



A N D R E W S , T E X A S

 **THE PERMANENT SOLUTION**

wcstexas.com



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WCS Safety and Quality Focus

- ⦿ WCS maintains strong, overarching commitment to safety and quality
- ⦿ WCS worked over 6.5 years without a lost time accident. Includes over 1.8 million safe work hours.
- ⦿ WCS promotes a safety culture consistent with the best nuclear utilities and DOE sites:
- ⦿ Trust-based organization
 - Open communication free from concerns over reprisal
 - All workers have right and obligation to report safety and quality concerns
 - Management practices conservative decision-making



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WCS Site



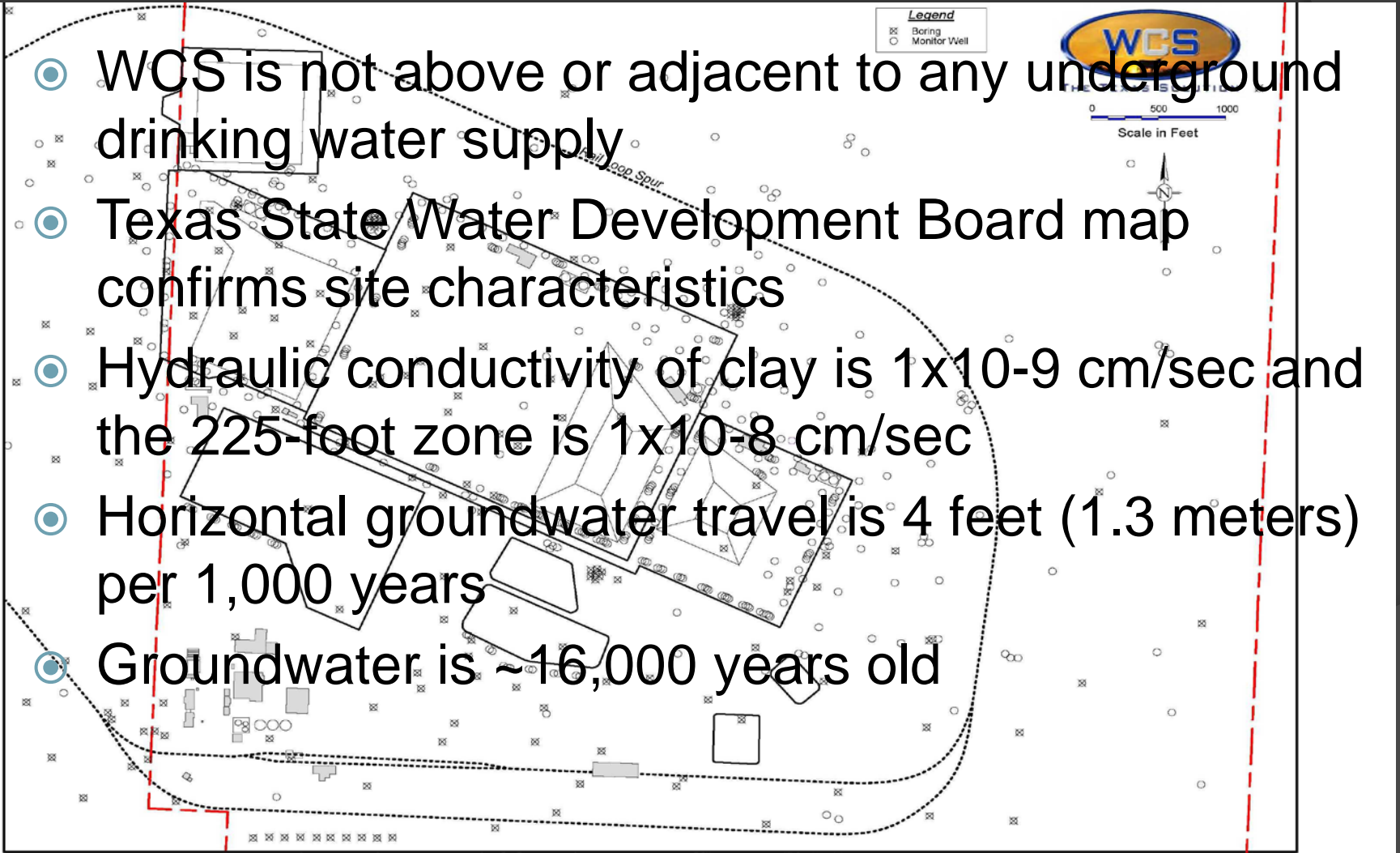
Located in west Texas, the facility offers the safest, most comprehensive LLW/MLLW treatment and disposal options for its customers.



