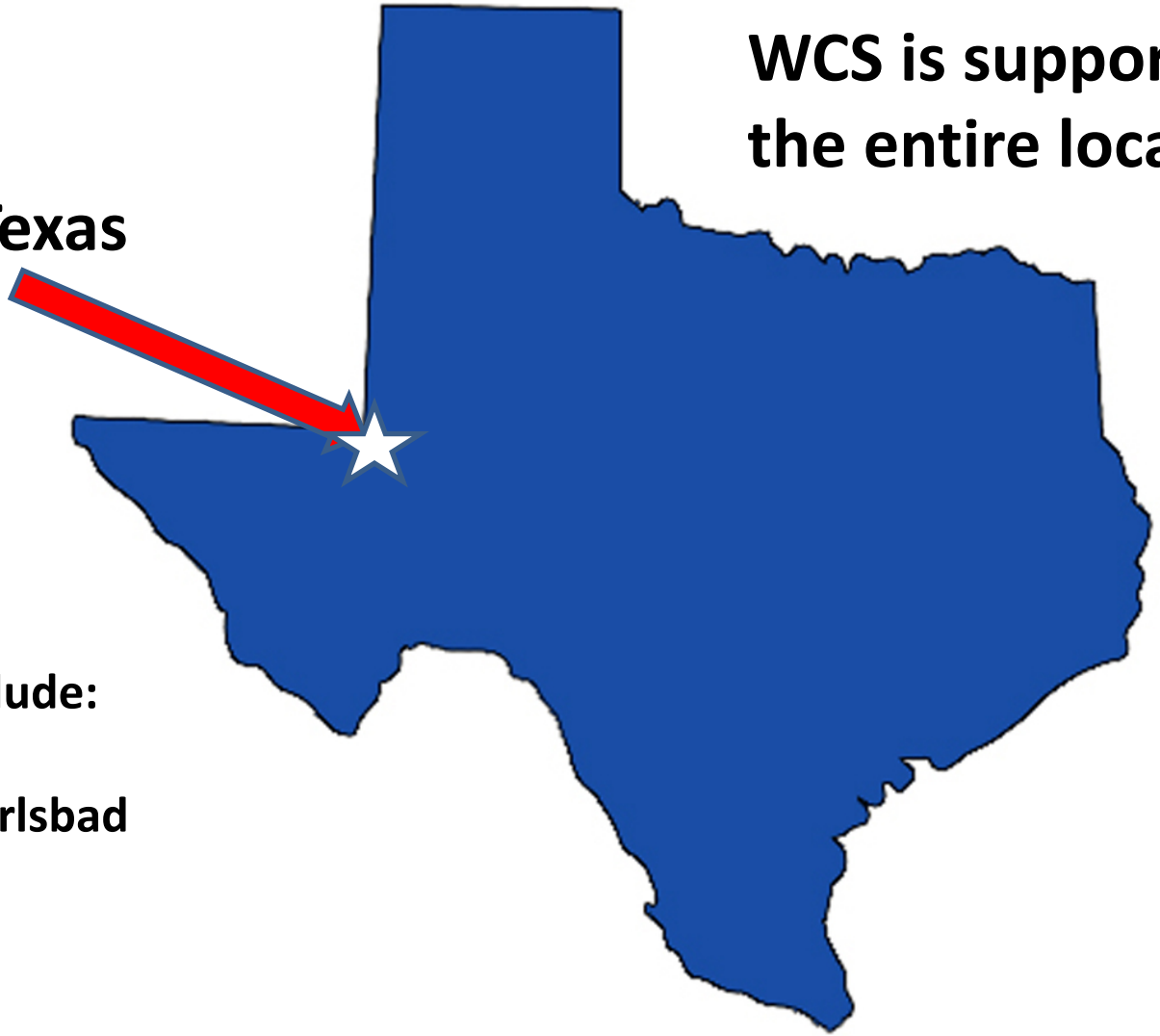
COMPLEX SOLUTIONS

Getting More Done With Less

Located Along the Nuclear Corridor in West Texas

WCS is supported by the entire local region

Andrews, Texas



Neighbors include:

