



Idaho
Cleanup
Project

Challenges in US DOE HLW Tank Management Idaho Perspective

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Successes

- *Processed over 8 million gallons liquid High Level Waste into solid waste form (calcine)*
- *Calcine HLW in safe storage configuration*
- *Closed 7 large (~300,000 gallons/tank) HLW underground tanks under the 3116/DOE) 435.1 closure process*
- *Completed construction of Integrated Waste Treatment Unit for processing remaining liquid tank waste inventory (approximately 850,000 gallons)*

Challenges

- *IWTU start-up and commissioning*
- *Calcine waste form does not meet current HLW disposition requirements*
- *Treatment process proposed for calcine (Hot Isostatic Press) requires regulatory approval as HLW LDR Treatment*
- *Sodium Bearing Waste Waste Determination (TRU waste vs HLW)*
- *Disposition path*
- *Affordability*

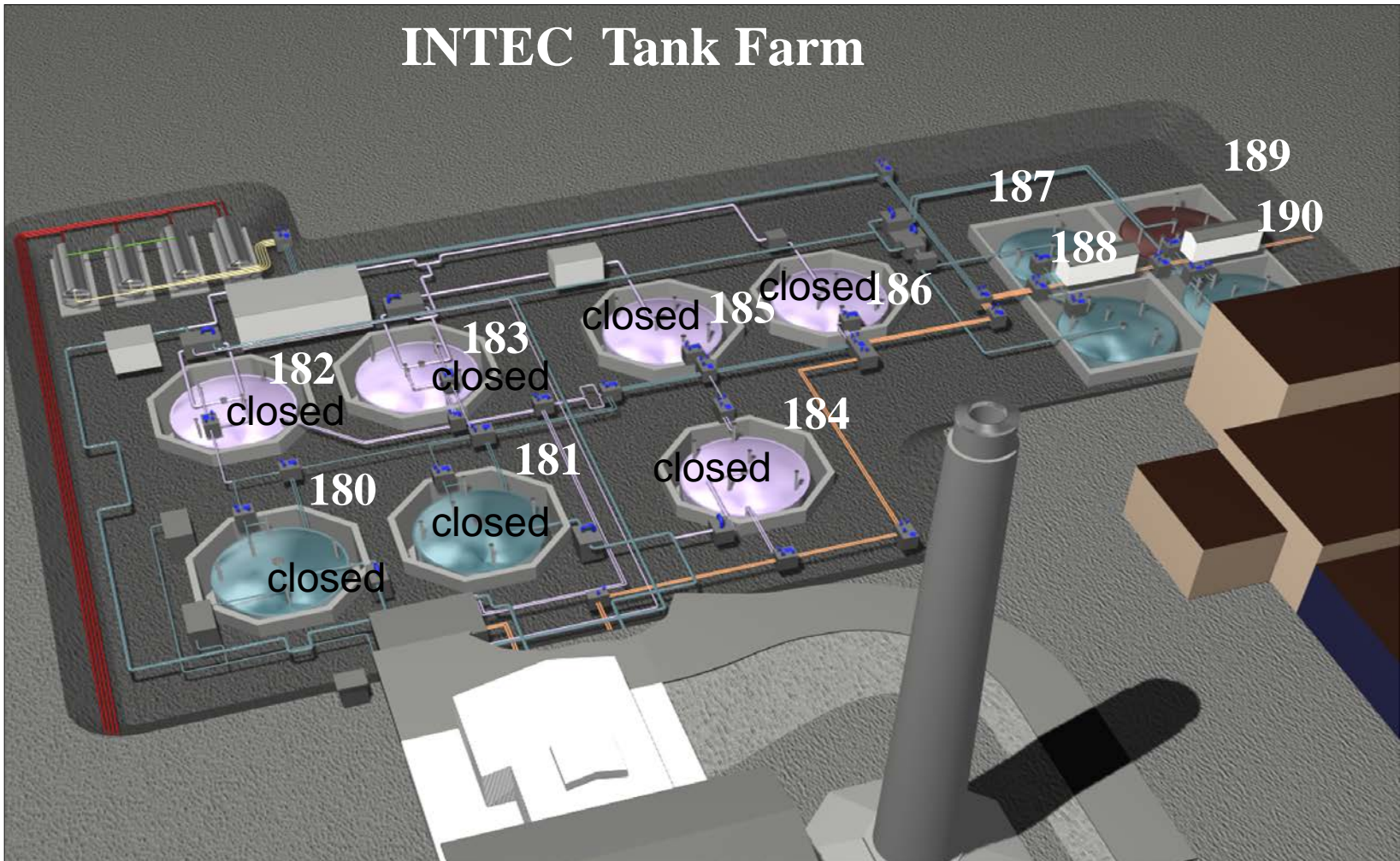


Integrated Waste Treatment Unit



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INTEC Tank Farm



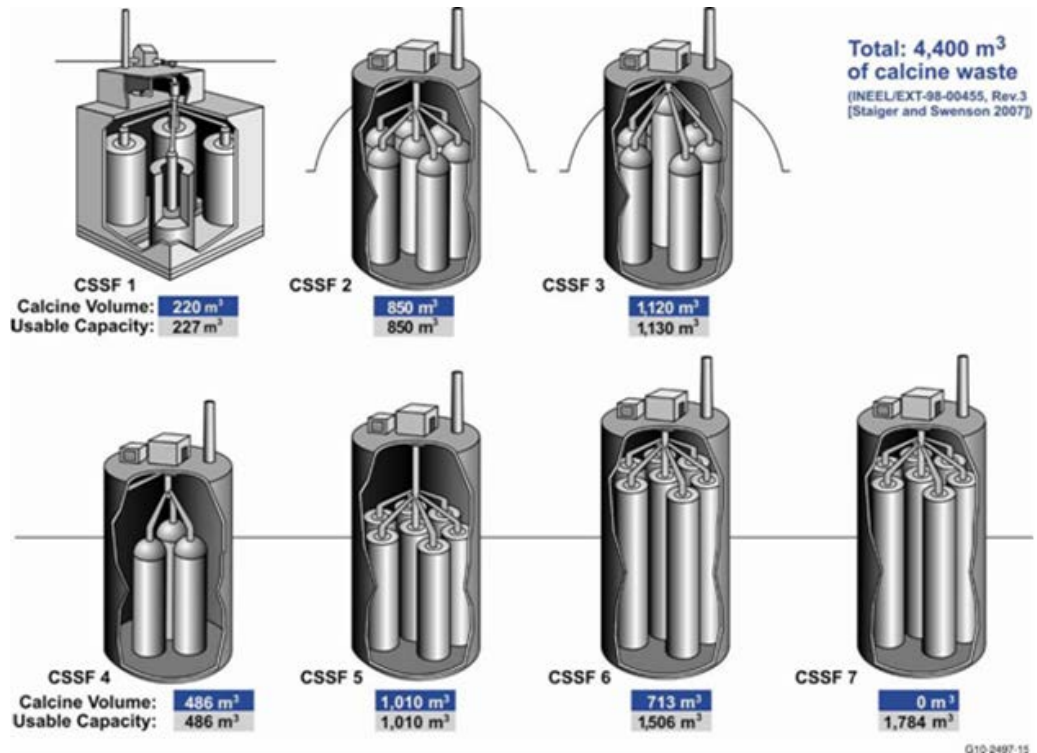
Calcine Solids Storage Facility



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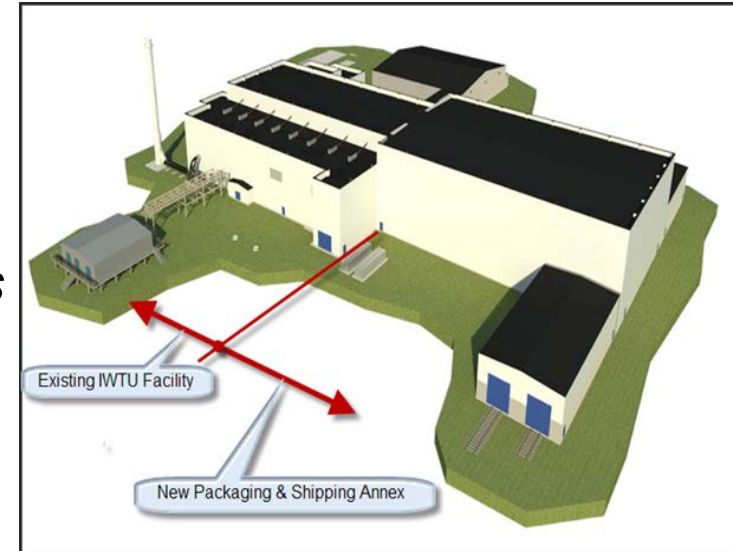
Background - Calcine Solids Storage Facility (CSSSF) Inventory

- Stored in 43 stainless steel bins
- Regulated under a 10-year RCRA Part B Permit Issued November 2006
- Compliance is based on a State-approved exemption from RCRA double containment requirement that requires periodic State approval to remain valid.

