



United States Nuclear Regulatory Commission

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*Protecting People and the Environment*

# **NRC/DOE Joint Public Meeting**

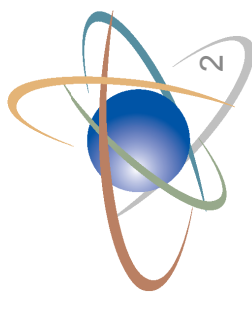
## **NDAA Section 3116 Accomplishments, Challenges, and Lessons Learned**

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

# Overview

## *NRC WIR Program*

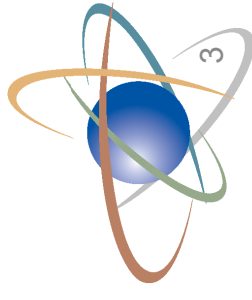
- **Basis for Involvement**
- **Accomplishments**
- **Challenges**
- **Path Forward**



# Basis for Involvement

*Overall Goal*

- Protect public health and safety
- To enable DOE's disposal of these wastes with the benefit of NRC's advice (consultation) and oversight (monitoring)
- Advice and lessons from oversight should be timely to increase effectiveness



# Basis for Involvement

## National Defense Authorization Act - Consultation

This Act may be cited as the “Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005”.

50 USC 2601      ●      **SEC. 3116. DEFENSE SITE ACCELERATION COMPLETION.**

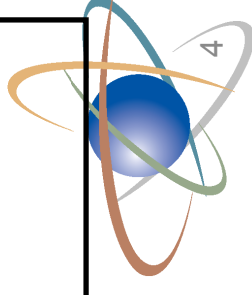
●      (a) IN GENERAL.—Notwithstanding the provisions of the Nuclear Waste Policy Act of 1982, the requirements of section 202 of the Energy Reorganization Act of 1974, and other laws

●      reprocessing of spent nuclear fuel that the Secretary of Energy (in this section referred to as the “Secretary”), in consultation with the Nuclear Regulatory Commission (in this section referred to as the “Commission”), determines—

(1) does not require permanent isolation in a deep geologic repository for spent fuel or high-level radioactive waste;

(2) has had highly radioactive radionuclides removed to the maximum extent practical; and

(3)(A) does not exceed concentration limits for Class C low-level waste as set out in section 61.55 of title 10, Code



# Basis for Involvement

## *National Defense Authorization Act - Monitoring*

50 USC 2601

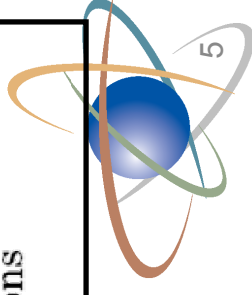
### **SEC. 3116. DEFENSE SITE ACCELERATION COMPLETION.**

(b) **MONITORING BY NUCLEAR REGULATORY COMMISSION.**—(1) The Commission shall, in coordination with the covered State, monitor disposal actions taken by the Department of Energy pursuant to subparagraphs (A) and (B) of subsection (a)(3) for the purpose of assessing compliance with the performance objectives set out in subpart C of part 61 of title 10, Code of Federal Regulations.

(2) If the Commission considers any disposal actions taken by the Department of Energy pursuant to those subparagraphs to be not in compliance with those performance objectives, the Commission shall, as soon as practicable after discovery of the noncompliant conditions, inform the Department of Energy, the covered State, and the following congressional committees:

(A) The Committee on Armed Services, the Committee on Energy and Commerce, and the Committee on Appropriations of the House of Representatives.

(B) The Committee on Armed Services, the Committee on Energy and Natural Resources, the Committee on Environment and Public Works, and the Committee on Appropriations of the Senate.

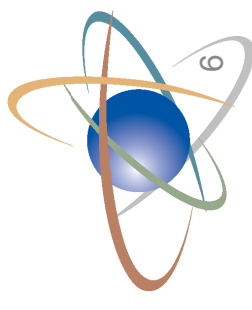


# Basis for Involvement

## *NRC's Part 61 Performance Objectives*

### **Subpart C—Performance Objectives**

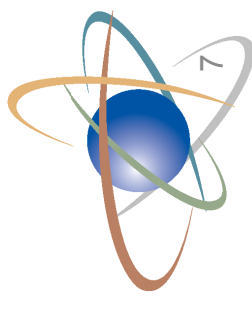
- § 61.40 General requirement.**
- § 61.41 Protection of the general population from releases of radioactivity.**
- § 61.42 Protection of individuals from inadvertent intrusion.**
- § 61.43 Protection of individuals during operations.**
- § 61.44 Stability of the disposal site after closure.**



# NDAA Implementation

*NUREG-1854, NRC Staff Guidance*

- Provides direction to the NRC staff in carrying out NDAA activities
- Does not set forth regulatory requirements for NRC nor DOE
- Incorporated comments from the public and from DOE
- To be revised and updated periodically to clarify the content or incorporate modifications as needed



