluents
- Information Notice on RMSs
- Inspection Procedure Changes
- TI 2515/185 Rollup
- Cancer Study
- RG 1.21 Reporting (Miscellaneous)

Decommissioning Planning

- Minimization of contamination
- New 10 CFR 20.1406(c)
- 20.1501(a)(ii) -- Replaced “radioactive material” with “residual radioactivity”
- 20.1501(a)(iii) – The “…hazards of the radiation levels and residual radioactivity detected…”
- 20.1501(b) – Records kept per 50.75(g) (Part 50) for residual radioactivity

10 CFR 20.1301(e)

- Environmental protection regulation
- Potential impact if EPA revises 40 CFR 190
- Still based on ICRP-2 doses
- Includes direct radiation (e.g., ISFSI)
- Limited to Uranium fuel cycle → Thorium
- ANPR? (by EPA)

NUREG, 2009 Effluents

- NRC's report will be a NUREG
- Contract delays, other delays
- Approved last week, issued soon
- Contains quartile rankings (Ci)
- Contains 3-year trend graphs
- Reorganized (for trend graphs)
- The RG 1.21 reporting format assists data entry

Information Notice (IN)

- OpE indicates numerous RMS issues (HP, Maintenance Rule, & EP)
- Many personnel involved with RMSs
- RMSs serve many functions
- Several OpE examples are in the IN
- RMS are OOS for long periods
- “Fixes” are sometimes short-lived
- IN is in the approval process
- Approval anticipated in ~ 2 weeks

Inspection Procedures

- 071124.06, Radioactive Gaseous and Liquid Effluent Treatment
- Incorporated changes due to decommissioning planning rule (i.e., changes to 10 CFR 20.1406(c))
- NRC Inspectors may document instances of deviations from NEI 07-07 in Inspection Reports

TI 2515/185 Closure

- TI checking elements in NEI 07-07
- Determine if implementing NEI 07-07 in a committed and enduring fashion
- NRC evaluation indicated only one site did not complete 5 or more program elements
- Future – Baseline inspections for GW
- NRC will publish summary document

Cancer Study

- National Academies of Science
- Provide latest epidemiological info.
- Phase 1 is done (ML120860057)
- Plan to start Phase 2 this summer
- Phase 2 is ecologic study and a record-based case-control study
- Will do pilot study of selected sites
- Will review old effluent reports

RG 1.21 Reports, Misc

- RG 1.21 is for content of annual report
- Some sites are using Rev 2
- Ensure to check your commitments
- Reports are more heavily scrutinized
- May see more inspection questions
- “Abnormal Releases,” not always listed
- Sometimes “summation of all releases” tables are not included

RG 1.21 Reports, Misc (Continued)

- LLDs without “<“ in tables may be interpreted as positive results

Tritium in Soil

- Received many questions about tritium in soil last year.
- NRC split sampling may include tritium in soil if appropriate.
- 10 CFR 20.1501 addresses adequate surveys.
- Although tritium in soil may not always be appropriate, it may be appropriate under specific circumstances.

Questions

Acronyms & Abbreviations

- CFR = Code of Federal Regulations
- RMS = Radiation Monitoring System
- TI = Temporary Instruction
- NRC = Nuclear Regulatory Commission
- Reg Guide (or RG) = Regulatory Guide
- ICRP = International Commission on Radiological Protection
- ANPR = Advanced Notice of Proposed Rulemaking
- ISFSI = Independent Spent Fuel Storage Installation
- Ci = Curies
- HP = Health Physics
- EP = Emergency Protection
- OpE =Operating Experience
- OOS = Out of service
- NEI = Nuclear Energy Institute
- GW = Groundwater
- LLDs = Lower Limits of Detection
- < = less than