

**NRC Responsibilities under the
Ronald W. Reagan National Defense Authorization Act
for FY2005 and Recent Implementation
at the Savannah River Site**

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by

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Key Points

- NRCs Role in the NDAA
- Milestones for Saltstone Disposal Facility
- Milestones for F-Tank Farm
- Milestones for H-Tank Farm
- Accomplishments
- Path Forward

NRC's NDAA Role

- DOE requested NRC to review its draft basis for a Waste Determination (WD) as part of consultation under the NDAA.
 - Technical Exchanges
 - Requests for Additional Information (RAIs)
 - Technical Evaluation Report (TER)

Consultation

- Once the Secretary of Energy makes a Waste Determination (WD), NRC, in coordination with the State, monitors DOE's disposal actions.
 - Monitoring Plan
 - On-Site Observations
 - Technical Review Reports

Monitoring

Milestones for SDF

Rectangular Vault



2005: DOE submits Draft WD/PA and NRC issues TER, Rev. 0 with conclusion that DOE could meet POs

2006: DOE Secretary signs Final WD and NRC monitoring begins

2007: NRC issues SDF Monitoring Plan, Rev. 0

Circular Disposal Structures



2009: DOE submits revised PA
2012: NRC issues Type-IV letter to DOE/SCDHEC and TER, Rev. 1 with conclusion that DOE may not meet one PO

2013: NRC issues SDF Monitoring Plan, Rev. 1 and DOE issues FY13 Special Analysis

2014: NRC issues RAI Comments on DOE FY13 Special Analysis

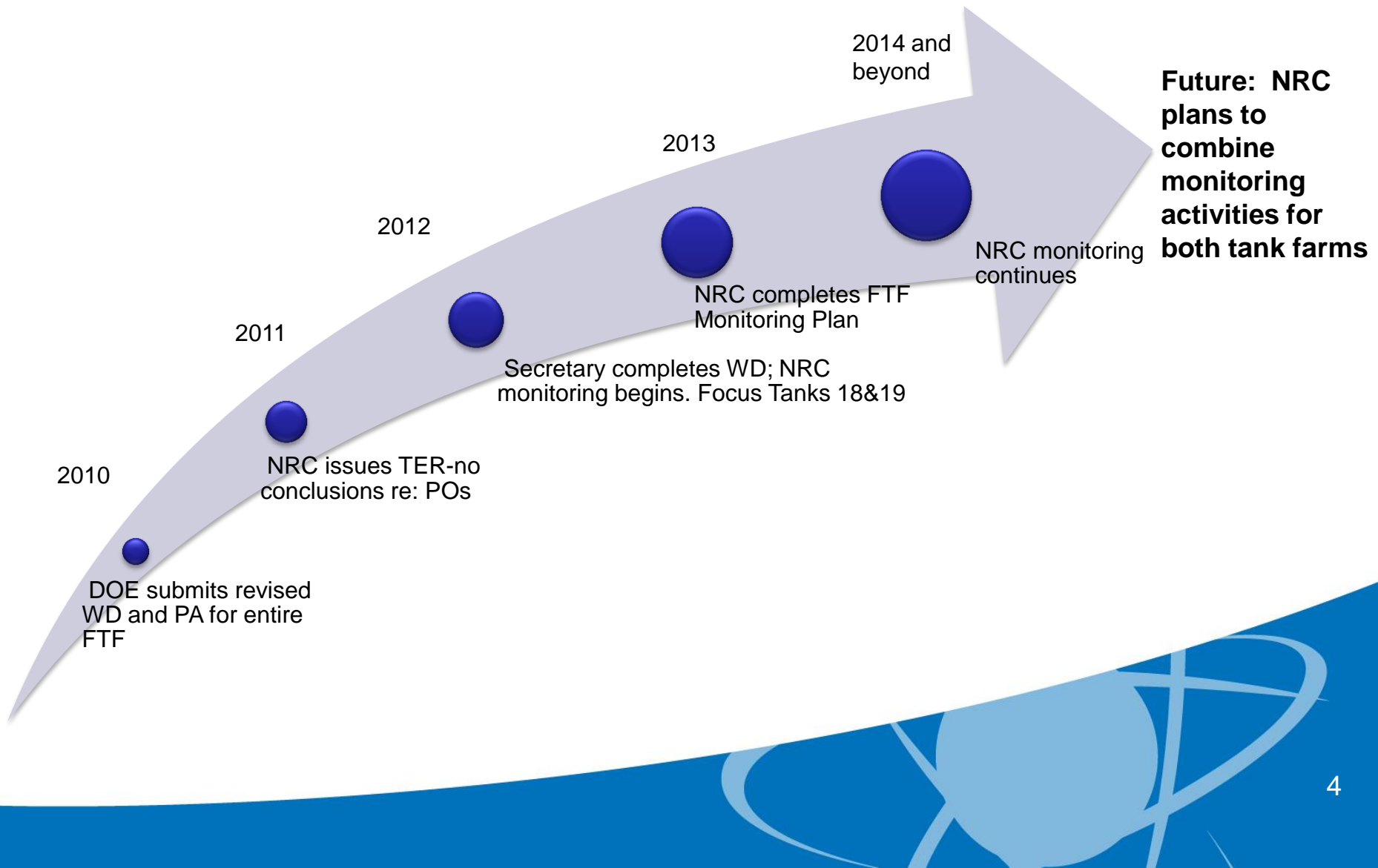
Much Larger Circular Disposal Structures (currently under construction)