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Site Characteristics

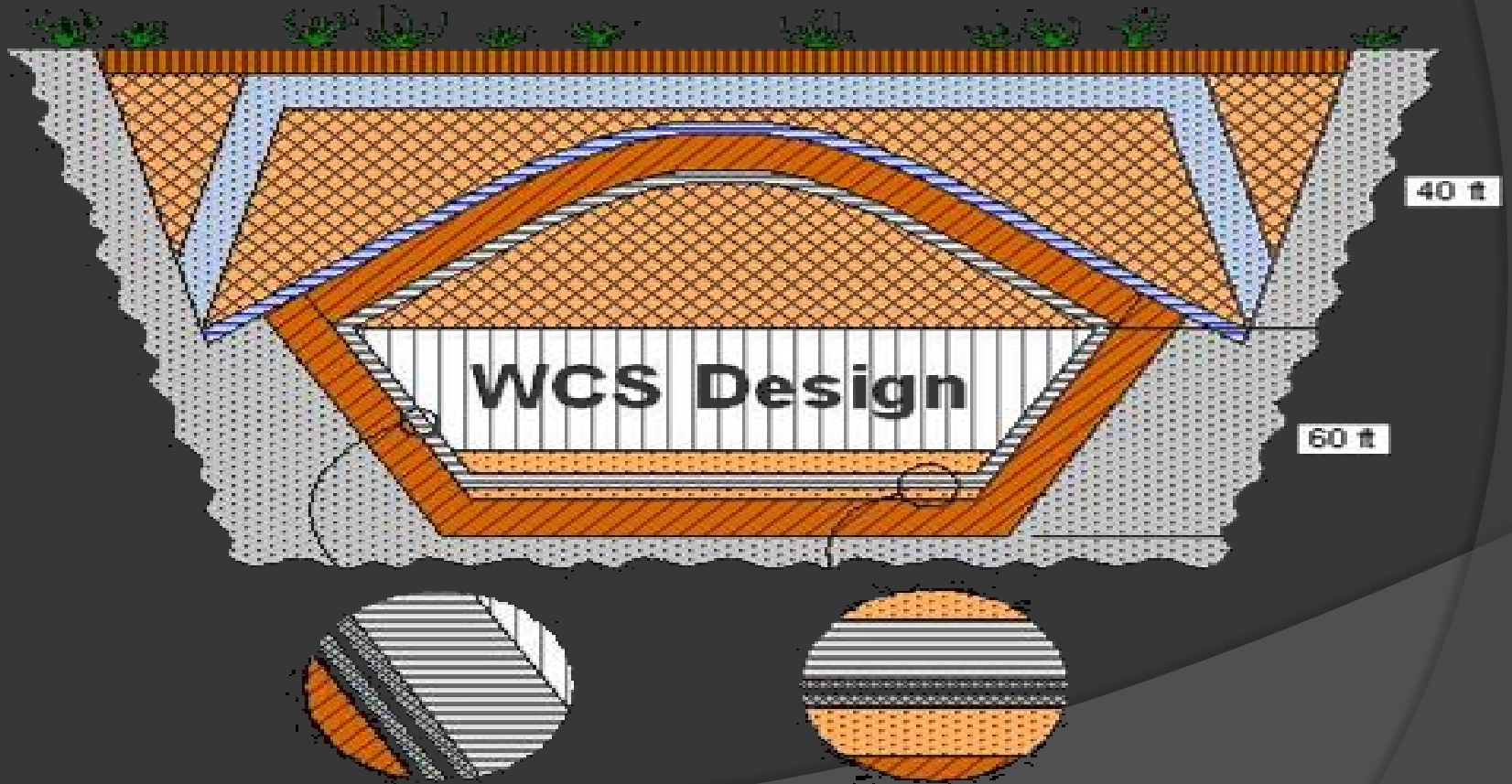
- WCS is not above or adjacent to any underground drinking water supply
- Texas State Water Development Board map confirms site characteristics
- Hydraulic conductivity of clay is 1×10^{-9} cm/sec and the 225-foot zone is 1×10^{-8} cm/sec
- Horizontal groundwater travel is 4 feet (1.3 meters) per 1,000 years
- Groundwater is ~16,000 years old





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LLRW Burial Design





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WCS Services

WCS provides the most comprehensive, full service, and complete Radioactive and Hazardous Waste Services in the Nation.