# NRC Monitoring

## Notification Letters

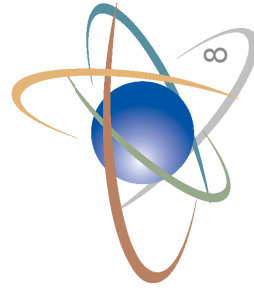
Type	Notification
<b>Non-Compliant Performance Objective Notification Letters</b>	
I	<u>Evidence Performance Objective Is Not Met</u>
II	<u>Lack of Compliance Demonstration</u>
III	<u>Insufficient Information</u>
<b>“Other” Notification Letters</b>	
IV	<u>Concern</u>
V	<u>Resolution</u>

Signed out by  
NRC Chairman

Sent to Congress,  
DOE and covered  
State

Signed out by  
NRC Staff of NRC  
Management

Sent to  
DOE and covered  
State

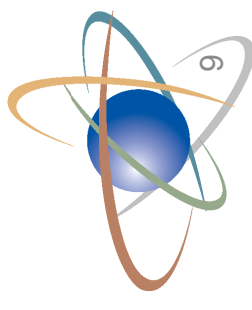




# Recent Activities

## Saltstone Technical Evaluation Report

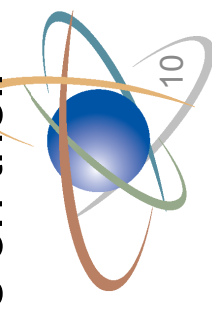
- The NRC staff's April 2012 Letter of Concern stated:
  - “ . . . NRC staff has reviewed DOE's proposed action and concluded that the performance objective in §61.41 for protection of the general population from releases may be exceeded by DOE's current proposed disposal activities for salt waste. Although the NRC staff cannot conclude that the performance objective in §61.41 is met, the potential dose to an off-site member of the public from DOE's disposal actions is still expected to be relatively low (i.e., approximately 1 mSv/yr [100 mrem/yr], the public dose limit in §20.1301).”



# Recent Activities

## NRC/DOE Communications

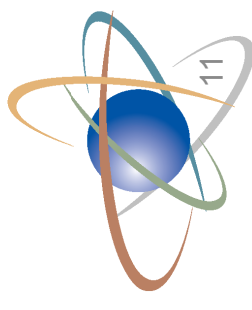
- In July 2012, DOE submitted a revised (lower) Tc-99 inventory for the next few disposal structures:
  - “ . . . updated [Tc]-99 inventory projection for [disposal structures 2A, 2B, 3A, 3B, 5A, and 5B]. These projections reflect the current salt waste batching, treatment, and disposal plans for these [six structures].”
- In August 2012, following analysis of DOE’s revised inventory, NRC staff concluded:
  - “ . . . if DOE’s new projected Tc-99 inventory for [Saltstone Disposal Units] 2, 3, and 5 is correct, then it is unlikely to cause an off-site peak dose exceeding the requirements of §61.41 (i.e., 0.25 mSv/yr (25 mrem/yr))”
- 2 NRC observations and 1 public meeting have been held since August 2012, where DOE has provided updates on their progress to resolving our concerns



# Accomplishments

*NRC's NDAA Responsibilities*

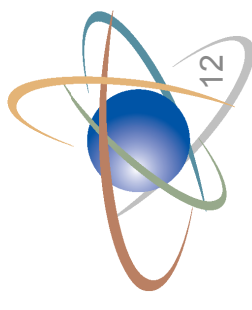
- Accomplishments under NRC consultation
- Accomplishments under NRC monitoring
- Enhanced communication and working relationship with DOE



# Accomplishments

*In NRC's Consultation Role*

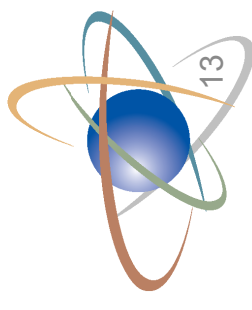
- Saltstone Facility (WD reviewed 2005)
- F-Tank Farm (WD reviewed 2011)
- H-Tank Farm (WD under review, RAIs by Summer 2013)
- Idaho National Laboratory Tank Farm Facility (WD reviewed 2005)



# Accomplishments

*In NRC's Monitoring Role*

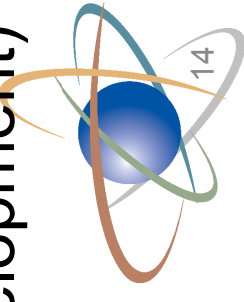
- **Saltstone**
  - 14 Onsite Observation Trips to Saltstone
  - 11 Technical Reviews
  - 2007 Monitoring Plan
  - 2012 Technical Evaluation Report on Revised Performance Assessment
  
- **F-Tank Farm**
  - 3 Onsite Observations
  - 3 Technical Reviews
  - 2012 Monitoring Plan
  
- **INL Tank Farm Facility**
  - 5 Onsite Observations
  - 10 Technical Reviews
  - 2007 Monitoring Plan