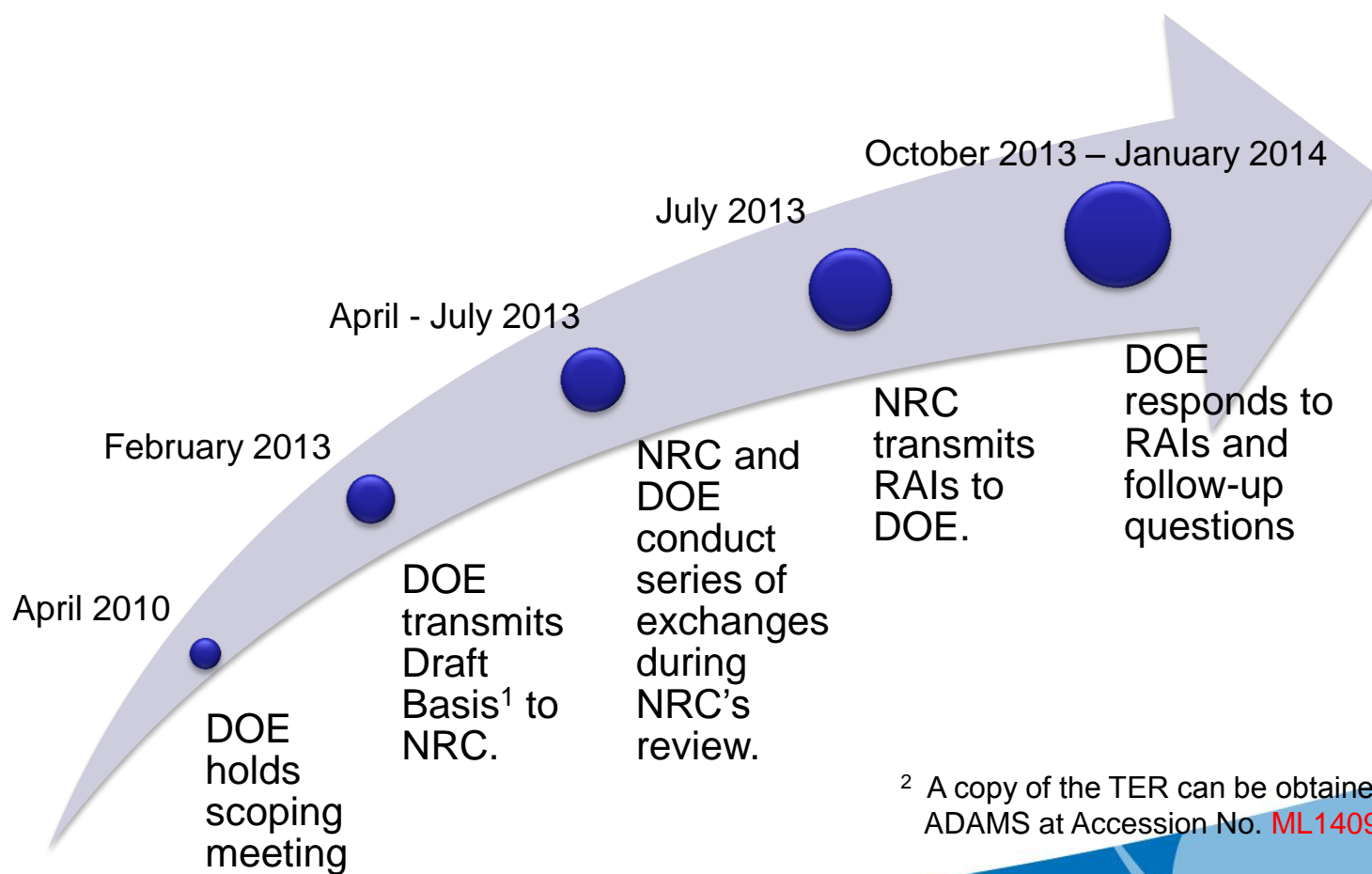
2014: NRC issues RAIs on DOE FY13 SA

DOE expects FY14 SA
TBD: NRC revised TER

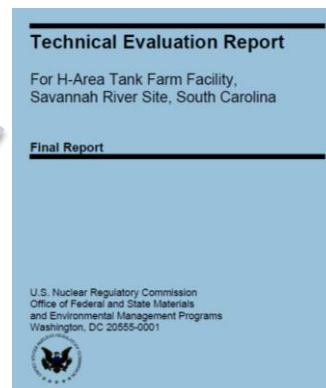
Milestones for FTF



Milestones for HTF



June 2014



NRC publishes TER²

² A copy of the TER can be obtained from the NRC's ADAMS at Accession No. [ML14094A496](#).

Overview of HTF TER

- Addresses three criteria specified in NDAA
 - whether or not repository disposal is required
 - removal of highly radioactive radionuclides to the maximum extent practical
 - ability to meet performance objectives specified in 10 CFR Part 61
- Review results and recommendations very similar to those in FTF TER
- Major differences
 - some HTF tanks have been completely submerged
 - some HTF tanks have a significant volume of waste in annuli
- Review results and recommendations will become basis for NRC monitoring

Review Results and Recommendations

- Criterion 1 (Geologic Disposal)
 - WIR does not require deep geologic disposal
- Criterion 2 (Removal of HRRs to MEP)
 - Approach to developing tank inventories is reasonable
 - Emphasize HRR removal rather than volume
 - Better explain uncertainties in sampling/analysis
 - Consider additional waste removal from Tank 16
annulus

Review Results and Recommendations (cont.)

- Criterion 3 (Waste Classification and Performance Objectives)
 - Waste classification generally consistent with NRC
 - No conclusions re: meeting performance objectives
 - Improve support for key barriers to release in PA
 - Workers and public protected during operations
 - Additional analysis for long-term stability
 - DOE should complete waste release experiments
 - DOE should evaluate releases from Type I and II tank annuli

Accomplishments

- Completion of NRC'S Consultation Role
- Monitoring
 - Increased NRC region involvement
 - Incorporated "lessons learned" into Saltstone Disposal Facility Monitoring Plan, Rev. 1
 - Streamlining monitoring program
- Increased NRC role at other DOE non-NDAA WIR sites

Path Forward

- Continue to work with DOE to address/resolve concerns in SDF Type-IV letter
- Consolidate SRS tank farm monitoring activities
- Continue to gather experience to improve efficiency and effectiveness of our monitoring program
- Revise monitoring guidance in NUREG 1854