- ◎ Disposal
 - Low-level radioactive waste (LLRW)/Mixed LLRW (MLLRW)
 - RCRA/TSCA Regulated Waste (Hazardous waste)
 - Exempt Waste
 - Byproduct Material
- ◎ Storage
 - Radioactive Waste, incl. GTCC LLRW, Transuranic Waste, Sealed Sources, and Byproduct Material
 - RCRA/TSCA Waste
- ◎ Treatment/Processing
 - Mixed LLRW (MLLW)
 - RCRA/TSCA Waste

 - Exemption to treat and store Special Nuclear Material (SNM) below certain concentration limits based on criticality – U.S. NRC in November 2001



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WCS Difference

● Class A, B & C Waste Disposal

- One stop shop for Class A, B and C waste & irradiated hardware.
- WCS is commissioning three (3) new Type B shipping casks
- Resin dewatering at our site (no need for pre-shipment dewatering)

● Safe and Secure

- The WCS disposal facility is the most robust disposal facility ever built
- 100 foot cell depth with multi-layered cell design
- Cell final cover is 25-45 feet thick multi-layered to grade
- MCC placement allows for waste retrievability via GPS technology

● Real Transfer of Ownership

- Upon receipt, waste ownership is transferred to the State of Texas
- Waste becomes Texas “compact” waste when importation is approved and WAC-compliant waste is received
- Financial trust account in place with TCEQ exceeds \$180 mil



WCS Difference

- ⦿ Minimized Liability, Risk and Cost
- ⦿ Direct disposal eliminates additional processing and shipping risk
- ⦿ Waste disposed of within 24 hours of receipt
- ⦿ Less transit time/fewer legs = less risk and reduced cost (cask use)



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License Changes

- ◎ Performance Assessment Update
 - submitted a major amendment to revise the performance assessment to all LLW near the Class C limits, including depleted uranium. Amendment is expected to be approved by June 2014.
- ◎ Landfill Expansion
 - submitted a major amendment to more than double the size of the CWF to 9 million cubic feet to address capacity questions. Amendment is expected to be approved in 2014.
- ◎ Exempt Waste
 - received an amendment to allow exemption of LLW similar to NRC 20.2002 process. Submitting procedures to TCEQ regarding sampling and approval process.



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Compact Waste Facility

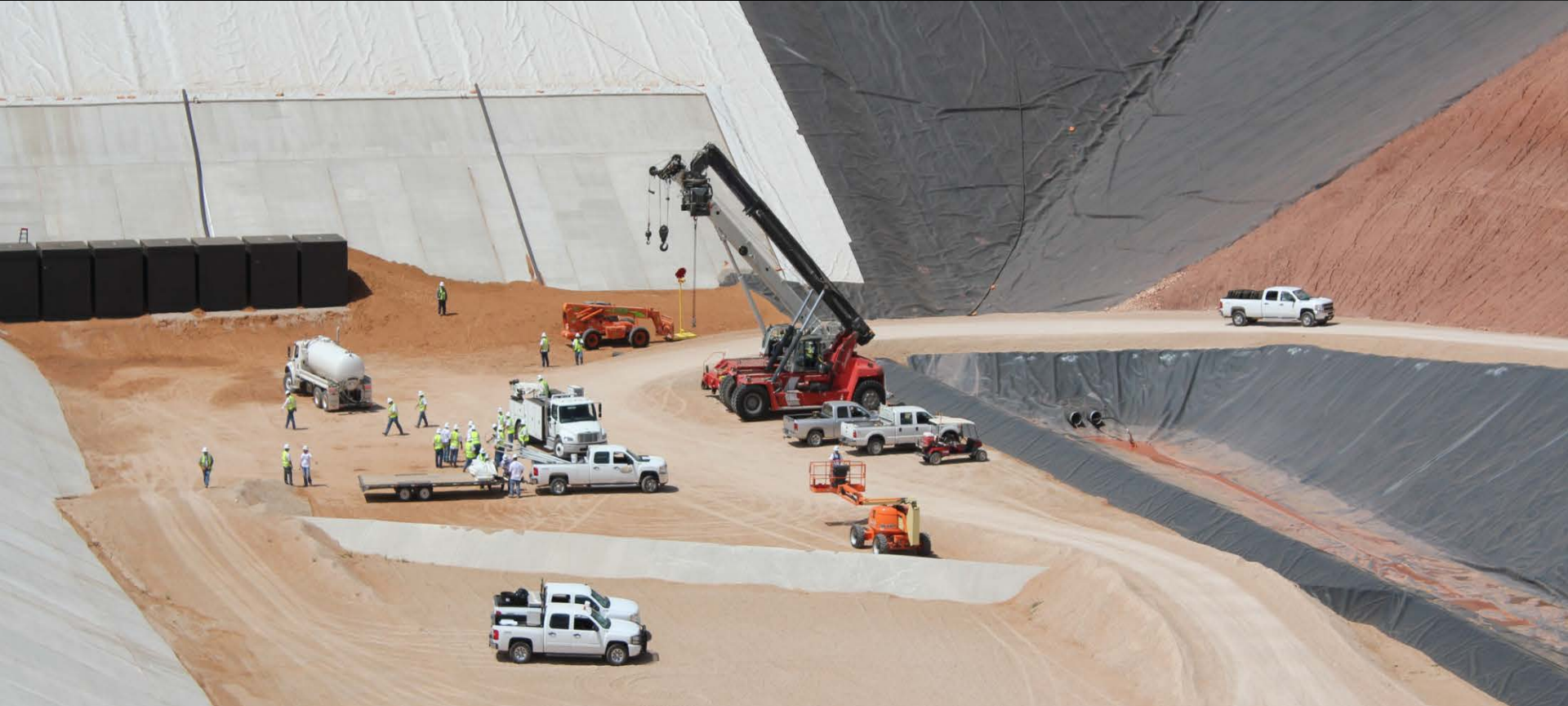


Direct burial at WCS is the **LOWEST RISK** option for radioactive waste, title to compact waste is transferred to the State of Texas upon arrival.



