



ENERGY *SOLUTIONS*

Barnwell Complex Update
Presented at
Governor's Nuclear Advisory Council Meeting
December 13, 2012

Summary

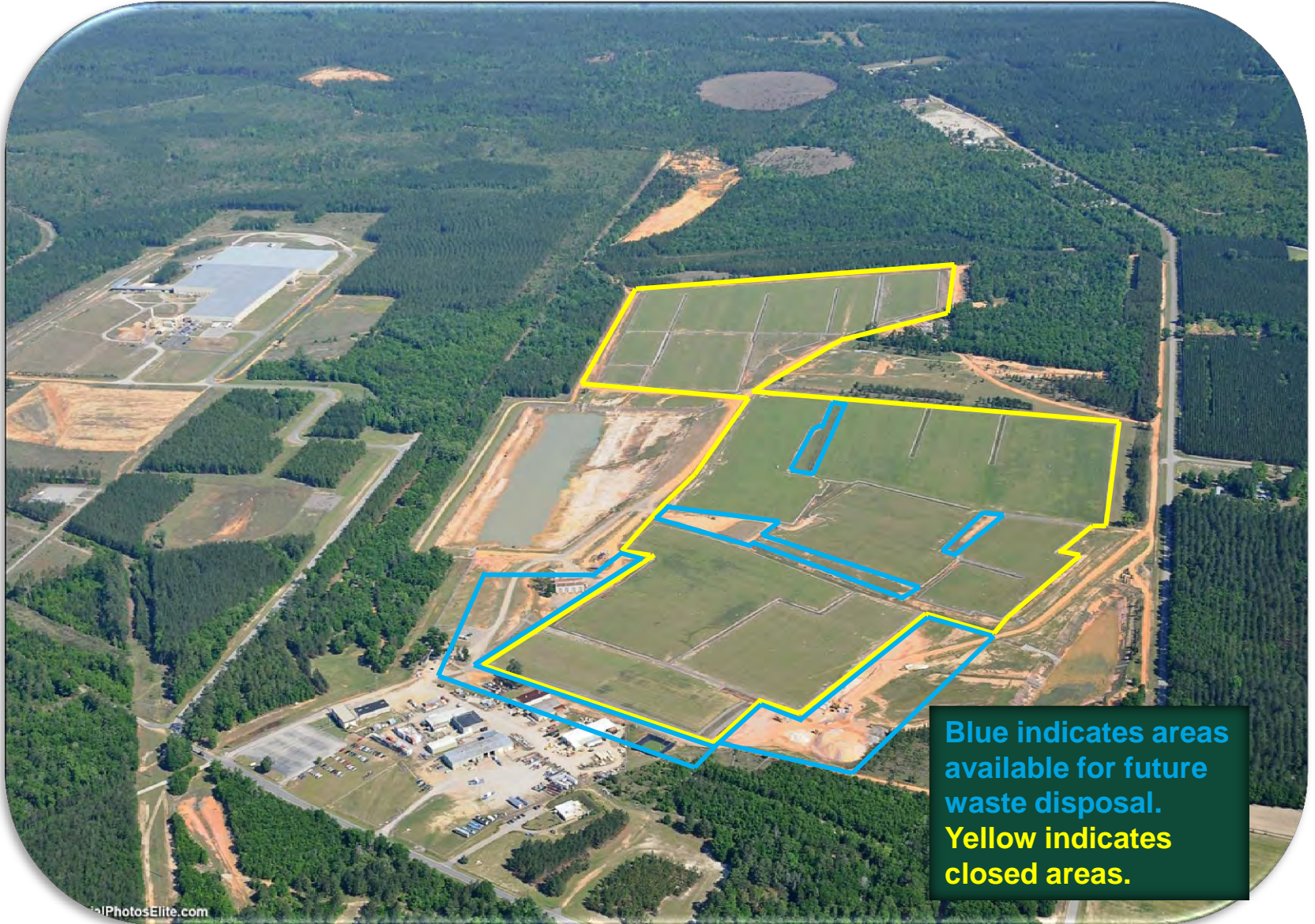
- Safety
- Compliance
- Barnwell Disposal Facility (BDF)
 - Disposal Volumes
 - Institutional/Decommissioning Progress
- Barnwell Processing Facility (BPF)
 - Current Business
 - Filter Shredding
- Barnwell Environmental and Dosimetry Laboratory (BEDL)
- Nuclear Services Support Facility (NSSF) and Liner Operations
 - Domestic Operations
 - International Operations
- Hittman Transportation and Cask Logistics