# Accomplishments

## *In NRC's Monitoring Role – Annual Monitoring Reports*

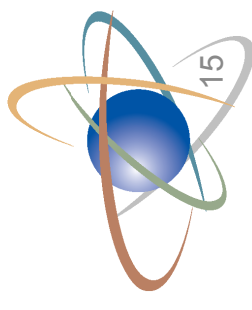
- 2007 NUREG-1911 (ML082280145)
- 2008 NUREG-1911, rev. 1 (ML091400501)
- 2009 NUREG-1911, rev. 2 (ML101950390)
- 2010 NUREG-1911, rev. 3 (ML111890390)
- 2011 NUREG-1911, rev. 4 (ML12144A318)
- 2012 (-2013) NUREG-1911, rev. 5 (under development)



# Accomplishments

*Progress in Communication*

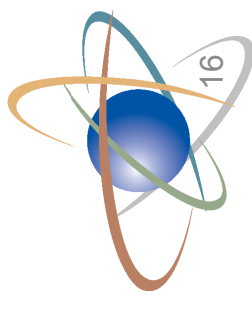
- Periodic management meetings
- Telephone management exchanges, as necessary
- Extensive technical exchanges between NRC and DOE staff
- Greater understanding/respect of each agency's roles



# Challenges

## *Programmatic Challenges*

- Synchronizing agency efforts to satisfy the Federal Facilities Agreements
- Ensuring level of detail in review to inform decisions
- Cultural and procedural differences between agencies
- Available Resources

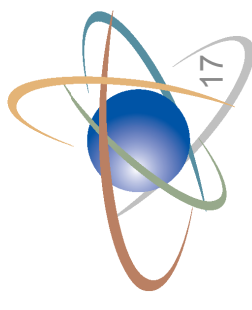




# Challenges

## *Technical Challenges*

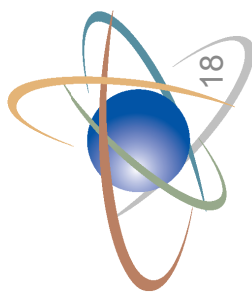
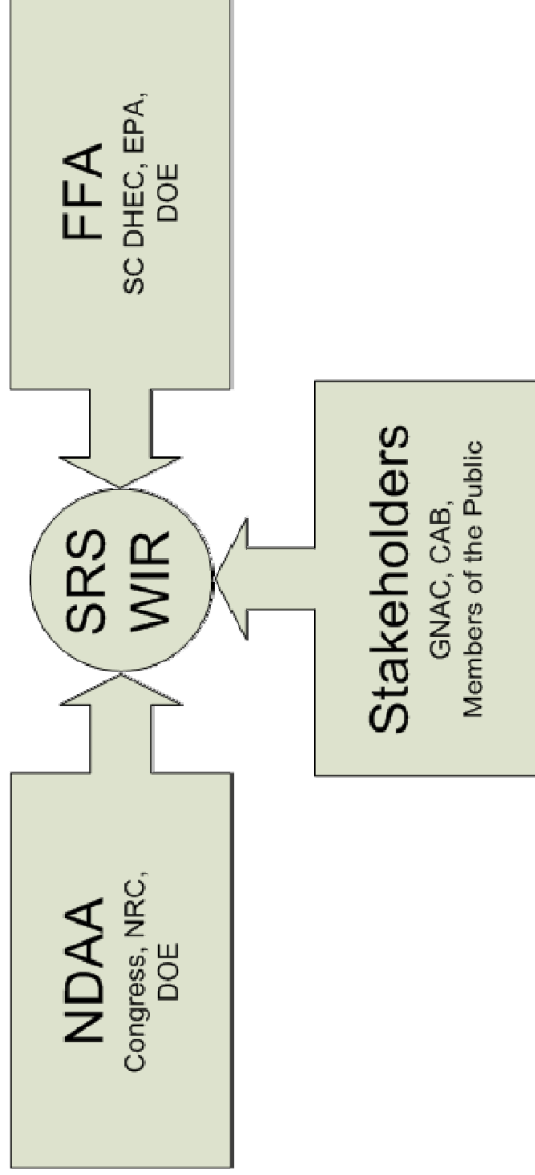
- Criterion 2 review: highly radioactive radionuclides removed to the maximum extent practical (during consultation)
- Assessing whether data agree with stated assumptions
- Assessing whether Part 61 performance objectives are being met



# Challenges

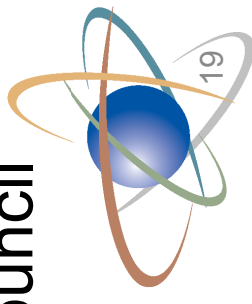
## SRS WIR Landscape

Complex technology, technology limitations, agency cultures, public acceptance, resource constraints, conservative standards



# NRC Path Forward

- Continue to keep public health and safety the NRC's top priority
- Continue consultation activities and, when complete, publish a combined monitoring plan for F-Tank and H-Tank Farms
- Continue monitoring activities for Saltstone and F-Tank Farm and continue to coordinate monitoring activities with SC DHEC and EPA
- Continue to interact with the SRS Citizens Advisory Board and SC Governors Nuclear Advisory Council



# Thank you for Participating

- For questions and comments, please contact
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