

Hanford Waste Management Area C Performance Assessment and Closure Activities

Keith Quigley

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Tank Closure Status

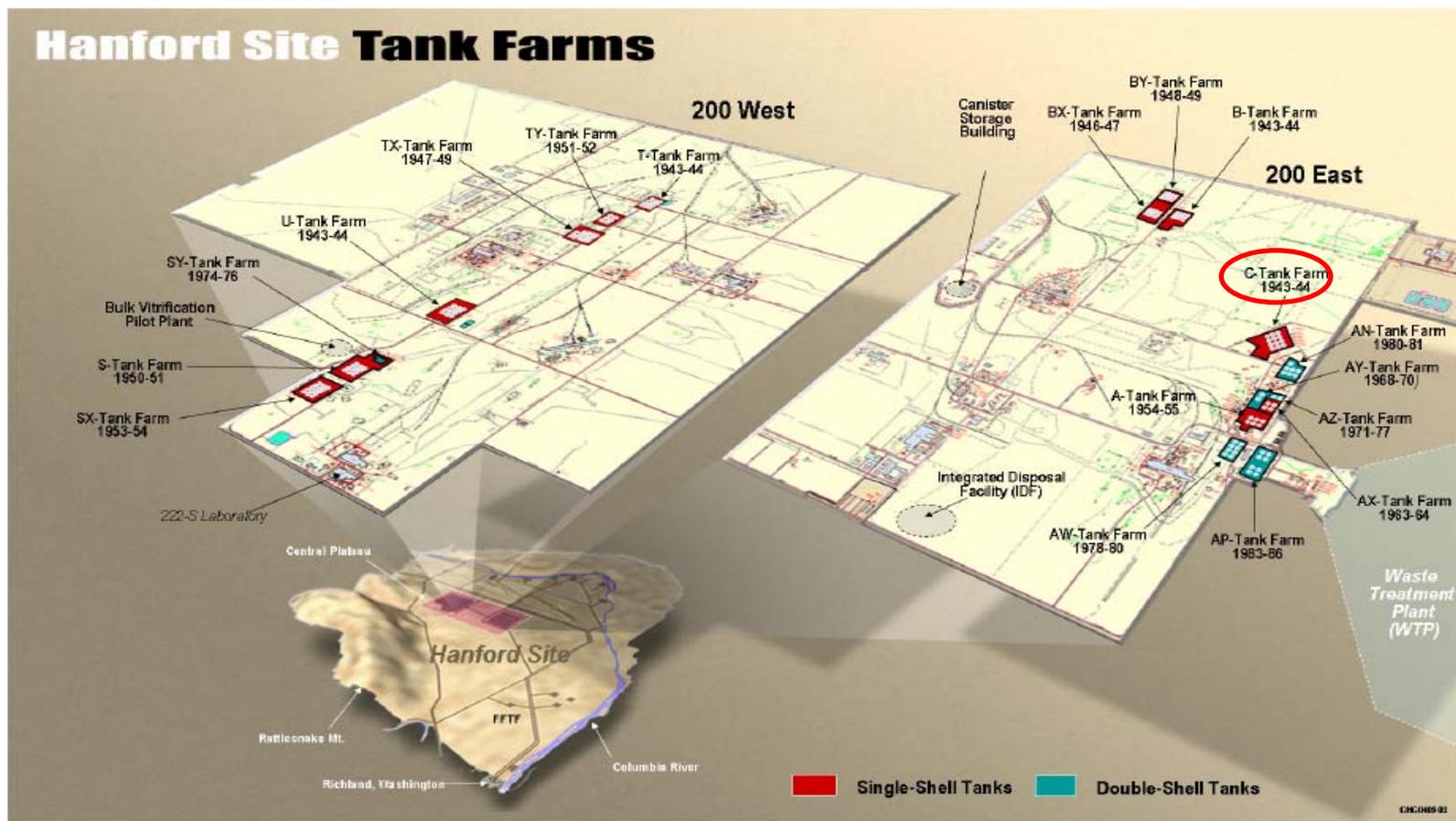
- History
- Closure Path Forward
- Approval Process

Refresher Information

- Hanford has 149 SSTs located in 12 SST Farms that are grouped into 7 RCRA Waste Management Areas (WMAs).

	12 SST Farms Grouped into 7 WMAs			
200 West Area	S/SX	T	TX/TY	U
200 East Area	A/AX	B/BX/BY	C	

- SSTs contain ~27 million gallons of mixed radioactive waste that is regulated under the AEA (rad) and RCRA (hazardous).
- Total SST residual waste volume in all SSTs at closure estimated to be ~ 0.36 million gallons assuming $\leq 360 \text{ ft}^3$ residuals in 100-series (large) tanks and $\leq 30 \text{ ft}^3$ residuals in 200-series (small) tanks per TPA retrieval objectives.
 - There is limited space in the DST for retrieval from the SST



- DOE plans Waste Management Area (WMA) C, located in the Hanford 200 East Area to be the first farm closed.