Barnwell Complex



- Barnwell Complex
 - First Aids - Zero
 - Total Recordable Case Rate (TRC) 0.0
 - Day Away, Restricted or Transferred (DART) 0.0
 - Days Away Case (DAC) 0.0
- National Safety Council
 - 2011 Perfect Record Award
- Hittman Trucking
 - National Private Truck Council – 2011 Awards
 - First Place Regional small trucking firm
 - First Place Regional large trucking firm
 - SaferStats score was .49 accidents per million miles

- 43 Years of Uninterrupted Operations
- *EnergySolutions* Operation Assessments/Observations
 - Internal Assessments
 - External Assessments
 - Independent Assessments
 - Management Field Observations
- DHEC Licensing and Oversight
 - Extensive license conditions
 - Inspections
 - On-site inspector
 - Daily shipment inspections
 - Engineers
 - Weekly site inspections
 - Staff
 - Unannounced semi-annual license inspections
 - 2012 – 2 inspections – 0 NOV's



Blue indicates areas available for future waste disposal.
Yellow indicates closed areas.

- 235 Acres Owned by the State of South Carolina
 - EnergySolutions leases the facility from South Carolina Budget and Control Board
 - EnergySolutions operates the disposal facility under SC DHEC Radioactive Material License 097
- Atlantic Compact member
 - Acceptance of Class A/B/C waste shipments 7 days per week
 - Acceptance of large components and irradiated hardware shipments
- Institutional Activities
 - Site maintenance
 - Environmental monitoring



Class A/B/C Waste Disposal



Large Component Disposal



Recent Waste Volumes

Fiscal Year	2009/2010(ft³)	2010/2011(ft³)	2011/2012(ft³)	2012/2013(ft³)*
Routine Utility Waste	6,637	10,983	9,201	2,490
Non-Utility Waste	60	67	120	87
Steam Generators	27,304	0	0	0
Irradiated Hardware	0	0	173	0
Fiscal Year Total	34,001	11,050	9,494	2,577

* Through November 2012

- *EnergySolutions* employees in South Carolina: 232
 - BDF 34
 - BPF 10
 - NSSF/Liner Operations 32
 - Hittman Trucking 22
 - Cask Logistics 6
 - Aiken 51
 - Columbia 67
 - Other 10
- Average length of employment at the Barnwell Complex
 - Over 20 years



- 17-acre facility that consists of two primary buildings
 - 101 – 7,500 ft²
 - 201 – 20,000 ft²
 - 301 – 8,000 ft² future RCRA treatment facility
- Services provided
 - Volume reduction
 - Dewatering
 - Waste treatment
 - Decontamination
 - Water processing
- The BPF shares a boundary from the west with the Department of Energy Savannah River Site



BPF Building 101

- Climate controlled concrete facility
 - 7,500 square feet
- Large open work bay for processing and compacting various radioactive material and waste streams
- Sort and Segregation Facility (SSF)
 - 700 square feet
- Super compactor