Closing Thoughts

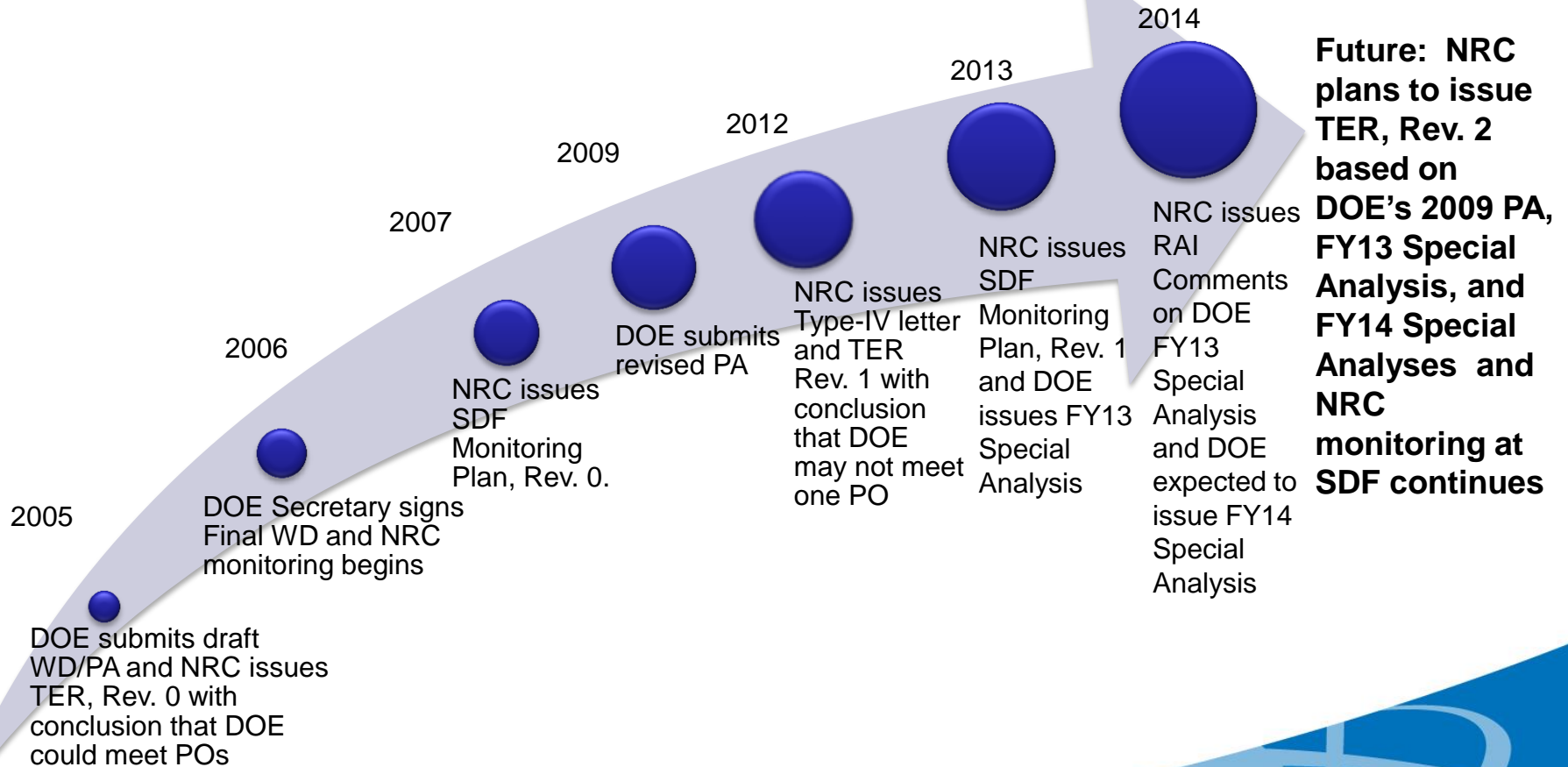
- NRC has completed consultation at Savannah River Site
- Consultation has added value to the Waste Determination process
- NRC will continue to carry out its monitoring responsibilities in coordination with SCDHEC
- NRC will consolidate and streamline its monitoring activities at the Savannah River Site
- Strong and productive relationship between NRC and DOE

QUESTIONS

BACK-UP SLIDES



Milestones for SDF



SDF Aerial Photo



Milestones Related to F-Tank Farm

- **Consultation**
 - 2005 DOE submitted draft WD and PA for Tanks 18/19
 - 2008 DOE requested that NRC stop review: WD will be revised to include entire FTF
 - 2010 DOE submitted revised WD and PA for entire FTF
 - 2011 NRC issued TER with no conclusions regarding POs
 - 2012 DOE issued final WD
- **Monitoring**
 - 2012 Early monitoring focused on closure of Tanks 18 and 19
 - 2013 NRC issued FTF Monitoring Plan
 - 2014 NRC monitoring activities continue
 - Following HTF WD, NRC will consolidate tank monitoring activities