

July 20, 2012

MEMORANDUM TO: Andrew Persinko, Deputy Director
Environmental Protection and Performance
Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

FROM: Michael P. Lee, Senior Project Manager */RA/*
Environmental Protection and Performance
Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

SUBJECT: SUMMARY OF MAY 15, 2012, PUBLIC MEETING IN DALLAS, TEXAS,
ON POTENTIAL REVISIONS TO 10 CFR PART 61

On May 15, 2012, staff from the Office of Federal and State Materials and Environmental Management Programs conducted the second of three public meetings for the purpose of gathering stakeholder views and comments concerning the ongoing site-specific analysis rulemaking to revise the Commission's commercial low-level radioactive waste (LLW) regulation at 10 CFR Part 61. In a January 19, 2012, Staff Requirements Memorandum (SRM), designated SRM-COMWDM-11-0002/COMGEA-11-0002, the Commission directed the staff to seek stakeholder views on the following new features (requirements) to be included in the ongoing 10 CFR Part 61 rulemaking:

- Allowing licensees the flexibility to use International Commission on Radiation Protection (ICRP) dose methodologies in a site-specific performance assessment for the disposal of all radioactive waste.
- A two-tiered approach that establishes a compliance period that covers the reasonably foreseeable future and a longer period of performance that is not *a priori* and is established to evaluate the performance of the site over longer timeframes. The period of performance is developed based on the candidate site characteristics (waste package, waste form, disposal technology, cover technology and geo-hydrology) and the peak dose to a designated receptor.

CONTACT: Mike Lee, FSME/DWMEP
301-415-6887

- Flexibility for disposal facilities to establish site-specific Waste Acceptance Criteria (WAC) based on the results of the site's performance assessment and intruder assessment.
- A compatibility category for the elements of the revised rule that establish the requirements for site-specific performance assessments and the development of the site-specific WAC that ensures alignment between the States and Federal government on safety fundamentals, while providing the States with the flexibility to determine how to implement these safety requirements.

The May 15, 2012, meeting agenda and staff presentations were made publicly available prior to the meeting and can be found in the Agencywide Documents Access and Management System (ADAMS) (ML12131A562 and ML12132A189, respectively), the agency's official recordkeeping system. The announcement for this facilitated public meeting was published in the *Federal Register* (FR) on May 8, 2012 (77 FR 26991). Approximately 20 individuals participated in this public meeting, both in person and remotely (electronically) via webinar. Attendance included representatives from the Electric Power Research Institute (EPRI), the U.S. Department of Energy (DOE or the Department), and a current LLW disposal facility operator. See enclosure.

Consistent with the Commission's January 2012 direction, the NRC staff delivered technical presentations that focused on the four rulemaking topics. The public meeting was transcribed to serve as an office record of the event, and the stakeholder comments and suggestions provided can be found by inspecting the transcript. The meeting transcript is publicly available at the following NRC website location: <http://www.nrc.gov/aboutnrc/regulatory/rulemaking/potential-rulemaking/uwstreams.html>.

Following the formal staff presentations, stakeholders and other members of the interested public provided comments on the four questions posed by the Commission. The NRC staff obtained constructive feedback from the meeting participants. The NRC staff noted that it intended to review the May 15, 2012, meeting transcript and will continue to consider both oral and written comments received as it prepares a revised regulatory basis document in support of the limited 10 CFR Part 61 rulemaking.

March 2, 2012 Public Meeting Stakeholder Comments

The NRC staff received several comments in matter of any potential 10 CFR Part 61 rulemaking. At the March 2, 2012 meeting, the staff committed to maintain a list of those comments and integrate them into future staff presentations.

The first of those comments was that the staff considers expanding the ongoing rulemaking beyond the four rulemaking topics identified in the January 2012 SRM to other areas. Those other areas proposed by stakeholders included:

- Updating the waste concentration tables at Section 61.55 to reflect the latest dose conversion factors and dose methodologies.
- Revisit the current basis for the duration of institutional controls, currently specified as 100 years in Section 61.30 and consider extending it possibly to 300 years.