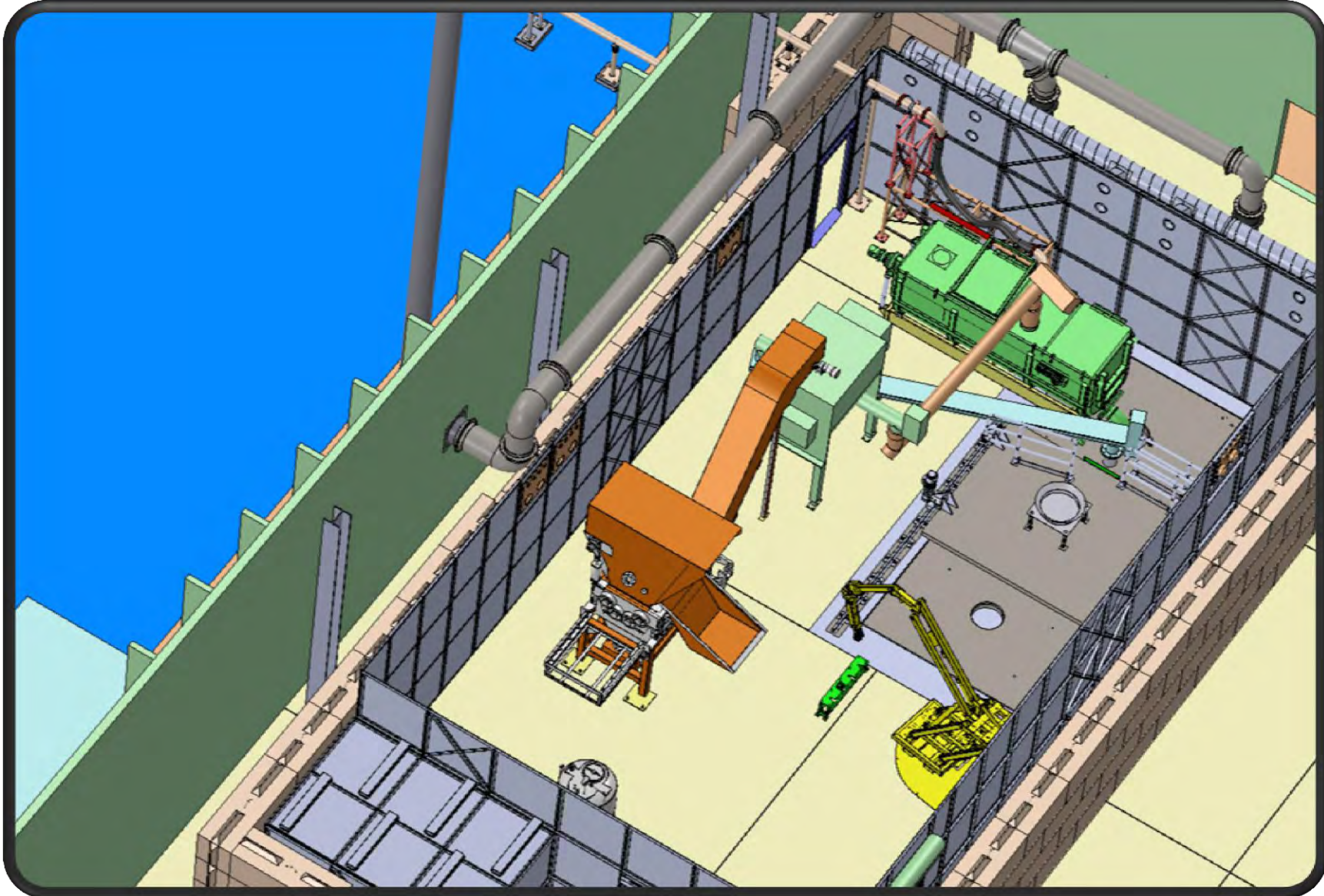


BPF Building 201

- 20,000 square foot climate controlled concrete facility
- Open floor space for processing radioactive materials and waste
- Filter Shredding
- Radiological waste testing laboratory
- 80-ton overhead bridge crane

