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# Liquid Waste Update: Targeting High-Risk Tanks

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# Purpose of the Presentation

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- Update on waste removal and closure activity progress for high-risk tanks
- Acceleration with success

# What is a High-Risk Tank?

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## Age

- *Type I Tanks were constructed from 1951-53*
- *Type II Tanks were constructed from 1955-56*

## Located within the Water Table

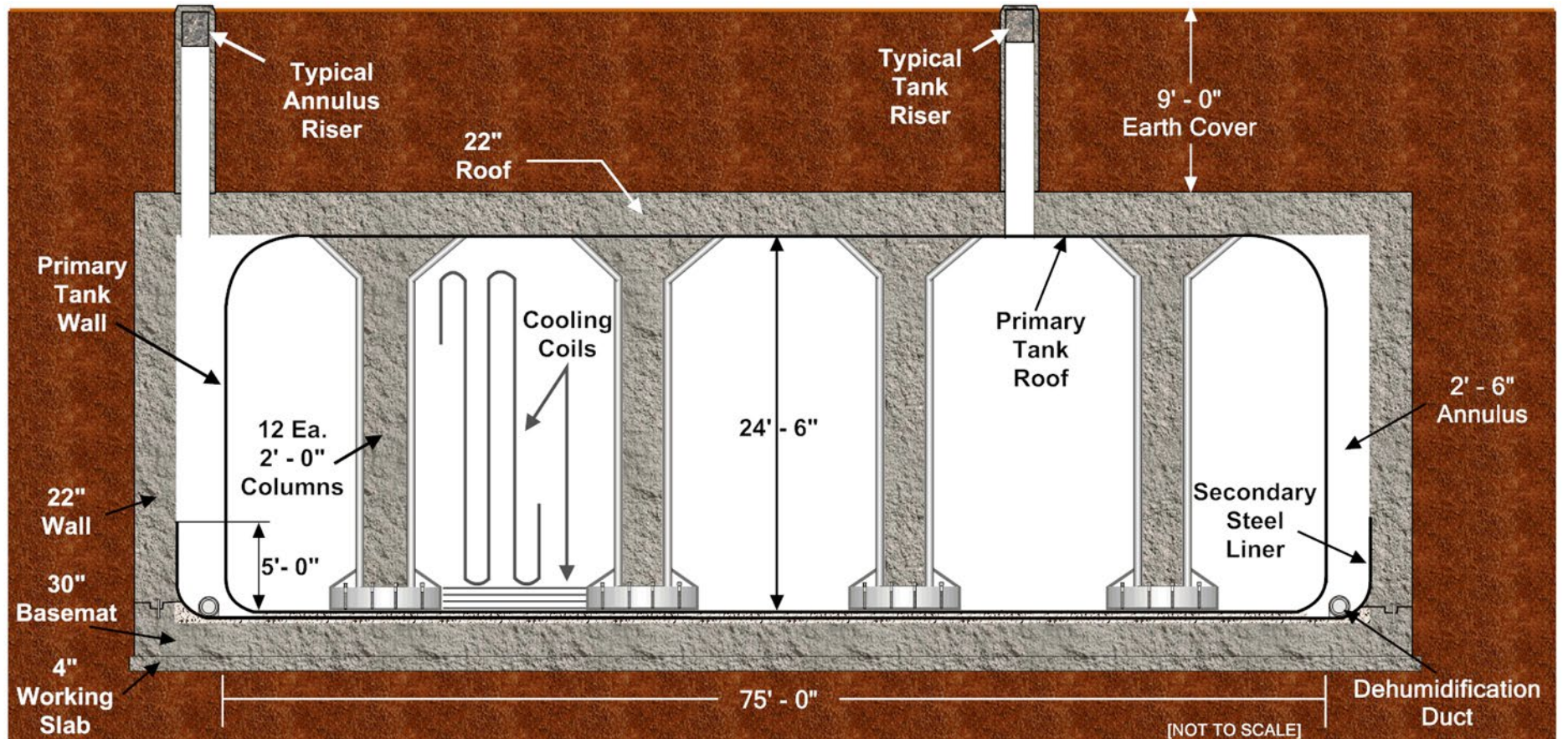
- *Tanks 9-12- Type I- Fully submerged*
- *Tanks 13-16 – Type II- Partially submerged*