- Revisit the earlier assumptions concerning the over-estimation of isotopes required by Appendix G of the 10 CFR Part 20 LLW manifest regulation.
- Development of new regulatory requirements under 10 CFR Part 61 to address the disposal of greater-than-Class C (GTCC) LLW.
- Development of new regulatory requirements under 10 CFR Part 61 to address the management of so-called low-activity wastes, a type of short-lived LLW.

A portion of the May 15, 2012, public meeting included a continuing discussion of the merits of some of the stakeholder's additional rulemaking comments.

Second, at the March 2, 2012, public meeting it was also recommended that the staff specifically target the Agreement States and the Conference of Radiation Control Program Directors to obtain their respective views on the issues associated with the four rulemaking topics identified in the January 2012 SRM. The staff's May 15, 2012, presentations included a summary of outreach efforts that were subsequently undertaken to engage those entities.

Third, the staff was asked at the March 2, 2012, meeting to provide additional details concerning its preliminary thoughts concerning how the time of compliance might be treated/defined in any LLW performance assessment, as well as the issues associated with establishing a site-specific WAC. The staff's May 15, 2012, presentations included additional information concerning these two issues.

Lastly, at the March 2, 2012, public meeting, stakeholders recommended that the staff prepare a cross-walk describing the disposition of earlier comments resulting from a May 18, 2011, public workshop on draft proposed Part 61 rulemaking language (76 FR 24831), and which aspects of that now 'stayed' rulemaking would be preserved and advanced into the next (current) rulemaking round. The desire expressed by stakeholders was to avoid repeating any previously-submitted comments, particularly on those aspects of the rulemaking initiative that have been superseded by the Commission's most recent direction. To improve the transparency of the overall rulemaking process, this staff agreed to this recommendation and noted at the May 15, 2012, meeting that the requested cross-walk was now available for inspection on the NRC LLW web site.

May 15, 2012 Public Meeting Highlights

In addition to providing additional feedback on the four questions posed by the Commission in their 2012 SRM, the stakeholder discussions also touched on the following topics:

DOE's Approach to Conducting a LLW Performance Assessment. Consistent with DOE Order 435.1, the Department also conducts performance assessments for its LLW disposal facilities. Although the duration of those calculations is limited to 1000 years for the purposes of decision-making, DOE representatives reported that the performance assessment calculations themselves are sometimes conducted for time durations much longer than 1000 years so as to ensure that their numerical models do not reveal any unanticipated outcome that might lead to doses in excess of the health standards. Should large doses be predicted after the first 1000 years, a DOE representative reported that that they would use those longer-term results to

parametrically evaluate the effectiveness of preventative options in lowering doses to acceptable levels.

Separate Regulatory Treatment of Depleted Uranium (DU). One stakeholder representing EPRI suggested that separate disposal criteria and standards should be developed for DU under 10 CFR Part 61, independent of those already in-place for so-called “classic” types of commercial LLW. This approach is considered analogous to the treatment of GTCC LLW by the current commercial LLW regulation.

NRC Consistency with Current Federal Radiation Guidance. One stakeholder suggested that the 10 CFR Part 61’s Subpart C performance objectives were inconsistent with *Federal Guidance Policy Recommendations* issued by the U.S. Environmental Protection Agency. In particular, it was suggested that the Commission’s LLW regulations did not comport with Report No. 13, entitled “Cancer Risk Coefficients for Environmental Exposure to Radionuclide: Updates and Supplements” dated September 1999, particularly with respect to permissible dose exposures to children.

In a somewhat related matter, at both the March 2, 2012, and the May 15, 2012, public meetings, some stakeholders suggested that health risk rather radiation dose might be a more effective way of evaluating health consequences associated with the disposal of LLW.