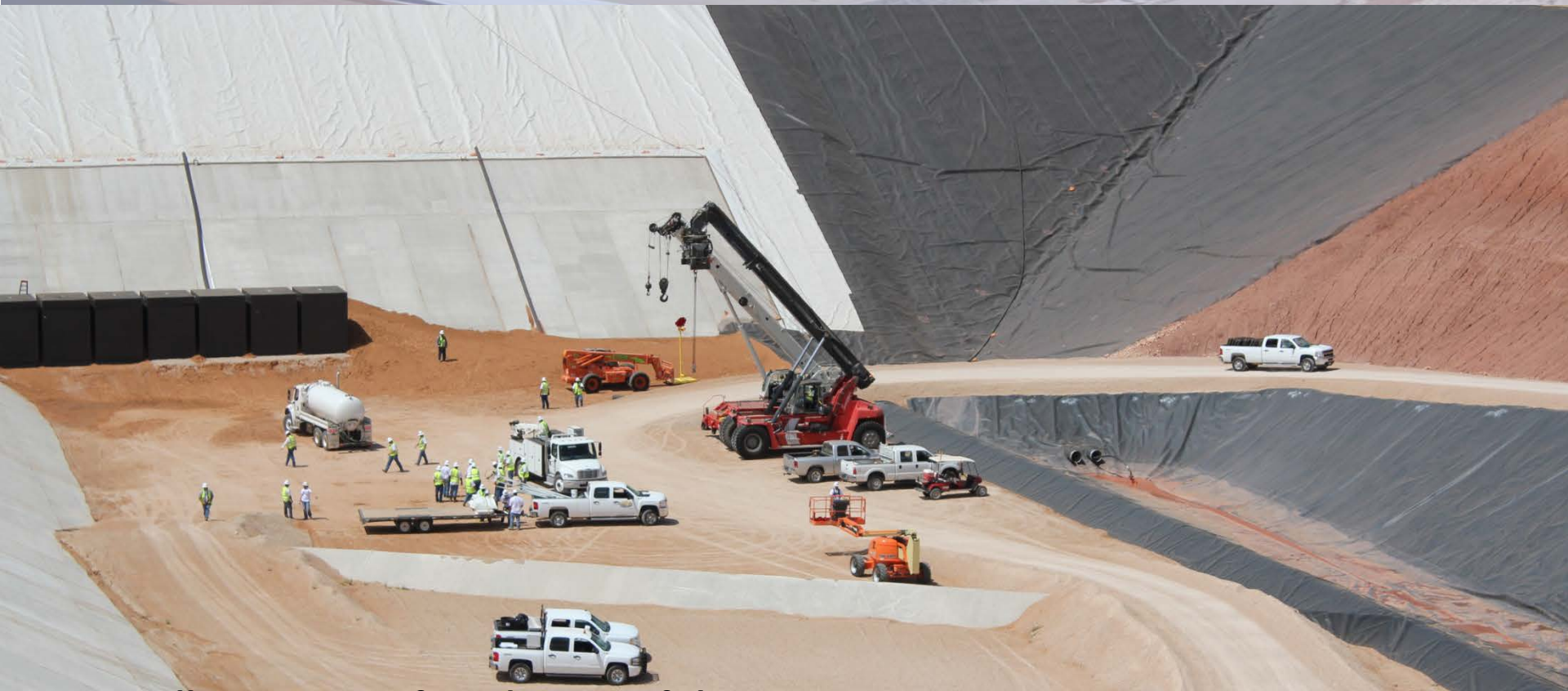
- Urenco
- WIPP/Carlsbad

WCS Current Facilities

Radioactive Waste Disposal License - What a Difference a Year Makes!

- Class A, B, and C - LLRW and Mixed LLRW Disposal
  - Final LLRW license received – September 2009
  - CWF - First LLW disposed – April 2012
  - FWF – First MLLW disposed – June 2013
    - FWF also has RCRA Permit and TSCA/CERCLA authorizations
- Includes Federal and Compact Landfills
  - DOE signed Agreement to take ownership of the Federal Landfill after post-closure – minimizes long term liability – only federal waste is allowed – no comingling of waste
  - TCEQ has taken ownership of Texas Compact Landfill and WCS leases it back for operations – no long term liability – title of the waste is transferred directly to the State of Texas upon acceptance

Federal Waste Facility



- FWF Cell is over 100 feet deep – 7 ft liner system
- Multi-layered cover system that is 25 – 45 feet thick, 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
- The FWF exceeds the 10,000-year period of compliance -10 CFR Part 61 draft rulemaking

Federal Waste Facility Key Dates

- Contract Award - May 2, 2013 - Nationwide IDIQ - Low-Level and Mixed Low-Level - Waste Disposal Services DE-EM0002405
- Grand Opening - June 6, 2013
- DOECAP Audit – July 2013 – ZERO Findings or Observations
- Currently 9 FWF Certified Generators to date (two additional audits pending)
- Current Task Order awards for the disposition of 38,000 cubic feet of Class C MLLW/LLW - YTD