## • Known primary tank leak sites- No Environmental Leaks

- *1,4, 9, 10, 11, 13, 14, 15*
- *Annual publicly available document called, “Annual Radioactive Waste Tank Inspection”.*

# Type I Tanks

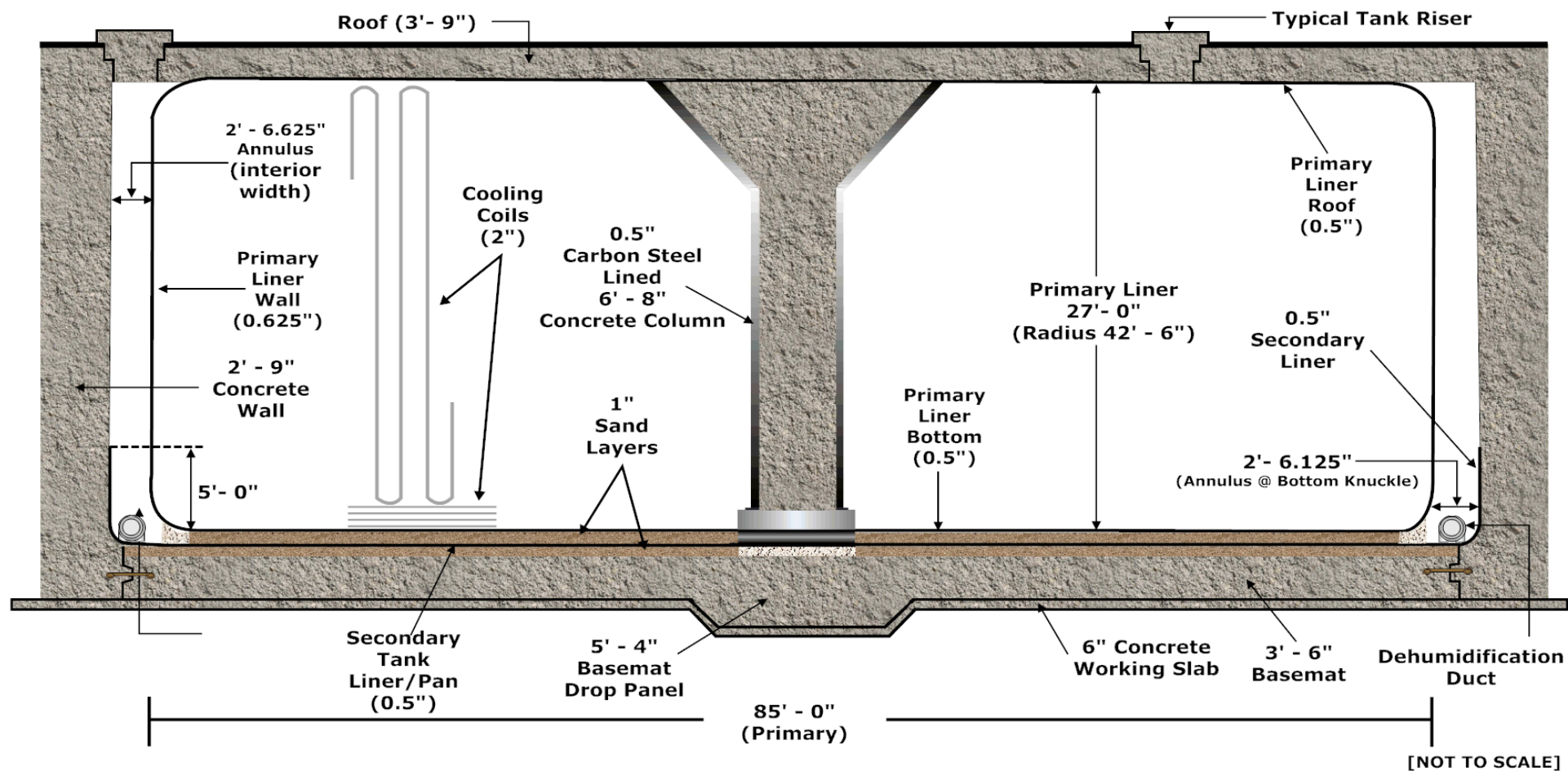
- Constructed from 1951-53
- Eight Tanks in FTF (Tanks 1-8)
- Four tanks in HTF (Tanks 9-12)