Future Availability for Draft Part 61 Rule text and Implementing Guidance. As a matter of policy, it was noted during the public meeting that the NRC staff makes draft regulatory text publicly available at a certain point in the rulemaking process. This practice was observed when the staff had completed draft regulatory text initially in response to SRM-SECY-08-0147. The staff noted that it would also continue to adhere to this practice when draft regulatory text in response to SRM-COMWDM-11-0002/COMGEA-11-0002 had been developed. As regards the implementing guidance describing how to conduct a performance assessment involving DU and other long-lived isotopes, the staff noted that it would take under advisement any request to make that draft document also publicly available.

The next 10 CFR Part 61 public meeting is scheduled for July 19, 2012, in Rockville (Maryland).

Enclosure:
Attendance List

parametrically evaluate the effectiveness of preventative options in lowering doses to acceptable levels.

Separate Regulatory Treatment of Depleted Uranium (DU). One stakeholder representing EPRI suggested that separate disposal criteria and standards should be developed for DU under 10 CFR Part 61, independent of those already in-place for so-called “classic” types of commercial LLW. This approach is considered analogous to the treatment of greater-than-Class C LLW by the current commercial LLW regulation.

NRC Consistency with Current Federal Radiation Guidance. One stakeholder suggested that the 10 CFR Part 61’s Subpart C performance objectives were inconsistent with *Federal Guidance Policy Recommendations* issued by the U.S. Environmental Protection Agency. In particular, it was suggested that the Commission’s LLW regulations did not comport with Report No. 13, entitled “Cancer Risk Coefficients for Environmental Exposure to Radionuclide: Updates and Supplements” dated September 1999, particularly with respect to permissible dose exposures to children.

In a somewhat related matter, at both the March 2, 2012, and the May 15, 2012, public meetings, some stakeholders suggested that health risk rather radiation dose might be a more effective way of evaluating health consequences associated with the disposal of LLW.

Future Availability for Draft Part 61 Rule text and Implementing Guidance. As a matter of policy, it was noted during the public meeting that the NRC staff makes draft regulatory text publicly available at a certain point in the rulemaking process. This practice was observed when the staff had completed draft regulatory text initially in response to SRM-SECY-08-0147. The staff noted that it would also continue to adhere to this practice when draft regulatory text in response to SRM-COMWDM-11-0002/COMGEA-11-0002 had been developed. As regards the implementing guidance describing how to conduct a performance assessment involving DU and other long-lived isotopes, the staff noted that it would take under advisement any request to make that draft document also publicly available.

The next 10 CFR Part 61 public meeting is scheduled for July 19, 2012, in Rockville (Maryland).

Enclosure:
Attendance List

ML12171A179

OFC	DWMEP	DWMEP	DWMEP	DWMEP
NAME	MLee	TMoon	GSuber	MLee
DATE	6/19/12	6/19/12	6/20/12	6/20/12

OFFICIAL RECORD COPY

DALLAS, TEXAS, PUBLIC MEETING ATTENDANCE LIST

May 15, 2012

A. Carrera	U.S. Nuclear Regulatory Commission
M. Lee*	U.S. Nuclear Regulatory Commission
B. Leslie	U.S. Nuclear Regulatory Commission
T. Moon	U.S. Nuclear Regulatory Commission
D. Persinko	U.S. Nuclear Regulatory Commission
G. Suber	U.S. Nuclear Regulatory Commission
D. Martin	U.S. Department of Energy
L. Suttora*	U.S. Department of Energy
R. Lundberg*	State of Utah
R. Seitz*	Savannah River National Laboratory
A. Makhijani*	Institute for Energy & Environmental Research
D. D'Arrigo *	Nuclear Information and Resource Service
E. Selig	Advocates for Responsible Disposal in Texas
L. Edwards	Electric Power Research Institute
T. Kalinowski	D.W. James Consulting
J. Alldredge	Luminant
J. Greeves*	Talisman International*
S. Goldston*	EnergySolutions
S. McCandless	EnergySolutions
J. Davis	URENCO USA
R. Baird	URS Corporation
D. Shrum	EnergySolutions
R. Baltzer	Waste Control Specialists

**Participated via webinar/telephone*

Enclosure