



U.S. DEPARTMENT OF  
**ENERGY**



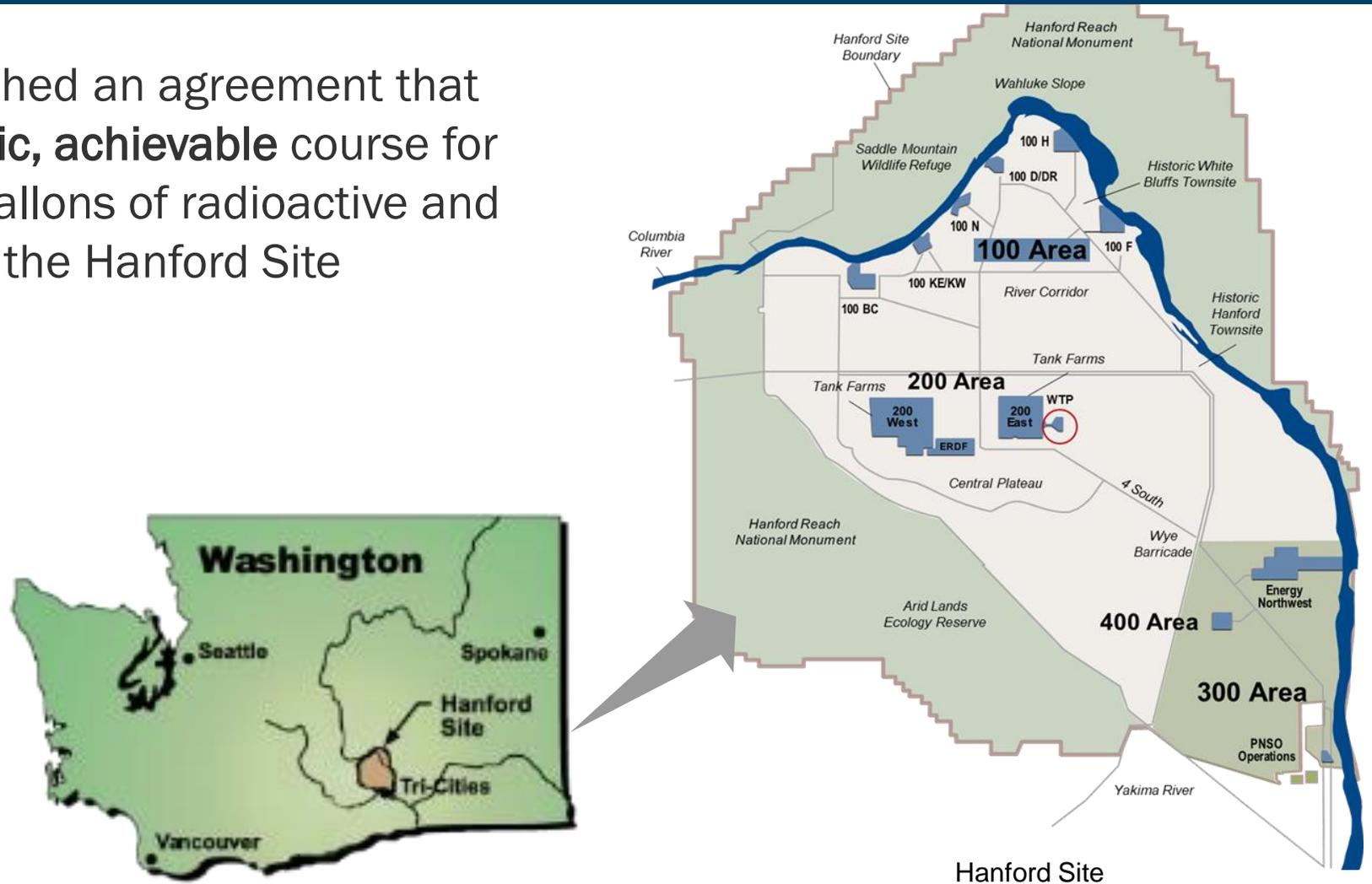
DEPARTMENT OF  
**ECOLOGY**  
State of Washington

## Holistic Agreement on Cleanup of Hanford Site Tank Waste

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# Holistic Agreement

The agencies have reached an agreement that proposes a **safe, realistic, achievable** course for **cleanup** of millions of gallons of radioactive and chemical tank waste at the Hanford Site



# Background

- Since June 2020, the Tri-Party agencies have been engaged in federally mediated negotiations to identify an agreeable path forward for the Hanford tank waste retrieval and treatment mission
- The agencies announced a conceptual agreement in May 2023
- Negotiations were informed by key documents (including public input), such as:
  - High-level waste analysis of alternatives
  - River Protection Project system plans
  - Test Bed Initiative environmental assessment and EPA variance



# What is the “Holistic Agreement”?

- The holistic agreement is comprised of three parts
  - Amendments to the Washington v. Energy consent decree via a joint motion filed with the court by the state and DOE
  - Change control forms to amend the Hanford Tri-Party Agreement
  - A settlement agreement document to capture other related provisions and commitments
- The agreement proposes a course for the tank waste retrieval and treatment mission through 2040.