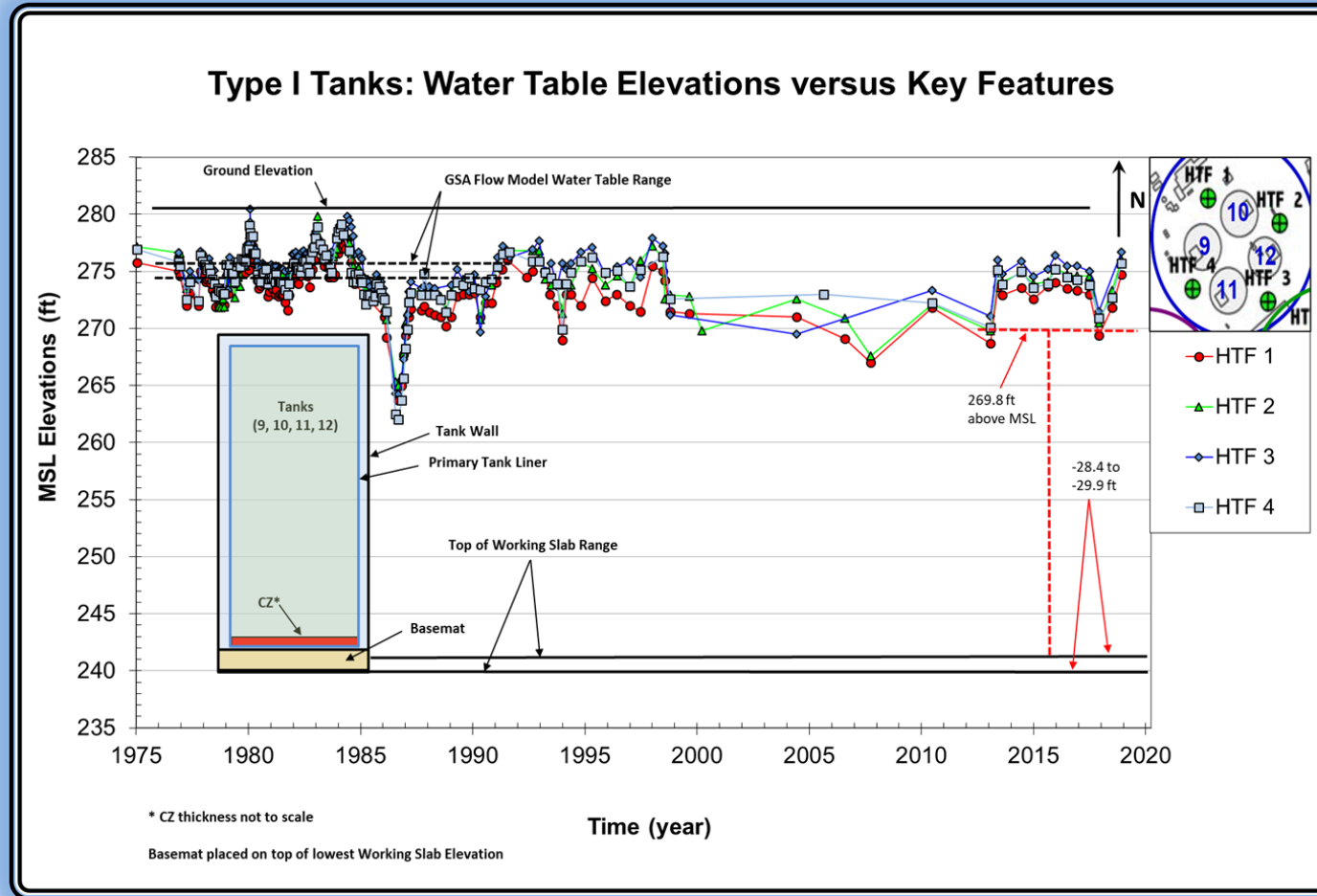


# Type II Tanks

- Constructed from 1955-56
- All four tanks in HTF (Tanks 13-16)

