DOE-EM/UK NDA Bilateral Agreement
Progress in Waste Processing Collaboration

Steve Schneider
Office of Waste Processing, EM31

Waste Management Symposia
March 7-11, 2010
Topic Areas Identified for Collaboration

- **Glass Chemistry/Formulation**
  - SRNL fabricated and characterized Uranium-bearing glasses under direct contract to Sellafield Ltd at a cost saving of $100k over originally proposed route.
  - Joint scopes of work developed on Spinel Formation and Sulfur Solubility in glass which are being completed in the UK with USDOE input.
  - Multiple information exchange meetings including
    - International Glass Corrosion Technical Exchange Meeting, Manchester, January 2011 to coordinate workscopes being conducted in this area.

- **Thermal Treatments**
  - Numerous reports provided by DOE to NDA to assist them in making decisions about the most suitable alternatives to vitrification for UK waste streams.
  - Next step is face-to-face discussions to enable NDA to learn more about DOE experiences with technologies.
Topic Areas Identified for Collaboration

- **Hot Isostatic Pressing**
  - Visit to INL from Sellafield, NNL and NDA staff. Multiple opportunities for information exchange identified and under way.
  - Possible opportunity for UK trial work in INL active facilities

- **Tank Corrosion and Structural Integrity**
  - Information exchanged on the types of storage vessels (tanks, silos etc) in use across both DOE and NDA complex
  - Key issue in DOE is corrosion of steel liners whereas key issue in NDA is long term degradation of concrete.

- **Sludge Retrieval and Management**
  - No activity to date