



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# **Draft Waste Incidental to Reprocessing (WIR) Evaluation for the Test Bed Initiative (TBI) Demonstration**

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- Answer the following questions:
  - What is the purpose of this Draft WIR Evaluation?
  - Has DOE made other Determinations?
  - What is the WIR Consultation and Public Process?
    - Open Public Process
    - WIR Criteria
  - How to submit comments

# Purpose of the Draft TBI WIR Evaluation

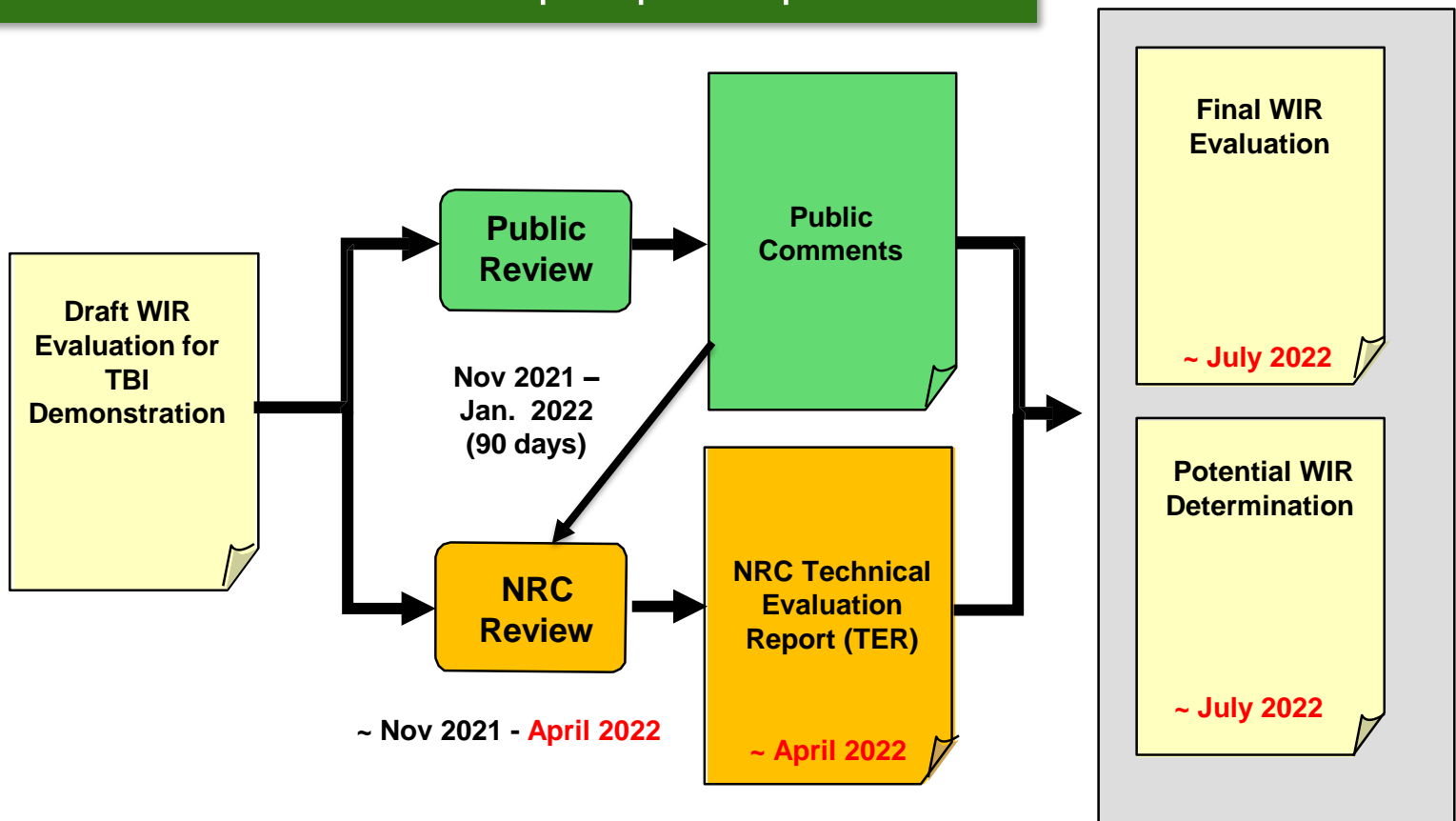
- As background:
  - DOE previously decided to separate low-activity waste from other tank waste and vitrify (immobilize in glass) some of the low activity tank waste.
  - DOE has not selected a supplemental treatment method for the remaining low-activity waste
- DOE is proposing the TBI Demonstration to demonstrate, at an engineering scale, a potential supplemental LAW treatment approach.
- This Draft WIR Evaluation concerns ~ 2,000 gallons of Tank SY-101 supernate that will be pretreated using in- tank settling, followed by decanting, filtration and processing through ion exchange (IX) media in an In-Tank Pretreatment System.
- Under the proposed TBI Demonstration, the pretreated waste will be solidified (grouted) at an offsite, commercial treatment facility and the solidified waste will be disposed of as mixed low-level radioactive waste (LLW) at an offsite commercial facility (either EnergySolutions near Clive, Utah or the Waste Control Specialists Federal Waste Facility near Andrews, Texas).
- DOE has prepared the Draft WIR Evaluation to assess whether the separated, pretreated and solidified tank waste meets the criteria in DOE Manual 435.1-1, is waste incidental to reprocessing and may be managed as LLW.