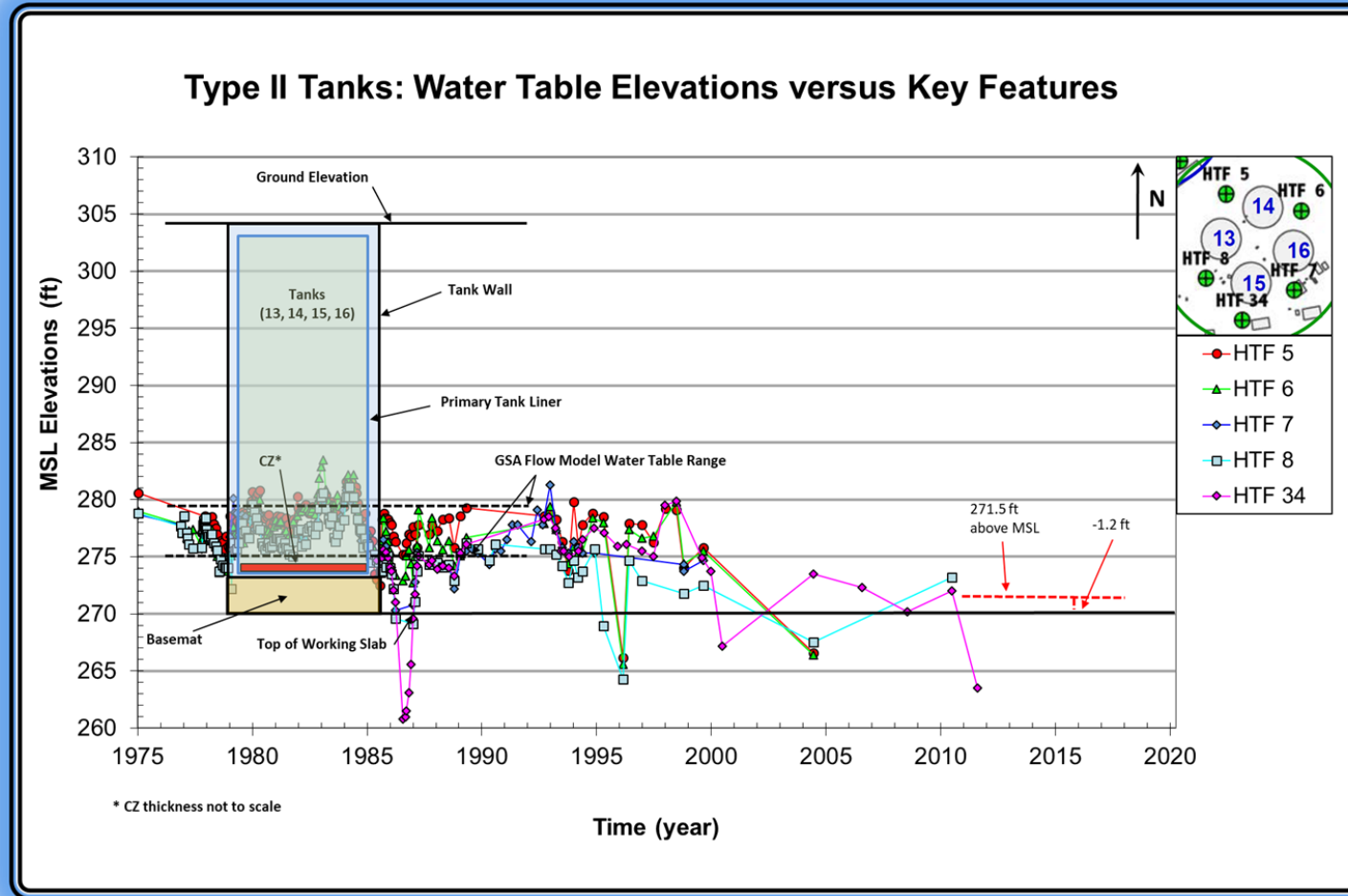


# Type I Tanks in the Water Table



MSL- Mean Sea Level

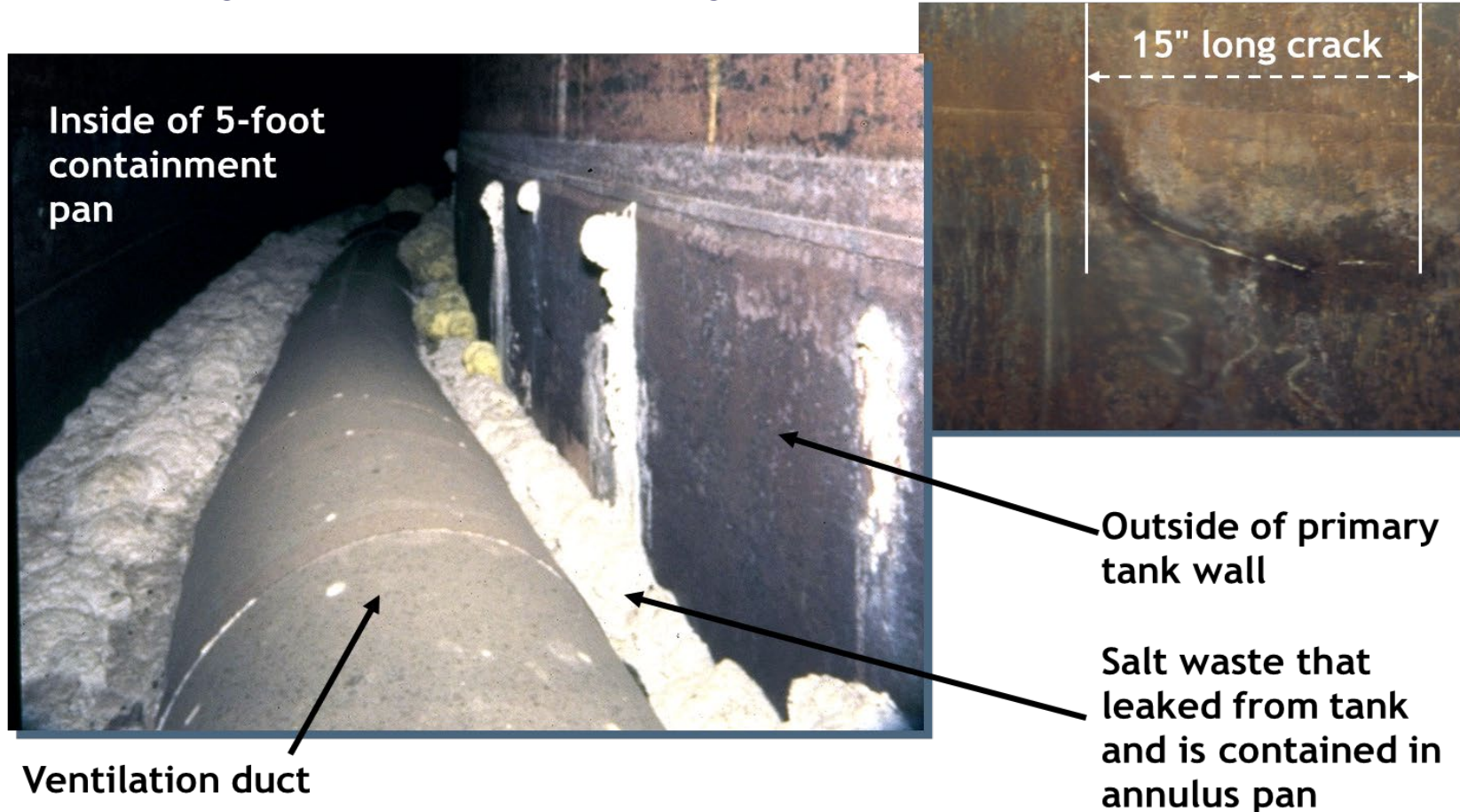