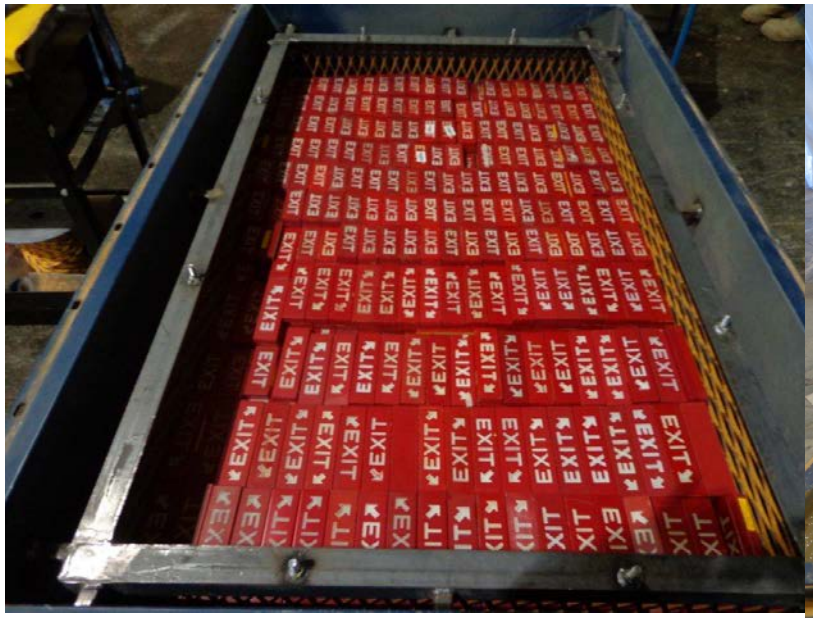
WCS Operations at the Treatment Facility

Portsmouth MLLW Class C Treatment (stabilization) – Doing More for Less

Stabilized shredded drum waste in flexible packaging for disposal into FWF

Encapsulated sealed source process (exit signs)

Encapsulated 20,000 curies of tritium contaminated exit signs



Doing More With Less

Los Alamos Governors Goal Doing More for Less

With the help of WCS and the supporters in Texas, we now have a cost-effective way of meeting our commitment to the Governor of New Mexico that was agreed to following the 2011 Las Conchas fire that came within 3-1/2 miles of the Las Alamos National Laboratory waste storage area

David Nickless - Los Alamos Field Office DOE Transuranic Waste Manager – DOE Press Release - June 6, 2013

Los Alamos Governors Goal Doing More for Less

- Governor's Goal – 3,706 cubic meters
- LANL's current process includes the decontamination of glove boxes from TRU to Class C MLLW
- DOE issued direct task orders to WCS – **saves** DOE the 40% overhead/G&A applied by the M&O contractor
- Waste required Macro-encapsulation Treatment – WCS disposal method meets the requirements under RCRA – **saves** LANL the cost associated with treatment

Los Alamos Governors Goal Doing More for Less

- WCS has designed and is building oversized MCCs (triple) to allow for the direct disposal of oversized waste –**saves** LANL the cost of size reduction, and is ALARA
- Previous approach – transport to Tennessee for treatment, and then transport to NNSS for disposal – 3,219 miles instead of 395 miles (one way) to WCS – **saves** LANL transportation cost, minimizes transportation risk, and allows for increased number of shipments
- DOE at LANL has issued 5 task orders to WCS for disposal of Class C MLLW totaling – 847 cubic meters YTD – representing 23% of the entire governor's goal – Allows LANL to better meet the Governor's Goal safer, and at the lowest cost

LANL MLLW Class C Shipment

Receipt of waste packages into WCS

LANL MLLW Class C Shipment

Receipt of oversized MLLW waste packages into WCS

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.

SPRU Waste

Separations Process Research Unit

- DOE issued direct task orders to WCS
- 105 M^3 of Class C LLW Debris (Solidified Tank Waste)
- Performed generator certification, waste profile approval, and task order award within seven working days from first contact by DOE
- First shipment received 10/11/13

License Changes to Further Support the DOE EM Mission

- ✓ **Special Nuclear Materials –** allows WCS to take possession of USDOT limits of SNM on a conveyance prior to disposal. *Amendment approved.*
- ✓ **Co-disposal Concept** – allows WCS to dispose of Class A soil/debris waste and large components outside of an MCC, with limited size restrictions. *Amendment approved.*
- ✓ **Increase Tc Limits** – the Tc limit for the FWF increased to 1190 curies. *Amendment approved.*
- ✓ **Depleted Uranium Disposal** – submitted an amendment to revise the performance assessment to take ~400,000 m3 of DU (large quantities) as well as other LLW near the Class C limits. *Amendment expected to be approved in July 2014.*

Questions?

www.WCSTEXAS.com