

# STRATEGIC ASSESSMENT OF LOW-LEVEL RADIOACTIVE WASTE REGULATORY PROGRAM

Gregory Suber, Chief  
Low-Level Waste Branch

Division of Waste Management and Environmental Protection  
Office of Federal and State Materials and Environmental  
Management Programs

July 8, 2014  
NRC Public Webinar  
Rockville, MD

# Objective

To gather information on an update to the NRC's 2007 Strategic Assessment of the LLRW regulatory program from stakeholders and other interested members of the public.

# Agenda

**Tuesday, July 8, 2013**

1:00 – 1:15 pm Introduction

G. Suber (NRC)

1:15 – 1:30 pm Background on  
2007 Strategic Assessment

M. George (NRC)

1:30 – 1:45 pm Specific Requests for Comments

M. George (NRC)

1:45 – 3:45 pm Questions and Comments

Public

3:45 – 4:00 pm Conclusion

G. Suber (NRC)

# QUESTIONS?



# BACKGROUND ON 2007 STRATEGIC ASSESSMENT OF LOW-LEVEL RADIOACTIVE WASTE REGULATORY PROGRAM

Matthews George

Low-Level Waste Branch

Division of Waste Management and Environmental Protection  
Office of Federal and State Materials and Environmental Management  
Programs

July 8, 2014  
NRC Public Webinar  
Rockville, MD

# Topics

- Background
- Status of the 2007 Strategic Assessment
- Proposed updates to the Strategic Assessment

# Background

Challenges and issues included:

- Desire of industry for greater flexibility and reliability in LLRW disposal options;
- Increased storage of Class B and Class C LLRW;
- Potential need to dispose of large quantities of power plant decommissioning waste and depleted uranium;
- LLRW program required greater resources than were available;
- Increased security concerns; and
- New waste streams that may be generated.

# Background (*cont...*)

## 2007 Strategic Assessment of the NRC's LLRW regulatory program

### Goal:

- Identify and prioritize staff activities.

### Objectives:

- Ensure safe and secure LLRW disposal;
- Improve the effectiveness, efficiency, and adaptability of the NRC's LLRW regulatory program; and
- Ensure regulatory stability and predictability.



# Background (*cont...*)

- Variety of activities proposed
- List of 20 activities developed
- Priorities of high (7 tasks), medium (6 tasks), or low (7 tasks) assigned

# Background (cont...)

## High Priority Activities

Task #	Task Description
1	Review and update guidance on extended storage of LLRW.
2	Develop guidance on 10 CFR 20.2002 Alternate Disposal Requests.
3	Determine if disposal of large quantities of depleted uranium would change the waste classification tables.
4	Update Branch Technical Position on Concentration Averaging and Encapsulation.
5	Develop procedures for Import/Export Review.
6	Develop guidance on alternate waste classification (10 CFR 61.58).
7	Perform scoping study of the need to revise/expand byproduct material financial assurance to account for life-cycle cost.

# Background (cont...)

## Medium Priority Activities

Task #	Task Description
1	Develop licensing criteria for greater than Class C (GTCC) disposal facility.
2	Consolidate LLRW guidance.
3	Develop guidance that summarizes disposition options for low-end materials and waste.
4	Coordinate with other agencies on consistency in regulating low activity waste disposal.
5	Identify new waste streams.
6	Develop information notice on waste minimization.

# Background (cont...)

## Low Priority Activities

Task #	Task Description
1	Evaluate potential changes to LLRW regulatory program as a result of severe curtailment of disposal capacity.
2	Promulgate rule for disposal of low-activity waste.
3	Identify and evaluate potential legislative changes.
4	Implement major revisions to 10 CFR Part 61.
5	Develop waste acceptance criteria for LLRW disposal in uranium mill tailings impoundments.
6	Examine need for guidance on defining when radioactive material becomes LLRW.
7	Develop and implement national waste tracking system.

# Status of the Strategic Assessment

- Strategic Assessment 7 high prioritized activities
  - ✓ Review and update guidance on extended storage
  - ✓ \* Determine if disposal of large quantities of Depleted Uranium would change waste classification tables
  - \* Develop guidance on 10 CFR 20.2002 Alternate Disposal Requests
  - \* Update Branch Technical Position on Concentration Averaging and Encapsulation
  - \* Develop guidance on alternate waste classification (10 CFR 61.58)
    - Develop procedures for Import/Export Reviews
    - Perform scoping study of the need to revise/expand byproduct material financial assurance

✓ = completed projects and \* = current projects

# Proposed Updates to the Strategic Assessment

- Review 2007 Strategic Assessment and could reprioritize some of remaining activities, such as:
  - Develop licensing criteria for greater than Class C disposal facility;
  - Perform scoping study of the need to revise/expand byproduct material financial assurance to account for life-cycle cost; or
  - Develop procedures for Import/Export Review.