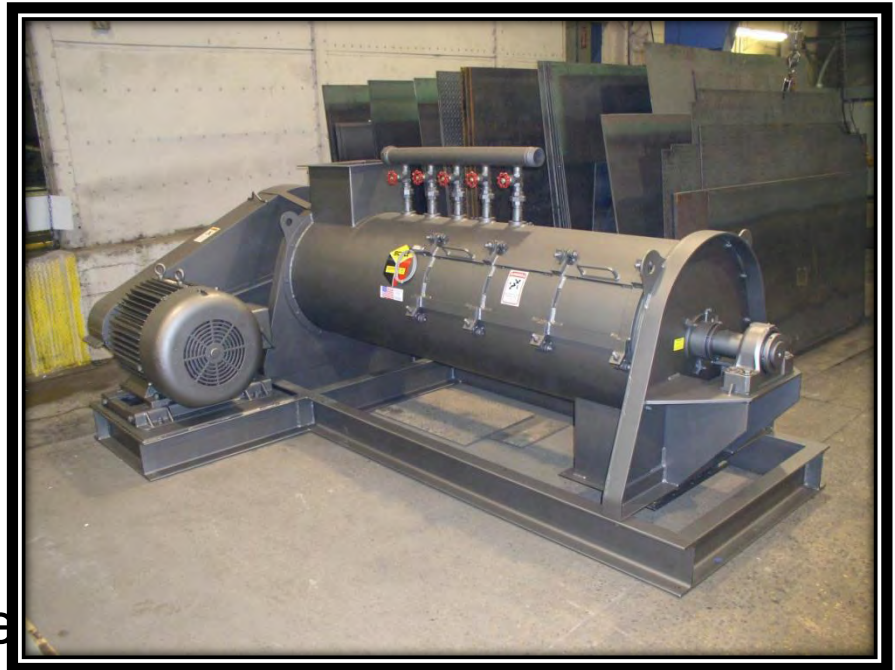


Filter Shredding



BPF Building 301 RCRA Treatment Facility (future)

- 8,000 square foot steel building with concrete floor and foundation
 - RCRA Part B permit
 - Building design is approved
 - Two unloading bays
 - Process area
 - 50-ton overhead bridge crane
 - 5,000 square foot future expansion



BEDL


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- Environmental Monitoring
- Radiological Laboratory
- Radiation Dosimetry
- Engineering Support
- Site Characterization
- Hazardous Material Management



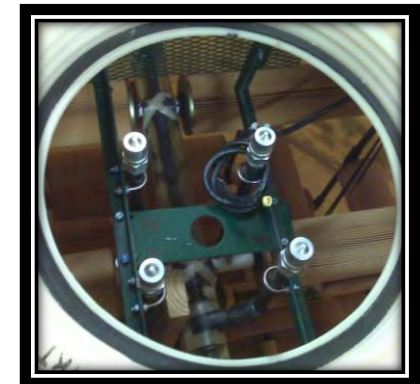
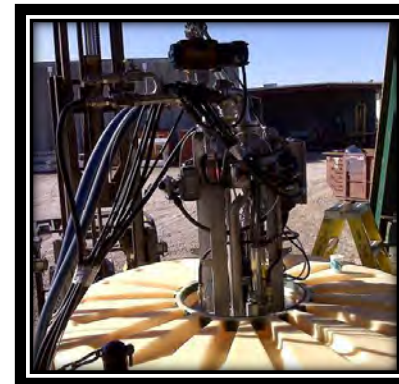
NSSF and Liner Operations



NSSF and Liner Operations

- *Containers*

- Answers for Special Packaging Needs
- Proven Design and Reliability
- Large Equipment Packaging
- High Rad
- Interim and Long-Term Storage
- Waste Shipping, Processing, & Disposal



Hittman Transportation



Hittman Transportation and Cask Logistics

- Two Locations

- Barnwell, SC
- Oak Ridge, TN

- Assets

- 81 Tractors
- Equipment
 - Flat Beds
 - Vans
 - Curtain Trailers
 - Cask Trailers
 - 80-ton Multi Axle Trailer



- Capabilities

- NRC NQA-1 Approved Program
- New and Used Nuclear Fuel Transport
- DOE Classified Shipments
- RAMQC Shipments
- Integrated Proprietary Cask Fleet
- Oversize/Overwidth Project Management





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QUESTIONS?