



ENERGY*SOLUTIONS*



Processing Capabilities

February 2008

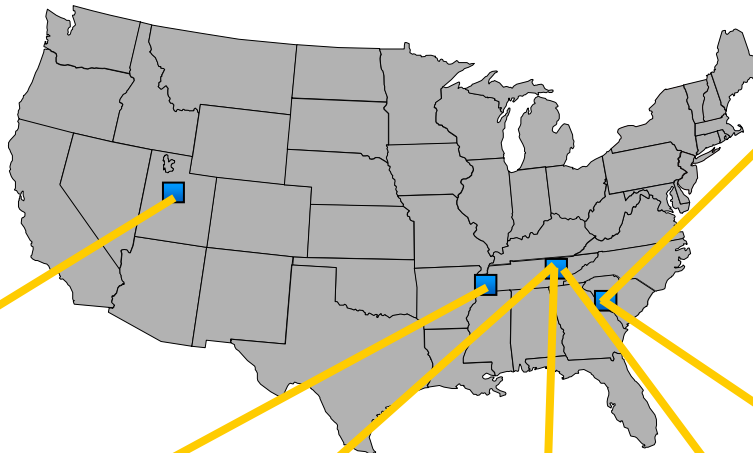
Troy Eshleman



Facilities

ENERGYSOLUTIONS

- 5 Licensed Operations Facilities
- 2 Disposal Facilities
- Logistics Operations



Clive Disposal



Clive, UT

Chem-Nuclear Disposal



Barnwell, SC

Barnwell Processing



Barnwell, SC

Memphis Operations



Memphis, TN

Gallaher Road Operations



Kingston, TN

Bear Creek Operations



Oak Ridge, TN

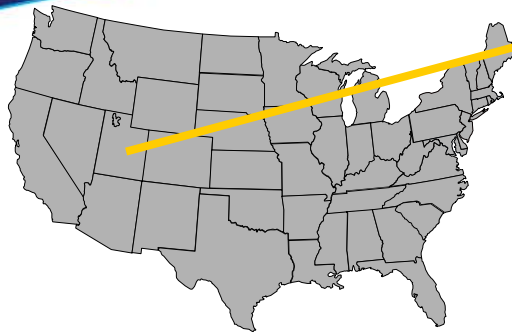
Manufacturing Sciences



Oak Ridge, TN



Clive Disposal



- Class A Low-level Waste Disposal
- Mixed Low-level Waste Treatment
- Mixed Low-level Waste Disposal





Mixed Waste: Treatment and Disposal

- Stabilization
- Solidification
- Vacuum Thermal Desorption (VTD)
- Macroencapsulation



Bear Creek Operations

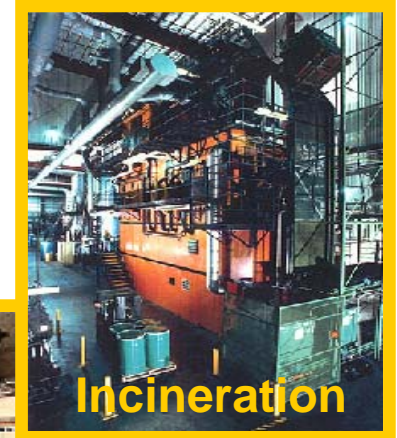


Bear Creek Operations



Oak Ridge, TN

- Incineration
 - 2 Commercial Low-level Radioactive Units
 - Solids, Liquids, Oils, and Sludges
- Compaction
 - Largest LLW Compactor in U.S.
- Metal Melt Furnace
 - Produce 10,000 Kg Shield Blocks for High Energy Physics Labs
- RCRA Part B Mixed Waste Permit
- Eastern U.S. transfer station/ waste preparation for Clive Disposal



Incineration



Compaction



Metal Melt



Transfer Station Operations



- Commodity DAW and Metals “Commercially Certified” for Clive disposal replacing primary Incineration and Compaction
- Customer Benefit:
 - Speed of processing/disposition (less than 45 day average to disposal)





Incineration



- Capacity: 1600 lbs/hr each
- Processing: Solids, Oils, Sludges and Liquids
- Incineration Licensing:
 - Ash attribution model decouples generator ID after incineration
 - Authorization to “burn/recycle” gases and radioactive sources and standards





Metals Recycling ENERGY SOLUTIONS

- Shield Block Contract with KEK, Japan
- Capacity: >10M lbs per year
- Processing: Carbon, Stainless other soft metals less than 2% by mass
- Products (Beneficial Reuse: All products back to nuclear industry):
 - Irradiated hardware storage canister
 - Security barriers





Lead Casting/Recycling



- Outlet for contaminated lead recycling
- Products for sale to the nuclear industry:
 - DOT Type A Packages
 - Process Shields for Liners
 - Specialty Shields for Accelerators
 - Transfer Bells





Specialty Services



- NTS Waste Certification Program
- Final Resin Dewatering and Solidification
- High Rad CW Water/Sludge Drying
- Filter Re-characterization (B/C filters)
- Source Solidification
- Repackaging Services



Memphis Operations

- Barge, Rail, Road Access
- “Safeshop” Customer Hotshop Rental
- Rad Equipment Storage
- Outage Equipment Service Center
- *Energy Solutions* Project Service Center
 - Equipment Decontamination
 - Container Decontamination
 - Tank Segmentation
 - Large Component Staging

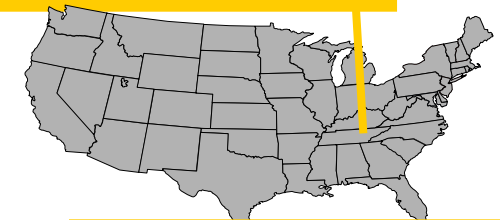




Manufacturing Sciences Corporation

ENERGY SOLUTIONS

- Cast and roll depleted uranium (DU) plate for U.S. ARMY Tank Armor program.
- A focused effort to market toll rolling services to non-radioactive specialty metals industry began in 1998.
- MSC is currently processing specialty metals for:
 - aerospace
 - wireless telecommunications
 - metals manufacturing
 - materials research
 - nuclear applications

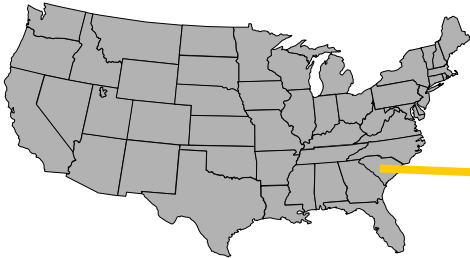


TN OSHA VPP Star Site



Barnwell Processing Facility

ENERGYSOLUTIONS



- Radwaste Processing
 - Dewater Liners
 - Sort/Segregate/Compact
 - Decontaminate
- Systems Demonstration
 - Radioactive and non-radioactive system deployment support