# Agreement Highlights

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- Maintaining existing timeframes for starting treatment of both low-activity and high-level waste by immobilizing it in glass via vitrification
- Using a direct-feed approach for immobilizing high-level waste in glass, similar to the Direct-Feed Low-Activity Waste Program
- Building a waste transfer vault and second effluent management facility to support treating high-level waste

# Agreement Highlights

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- Removing waste from 22 tanks in Hanford's 200 West Area by 2040
  - Includes grouting low-activity waste portion for offsite disposal
  - Consistent with recommendations provided to the agencies
- Designing and constructing 1-million gallons of capacity for multi-purpose storage of tank waste
- Evaluating and developing new technologies for retrieving waste from tanks
- High-level waste interpretation forbearance

# Consent Decree — Low-Activity Waste Facility

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- Low-activity waste vitrification milestones unchanged (with COVID force majeure adjustment)
- Milestone for achieving Low-Activity Waste Facility “initial operations” moved up from 2036 to 3 years after facility hot commissioning

# Consent Decree — High-Level Waste Facility

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- Will be converted to a direct feed configuration with two new facilities
  - High-level waste effluent management facility
  - Waste transfer vault
- Current commissioning dates remain the same but may be adjusted after critical path schedule developed

# Consent Decree — Pretreatment Capabilities

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- In 2029, DOE selects additional pretreatment capabilities to be implemented after hot commissioning of direct feed high-level waste (e.g., sludge washing)
- Full Waste Treatment and Immobilization Plant startup and initial operations dates will also be re-set at that time

# Consent Decree — Single-Shell Tank Retrievals

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- No change to current dates for completing retrieval of waste from most single-shell tanks in the A/AX tank farms
- Date for completing retrieval of challenging tanks A-104 and A-105 extended to allow for development of new retrieval technology, or complete retrieval of up to two substitute tanks.

# Tri-Party Agreement — “End Dates”

- No change to current dates for retrieving all single-shell tanks (2040), closing the single-shell tank system (2043) and treating all tank waste (2047)
- Asterisks added to all three “end dates” acknowledging that dates must be revised (without excusing USD OE from obligation to satisfy milestones as expeditiously as possible)
- Dates will be revised in a “one-time” System Plan negotiation to occur after direct feed high-level waste hot commissioning (based on better information at that time) (negotiation aligned with re-setting consent decree pretreatment and full Waste Treatment and Immobilization Plant milestones)

# Tri-Party Agreement — “System Plan” Negotiations

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- Negotiation frequency changed
- Every 3 years
  - Single-shell tanks retrieval sequencing (looking ahead next 8 years)
  - Contingency actions (including need for new tank capacity)
- Every 6 years
  - All topics

# Tri-Party Agreement — Single-Shell Tank Retrievals

- 22 additional single-shell tank retrievals by 2040\*
  - All from S/SX/U Farms
  - Low-activity waste portion of waste will go through alternative treatment (i.e., grouting) and be disposed of off-site
  - Allows 200 West Area tank retrievals to proceed independent of Waste Treatment and Immobilization Plant
- Tank A-103 completion date adjusted from 2022 to 2028

\*Total of 29 retrievals by 2040 (including remaining consent decree tanks plus A-103)

# Tri-Party Agreement—“Alternative Treatment”

- By the end of 2024 Energy will select alternatives and apprise Ecology of those selections. Additional milestones were developed to create a critical path schedule and incorporate decisions into the permit.
- Offsite disposal conditions:
  - Grouted waste to be disposed of at facilities outside Hanford’s contiguous borders
  - “Just in time” production: —Energy cannot treat/store more waste than it can reasonably ship
- Conditions remain in place at least through 2040; Ecology and Energy to meet no later than 2038 to discuss future conditions (if any)

# Tri-Party Agreement—New Tank Capacity

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- One million gallons of new multi-purpose storage capacity ready to operate by 2040
  - To be built in 200 West Area
  - Subject to process to evaluate alternatives (analysis of alternatives)

# Tri-Party Agreement — Retrieval Technology

- New Retrieval Technology Evaluation and Development
  - DOE will prepare a technology evaluation document to assess new or refined technologies to address retrieval challenges and tank condition issues
  - An expert advisory panel will be tasked with providing analysis, recommendations
  - DOE must carry forward at least two technologies into development
  - Expert panel will also analyze saltwell pumping for potential use in actively leaking single-shell tanks

# Tri-Party Agreement — Other

- Cross-Site Transfer Line
  - Two new interim milestones to activate cross-site transfer lines
- Immobilized high-level waste
  - Adds permit modification and construction substantially complete requirements for immobilized high-level waste facility
- Interim Waste Management Areas Closure Milestones
  - To support Closure Plan submissions for Waste Management Areas A-AX, B-BX-BY, C, S-SX, T, TX-TY, and U

# Settlement Agreement

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- Not subject to public comment; mostly addresses processes for rollout and potential finalization
- Includes statement that DOE intends to forbear from applying high-level waste interpretation at Hanford
- Includes commitment for DOE and Ecology to discuss off-site grout disposal conditions, if any, after expiration of current proposed conditions

# Settlement Agreement (Cont'd)

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- DOE commits to involve Ecology in certain internal processes
- Parties agree to have follow-on separate, mediated negotiation to discuss possible updates to Tri-Party Agreement Appendices H (retrievals) and I (closure)
- Conditional language associated with completion of required regulatory processes (e.g., *National Environmental Policy Act [NEPA]*, *National Historic Preservation Act*).

# Next Steps



- May 30: 60-day public comment period on proposed changes to consent decree and Tri-Party Agreement begins
- Agencies will hold regional public meetings in Washington and Oregon (to be announced)

# Next Steps (cont.)

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- Discussions with Tribes seeking to consult
- Complete public comment period
- Issue response to comments
- Complete applicable regulatory processes (e.g., National Environmental Policy Act)
- Execute proposed amendments to consent decree in federal district court
- Agencies sign and implement proposed Tri-Party Agreement revisions

# Questions?



The Hanford Reach  
White Bluffs Overlooking the Columbia River