# Type II Tanks in the Water Table



MSL- Mean Sea Level






# Example of a Primary Tank Wall Leak

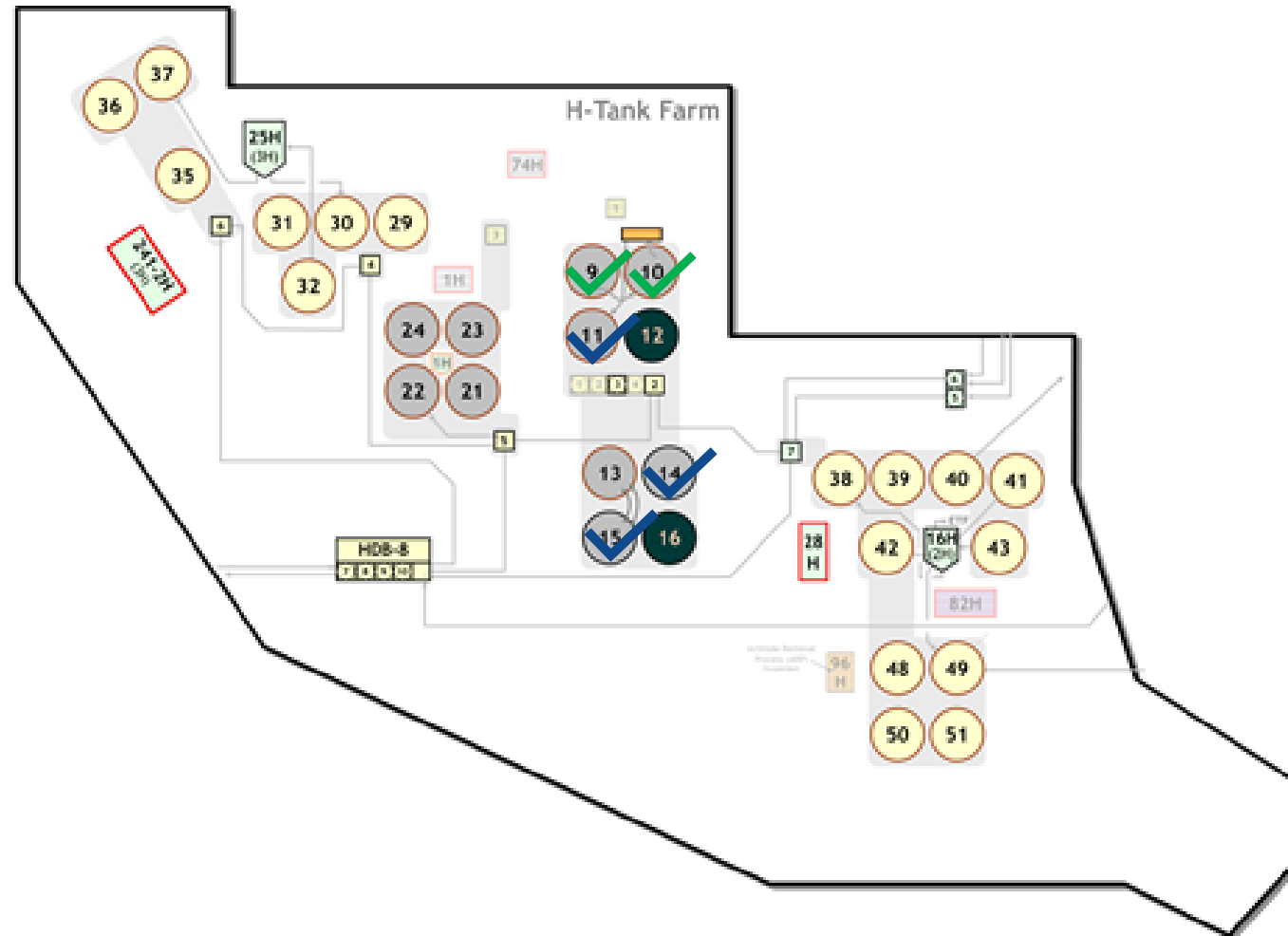
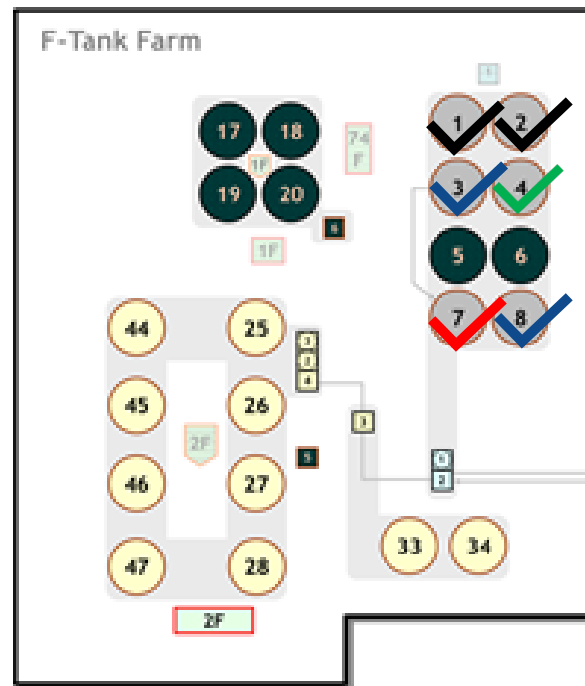
Example of Prior Leakage from  
Primary Tank into Secondary Pan