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Federal Waste Facility



- FWF Cell is over 100 feet deep – 7 ft liner system
- Multi-layered cover system that is 25 – 45 feet thick
- Final closure will return to original surface
- Depth to waste is at least 25 feet below surface
- Natural red bed clay is less permeable to water than concrete



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Disposal Class C Oversized MLLW in the FWF



WCS workers place a MLLW Class C oversized component into a custom MCC for final disposal. This disposal method provides the generator and WCS workers with significant ALARA benefits by not having to size reduce the component for final disposal.



Hazardous Waste Landfill (RCRA Disposal Waste Facility)

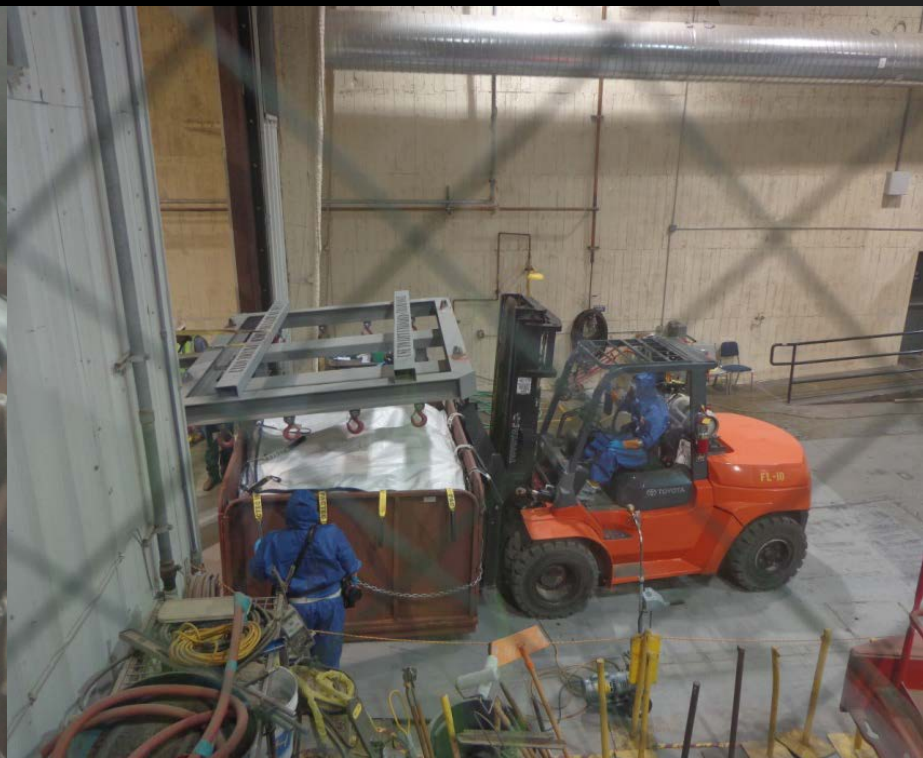


 WCS is now licensed to dispose of low activity (exempt) waste in our RCRA landfill – Exempt disposal at enhanced levels.



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MLLW Treatment Facility



WCS workers perform stabilized treatment for shredded drum waste and then place the treated waste into flexible packaging for MLLW Class C disposal into FWF.



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WCS Type-B Cask Services



“Providing maximum benefit and the lowest risk”

Offering TYPE B Cask services for resins and filters. With an internal volume of 160 ft³ and shielding limit of 500 R/Hr. The drum capacity is 10 (55) gallon with a maximum payload of 15,000 lbs.



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Large Component Capable



WCS has significant in-house capabilities to manage large component disposal. A worker is shown remotely driving a 60 ton MCC to a staging area.



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Rail Capable



WCS has excellent highway and direct rail access, with a four mile rail loop around our facility we are very well equipped to manage unit train service.



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Irradiated Hardware Transfer System



Preparing the WCS transfer equipment to receive an irradiated hardware shipment. A typical shipment has a contact dose rates of 10,000 R/hr.



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Environmental Protection



WCS is committed to the safe and secure handling of the state and nation's Low-level Radioactive Waste. WCS provides a safe, secure, long-term solution for waste disposal while fully protecting the environment. WCS' greatest ally in this effort is the geology and site characteristics of our facility.