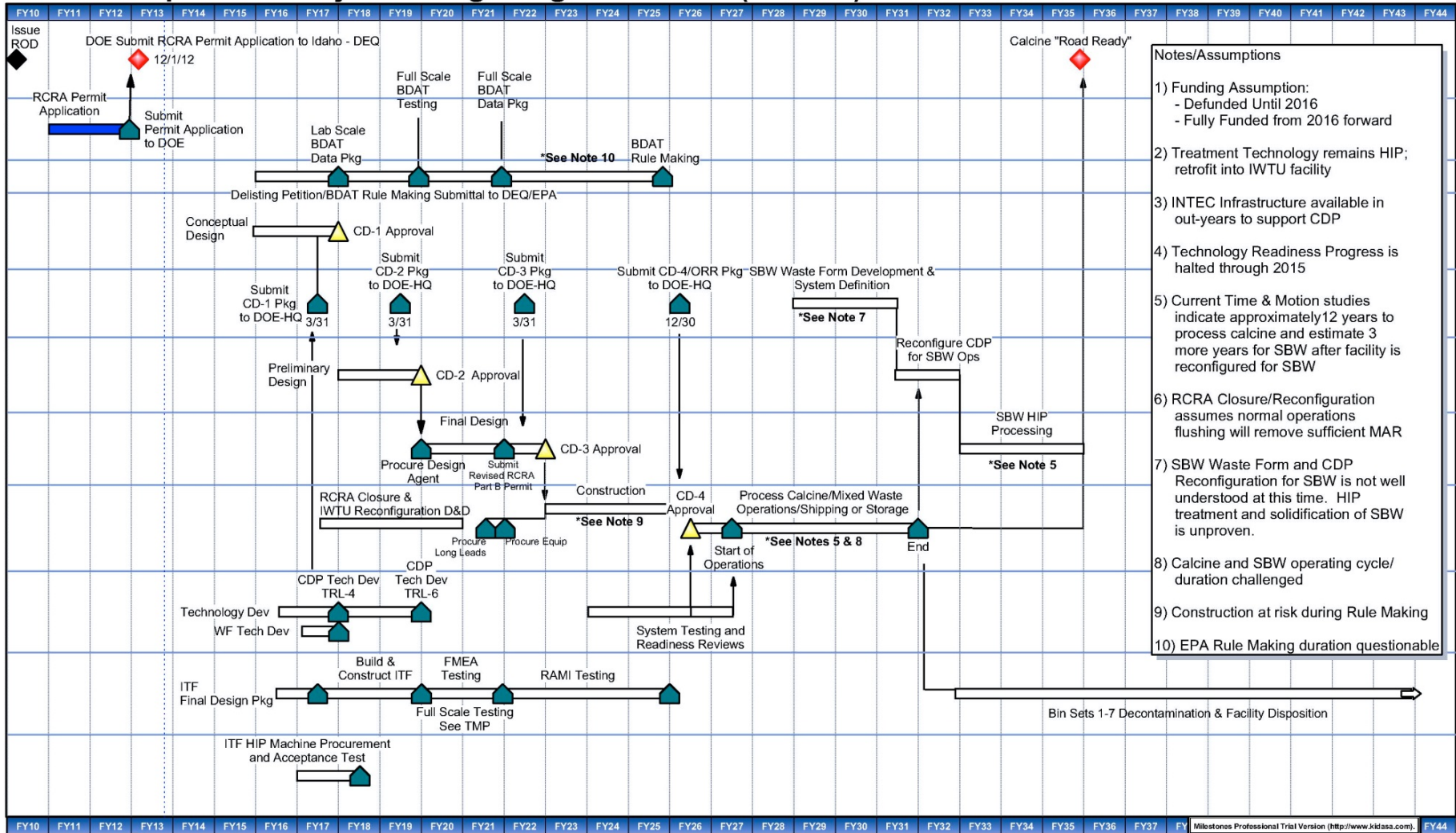


Calcine Disposition Project Scope

- *Design and construct processing facility using existing facility (Integrated Waste Treatment Unit) to the maximum extent practical*
- *Retrieve and transport 4,400 cubic meters of calcine from current storage in the Calcine Solids Storage Facilities*
- *Treat calcine to meet Land Disposal Restriction requirements and Waste Acceptance System Requirements Document (WASRD)*
- *Process ~700 canisters of Sodium Bearing Waste through the HIP (if determined to be HLW)*
- *Make Calcine road ready for disposition or storage outside of Idaho by 2035*



Calcine Disposition Project - Long Range Schedule (Rev11b)



- Notes/Assumptions**
- 1) Funding Assumption:
- Defunded Until 2016
- Fully Funded from 2016 forward
 - 2) Treatment Technology remains HIP;
retrofit into IWTU facility
 - 3) INTEC Infrastructure available in
out-years to support CDP
 - 4) Technology Readiness Progress is
halted through 2015
 - 5) Current Time & Motion studies
indicate approximately 12 years to
process calcine and estimate 3
more years for SBW after facility is
reconfigured for SBW
 - 6) RCRA Closure/Reconfiguration
assumes normal operations
flushing will remove sufficient MAR
 - 7) SBW Waste Form and CDP
Reconfiguration for SBW is not well
understood at this time. HIP
treatment and solidification of SBW
is unproven.
 - 8) Calcine and SBW operating cycle/
duration challenged
 - 9) Construction at risk during Rule Making
 - 10) EPA Rule Making duration questionable