## Current Status/Accomplishments

-  CY24- Preliminary Cease Waste Removal Complete
  -  CY25- Preliminary Cease Waste Removal - On Schedule
  -  Under Modification
  -  Waste Retrieval Design in progress
  -  Closed

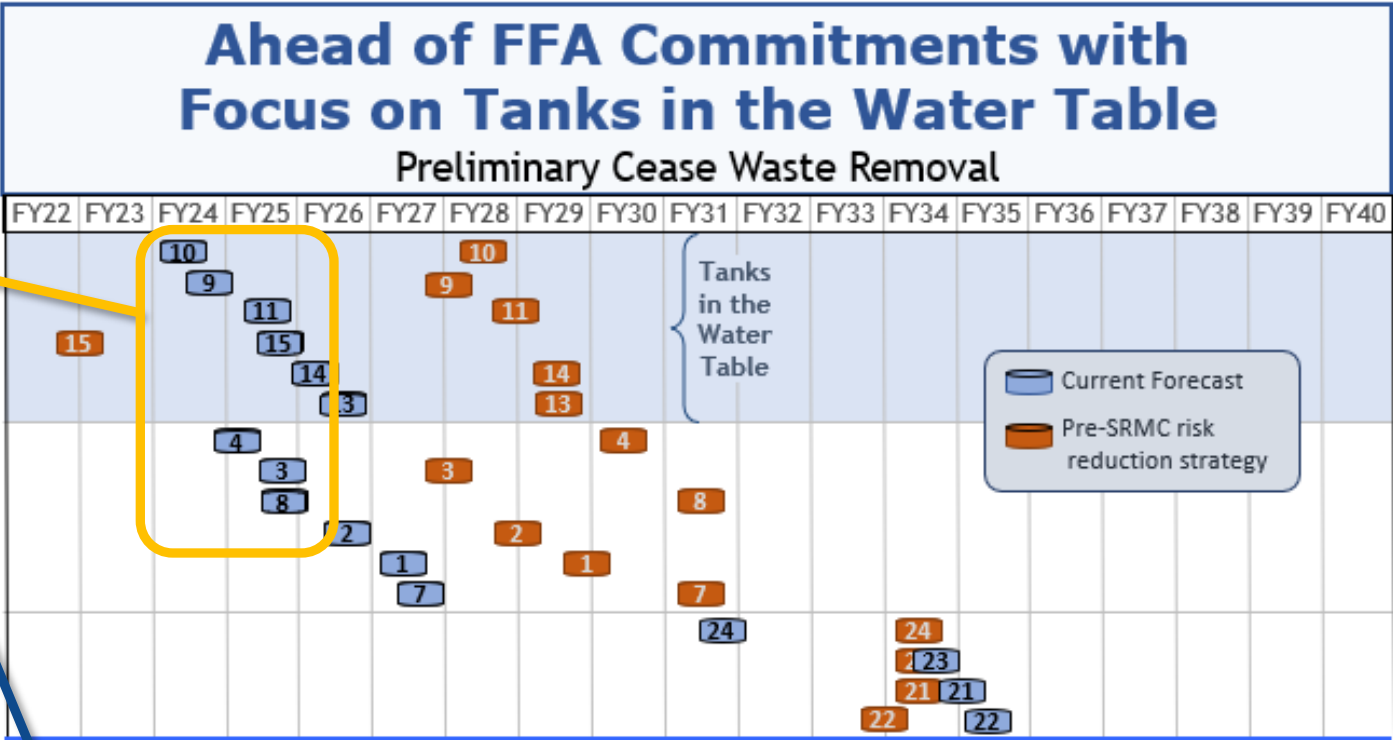


# Delivering Risk Reduction

FFA Milestone Summary

Calendar Year	Preliminary Cease Waste Removal (# of Tanks)	Operational Closure (# of Tanks)
2023	0	0
2024	1	0
2025	3	0
2026	2	0
2027	2	0
2028	0	3
2029	2	0
2030	1	2
2031	0	3
2032	0	1
2033	0	2
2034	1	0
2035	1	0
2036	1	1
2037	2	4
Total	16	16