Tank Closure process

1. Retrieval
2. Samples
3. Approvals
 - DOE-HQ
 - DOE-ORP
 - Washington State Department of Ecology
4. Tank Closure
5. Farm Closure (Waste Management Area)
6. Area Closure

2. Sampling activities

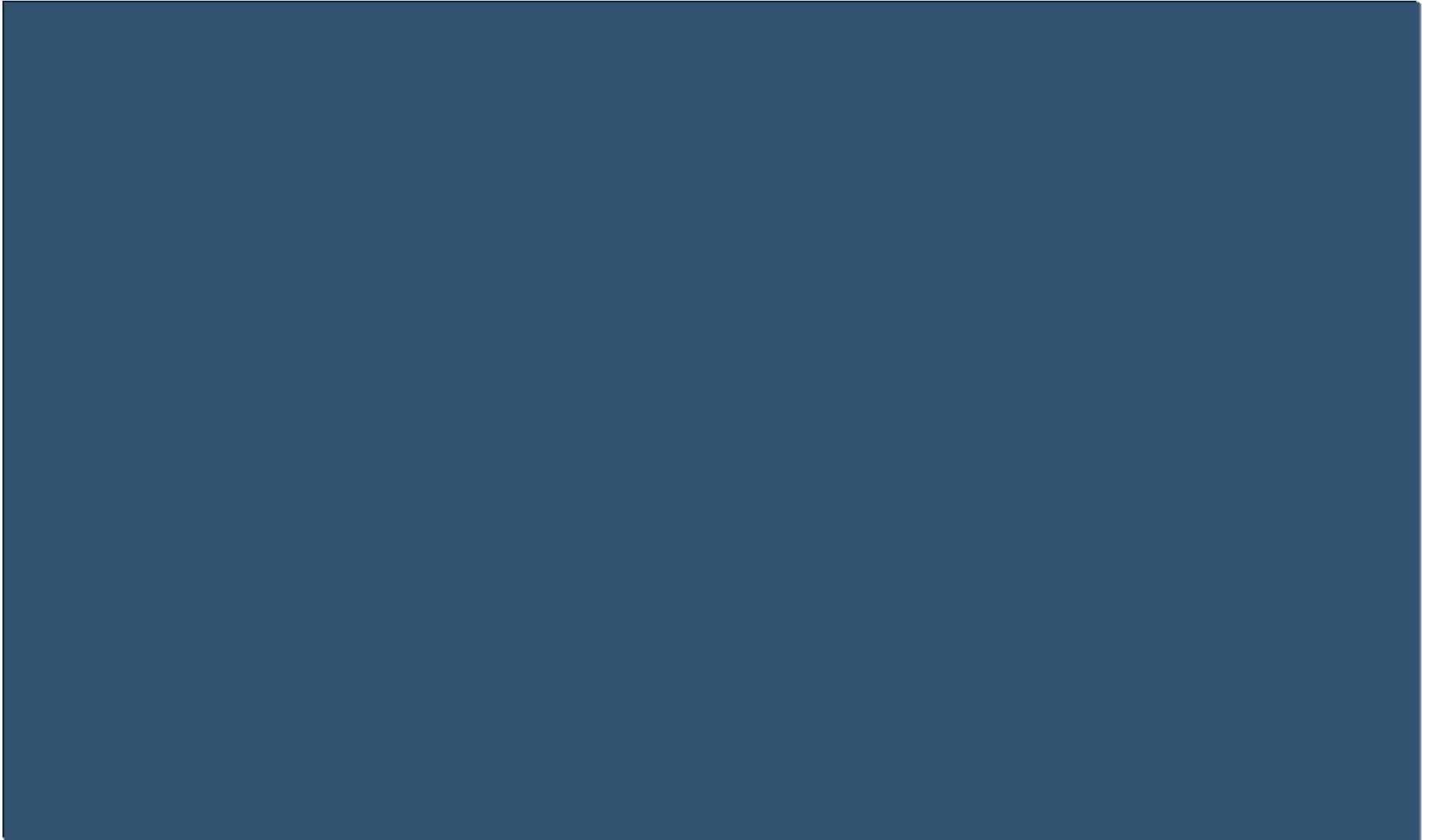
- Tank Waste Retrieval Work Plan (TWRWP)
- Data Quality Objectives (one DQO for SST)
- Sample Analysis Plan (SAP)
- Samples
- Laboratory analysis
- Waste Inventory report
- Retrieval Data Report (RDR)
- DOE Review and approval
- Review from Washington State Department of Ecology

3. Approvals

- DOE-HQ
 - EIS/ROD
 - DOE Order 435.1 Tier I Closure Plan
 - Waste Determination
 - C-Farm Performance Assessment
 - NRC Review
- DOE-ORP
 - DOE Order 435.1 Tier II Closure Plan
- Washington State Department of Ecology
 - Tier I Closure Plan
 - Tier II Closure Plan
 - Tier III Closure Plan
 - Permit Issued