# Has DOE made other Determinations?

- Yes, DOE has made similar determinations
- DOE has made several DOE Manual 435.1-1 WIR determinations, based on WIR Evaluations
- DOE has also made several determinations for waste at SRS and Idaho, pursuant to analogous criteria in Section 3116 of the National Defense Authorization Act for Fiscal Year 2005

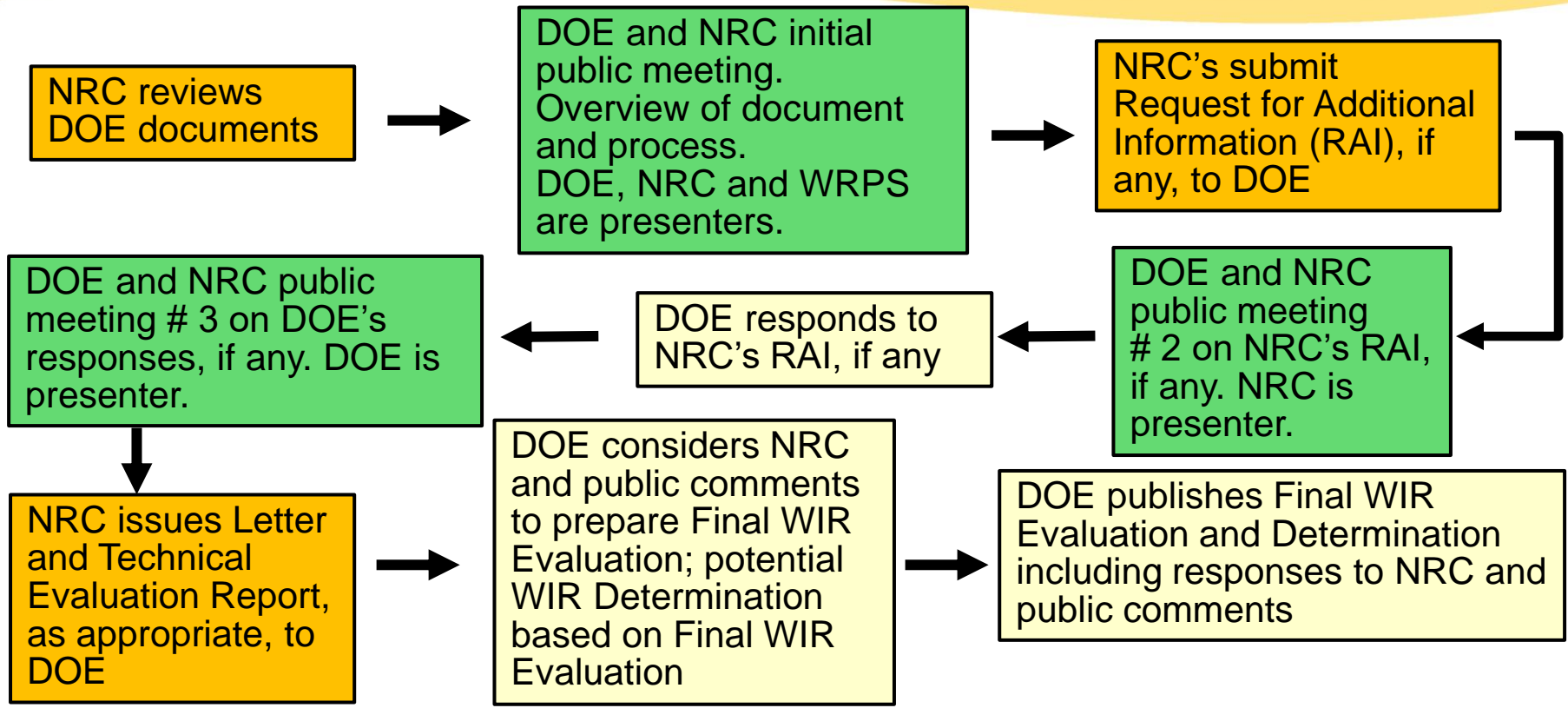
# WIR Consultation and Public Process

NRC consultation ~ 6 month open public process



DOE Actions   Nuclear Regulatory Commission   Public

*All dates in red are estimates, subject to change*



DOE Actions
  Nuclear Regulatory Commission
  Public

DOE shares all public comments with NRC. DOE and NRC anticipate staff to staff, non-decision conference calls to ask clarification questions which will be open to the public to observe. DOE and NRC will post a summary of all public meetings.

## The relevant DOE Manual 435.1-1 Chapter II, section B(2)(a) criteria for determining that waste to be incidental to reprocessing:

1. Have been processed, or will be processed, to remove key radionuclides to the maximum extent that is technically and economically practical; and
2. Will be managed to meet safety requirements comparable to the performance objectives set out in 10 CFR 61 Subpart C; and
3. Are to be managed, pursuant to DOE's authority under the Atomic Energy Act of 1954, as amended, and in accordance with the [LLW] provisions of Chapter IV of this Manual, provided the waste will be incorporated in a solid physical form at a concentration that does not exceed the applicable concentration limits for Class C low-level waste as set out in 10 CFR 61.55, Waste Classification

***The Draft WIR Evaluation demonstrates that the waste will meet these criteria.***

# How can you access the Draft WIR Evaluation?

The Draft WIR Evaluation is available on the Internet at:

<https://www.hanford.gov/page.cfm/TestBedInitiative> or

<https://www.hanford.gov/page.cfm/ReprocessingEvaluationforBedInitiative>



# How to Submit Comments

Written comments should be submitted via email to:

[TBIWIR@rl.gov](mailto:TBIWIR@rl.gov)

Or postal mail to:

Ms. Jennifer Colborn

U.S. Department of Energy, Office of River Protection

Mail Stop H6-60

2440 Stevens Drive

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Submit comments by Wednesday, February 2, 2022.