Waste Removal & Tank Closure Task Order Plan



# Efficiencies Allowing Acceleration

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- **Workplace Efficiency reviews**
  - *Process Improvement Team Review*
- **Preliminary Cease Waste Removal without Tank Modifications**
- **Drone use inside of the Tanks**
- **Augmentation of Lab Sample Analysis**
- **Re-sequencing the Tank Isolation Activities**
- **Tank sampling schedule adjustments**
- **Closure paperwork efficiency review**
  - *Rapid Improvement Event*
    - SRMC, DOE-SR, SCDES, and EPA

# Mapping the Inside of Tanks

- In situ Mapping



- Drone Mapping





# Acceleration Examples

Project	FY25			FY26		FY27		FY28		FY29		FY30	
Tank 9 (Current)	Tank 9 Cooling Coil Flush / Sample Prep / D&R		Tank 9 Sampling	Tank 9 Isolation Design Tank 9 Sample Analysis		Tank 9 Isolation Field Work Tank 9 Grout Design		Tank 9 Grout Preps	Tank 9 Grouting				
Tank 9 (Accelerated)	Tank 9 Cooling Coil Flush / Sample Prep / D&R	Tank 9 Sampling / Mode Change	LAB Tank 9 Grout Preps Tank 9 Grout Design		Tank 9 Grouting								
Tank 10 (Current)	Tank 10 Sample Prep	Tank 10 Sampling	Tank 10 Isolation Design Tank 10 Sample Analysis		Tank 10 Isolation Field Work Tank 10 Grout Design		Tank 10 Grout Preps		Tank 10 Grouting				
Tank 10 (Accelerated)	Tank 10 Sample Prep	Tank 10 Sampling / Mode Change	LAB Tank 10 Grout Preps Tank 10 Grout Design		Tank 10 Grouting								
Tank 11 (Current)	Tank 11 HR Execution (Includes LTAD)	Tank 11 Sample Prep / D&R / Cooling Coil Flush	Tank 11 Sampling	Tank 11 Isolation Design Tank 11 Sample Analysis		Tank 11 Isolation Field Work Tank 11 Grout Design		Tank 11 Grout Preps	Tank 11 Grouting				
Tank 11 (Accelerated)	Tank 11 HR Execution (Includes LTAD)	Tank 11 Sample Prep / D&R / Cooling Coil Flush	Tank 11 Sampling / Mode Change	LAB Tank 11 Grout Preps Tank 11 Grout Design		Tank 11 Grouting	Tanks 9-10-11 Physical Isolation Design	Tanks 9-10-11 Physical Isolation Field Work					
Tank 14 (Current)	Tank 14 Waste Removal Installation	Tank 14 HR Execution Tank 14 Annulus Cleaning	Tank 14 Sample Prep / D&R / Cooling Coil Flush	Tank 14 Sampling		Tank 14 Isolation Design Tank 14 Sample Analysis		Tank 14 Isolation Field Work Tank 14 Grout Design	Tank 14 Grout Preps	Tank 14 Grouting			
Tank 14 (Accelerated)	Tank 14 Waste Removal Installation	Tank 14 HR Execution Tank 14 Annulus Cleaning	Tank 14 Sample Prep / D&R / Cooling Coil Flush	Tank 14 Sampling / Mode Change	LAB Tank 14 Grout Preps Tank 14 Grout Design		Tank 14 Grouting						
Tank 15 (Current)	Tank 15 LTAD	Tank 15 Sample Prep / D&R / Cooling Coil Flush	Tank 15 Sampling		Tank 15 Sample Analysis		Tank 15 Isolation Design		Tank 15 Isolation Field Work Tank 15 Grout Design	Tank 15 Grout Preps	Tank 15 Grouting		
Tank 15 (Accelerated)	Tank 15 LTAD	Tank 15 Sample Prep / D&R / Cooling Coil Flush	Tank 15 Sampling / Mode Change	LAB Tank 15 Grout Preps Tank 15 Grout Design		Tank 15 Grouting							

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# Questions?