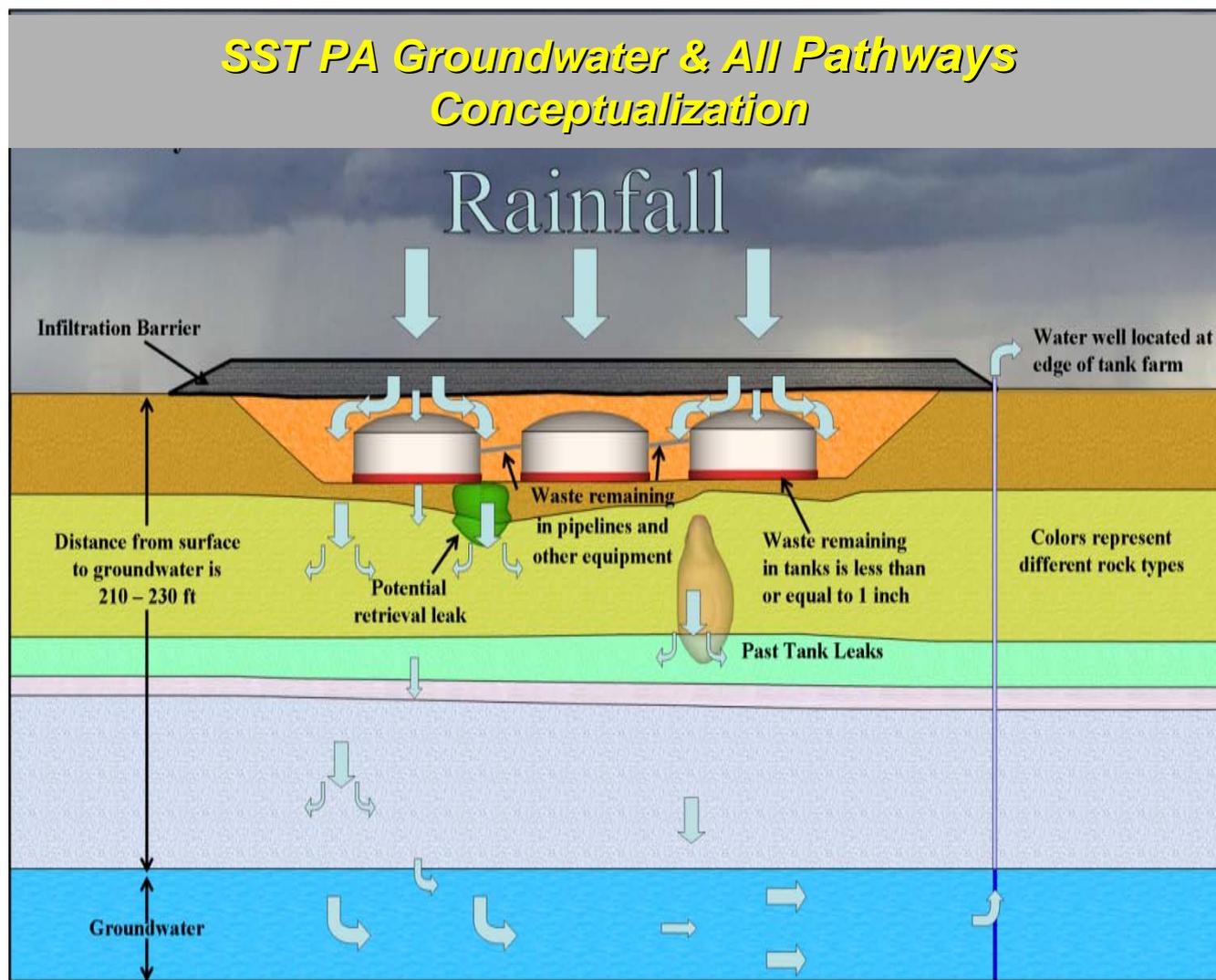


Regulatory Approvals



Performance Assessment Model

- Address both radioactive and hazardous constituents from WMA C and near-by sources.
- Provide information suitable for use by DOE, Ecology, EPA, and NRC in addressing their respective roles relative to tank farm cleanup, closure, and waste determinations.



Waste Determination

- The purpose of waste classification is to ensure the disposal techniques used are appropriate for the waste’s characteristics.
- All wastes stored in DOE tanks (tank wastes) are managed as HLW. This simply means all tanks wastes are subject to the highest health and safety protocols.
- The term “high-level radioactive waste means
 - the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains **fission products in sufficient concentrations**: and
 - Other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.
- Washington is not currently a “covered State” under NDAA Section 3116
- ORP Waste Determinations will be conducted under DOE Order 435.1-1

DOE 435.1-1 Evaluation Process Criteria

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 Part 61, Subpart C, Performance Objectives: 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 provisions of Chapter IV of this manual, provided the waste will be incorporated in a solid physical form at a concentration limits for Class C low-level waste as set out in 10 CFR 61.55, Waste Classification; or will meet alternative requirements for waste classification and characterization as DOE may authorize.

Questions and Answers