# March 7, 2014 Phoenix Workshop on Update to the Strategic Assessment

- Issues to consider include:
  - Low-activity waste;
  - Waste classification;
  - Proposed 10 CFR Part 61 rulemaking;
  - Clearance;
  - Disposal capacity;
  - Gap analysis;
  - Greater than Class C waste;
  - Waste manifest;
  - New waste streams;
  - Sealed sources; and
  - Waste attribution.

# SPECIFIC REQUESTS FOR COMMENTS

Matthews George  
Low-Level Waste Branch  
Division of Waste Management and Environmental Protection  
Office of Federal and State Materials and Environmental Management  
Programs

July 8, 2014  
NRC Public Webinar  
Rockville, MD



# Topics

- Current national LLRW disposal program
- Current LLRW disposal regulatory system
- Update to the 2007 Strategic Assessment
- Communication & cooperation
- Factors to evaluate the proposed activities

# Specific Requests for Comments

- Current National LLRW Disposal Program:
  - What changes anticipated in LLRW area may impact safety, security & protection of the environment?

# Specific Requests for Comments (cont...)

- Current LLRW Disposal Regulatory System:
  1. What are the key safety concerns relative to LLRW disposal?
  2. What improvements in the current regulatory approach toward LLRW disposal in the US would enhance the NRC's ability to ensure safe & secure LLRW disposal?
  3. What actions could be taken by the NRC & other Federal and State authorities, as well as private industry to optimize the management of LLRW?
  4. Are there additional actions that can/should be taken regarding specific issues?

# Specific Requests for Comments (cont...)

- Update to the 2007 Strategic Assessment:
  - What activities should remain, removed or added to the list of proposed activities developed in 2007 Strategic Assessment?

# Specific Requests for Comments (cont...)

- **Communication & Cooperation**

1. What works well and not-so-well, domestically and/or internationally with regard to communicating with affected and interested stakeholders on the management of radioactive waste?
2. What specific actions can NRC take to improve coordination with other Federal agencies for a more consistent treatment of radioactive waste that possess similar or equivalent levels of biological hazards?

# Factors to Evaluate the Proposed Activities

- Impact to Strategic Goals (e.g., safety, security)
- Need (near, medium, or long terms)
- Resulting benefits
- Level of efforts (cost, resources)
- Potential disposal scenarios

# Factors to Evaluate the Proposed Activities (cont...)

- Potential Disposal Scenarios
  - When evaluating the proposed activities, the responsiveness to potential disposal scenarios will be considered.
  - The following three (3) revised disposal scenarios are proposed for incorporation in the updated Strategic Assessment
    - “optimistic future” scenario: a continuous expansion of safe, secure disposal capacity for the entire spectrum of LLRW.
    - “realistic future” scenario: a clear path to disposal exist for Class A, B and C wastes.
    - “pessimistic future” scenario: disposal capacity is constrained for LLRW in the not too distant future.

# QUESTIONS AND COMMENTS

July 8, 2014  
NRC Public Webinar  
Rockville, MD



# CONCLUSION

Gregory Suber, Chief  
Low-Level Waste Branch

Division of Waste Management and Environmental Protection  
Office of Federal and State Materials and Environmental  
Management Programs

**July 8, 2014**  
**NRC Public Webinar**  
**Rockville, MD**

# Next Steps

- Information gathering
- *Federal Register Notice* soliciting comments on proposed activities,
  - Comment period closes on September 15, 2014
- Request comment on draft updated Strategic Assessment in 2015

# Contact Information

- Information available at NRC website:
  - <http://www.nrc.gov/waste/llw-disposal/llw-pa/llw-strategic-assessment.html>
- Written comments to [www.regulations.gov](http://www.regulations.gov) under Docket ID NRC-2014-0080
- Points of Contact:
  - Melanie Wong  
(301) 415-2432, [Melanie.Wong@nrc.gov](mailto:Melanie.Wong@nrc.gov)
  - Mathews George  
(301) 415-7065, [Mathews.George@nrc.gov](mailto:Mathews.George@nrc.gov)