



U.S. DEPARTMENT OF  
**ENERGY**

*Presentation to the SRS CAB  
Nuclear Materials Committee*

**Nuclear Materials Process  
Planning for FY2010  
September 15, 2009**

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# Acronyms

Al – Aluminum

ATR – Advanced Test Reactor

DOE – Department of Energy

DRR – Domestic Research Reactor

EM – DOE Office of Environmental  
Management

EUD – Enriched Uranium Disposition

FRR – Foreign Research Reactor

FY – Fiscal Year

HEU – Highly Enriched Uranium >20%

HFIR – High Flux Isotope Reactor

INL – Idaho National Laboratory

IPT – Integrated Project Team

LAC – L Area Complex

LEU – Low Enriched Uranium <20%

LWT – Legal Weight Truck

LTH – L-Area To H-Area

MTHM – Metric Tons Heavy Metal

MTR - Material Test Reactor

NE – DOE Office of Nuclear Energy

NNSA – National Nuclear Security  
Administration

ORNL – Oak Ridge National  
Laboratory

SC – DOE Office of Science

SNF – Spent Nuclear Fuel

SRNS –Savannah River Nuclear  
Solutions

SRS – Savannah River Site



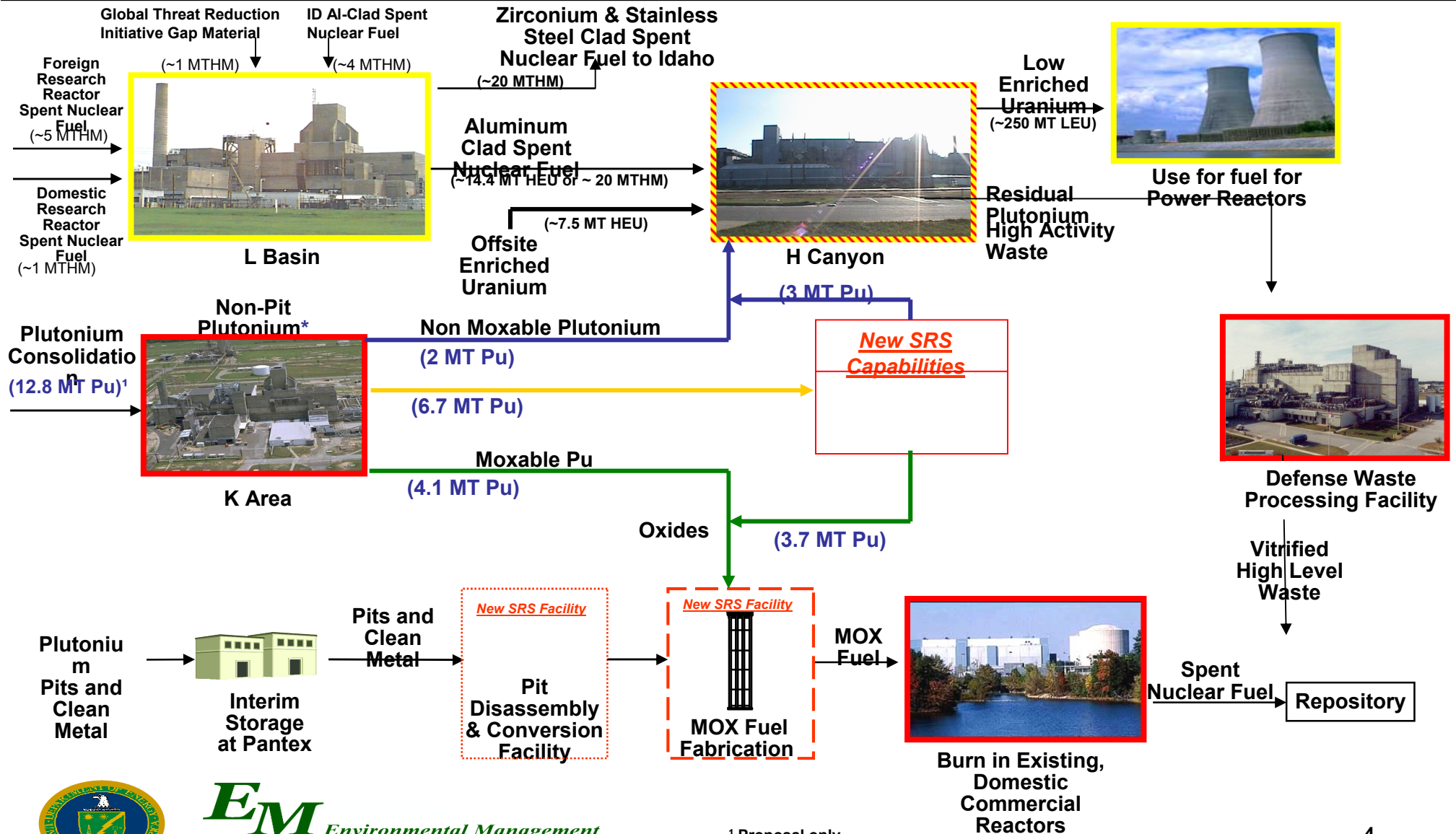
# *Purpose*

➤ **Describe the proposed work plan in FY2010 for:**

- **H-Canyon/HB Line**
- **K-Area Complex**



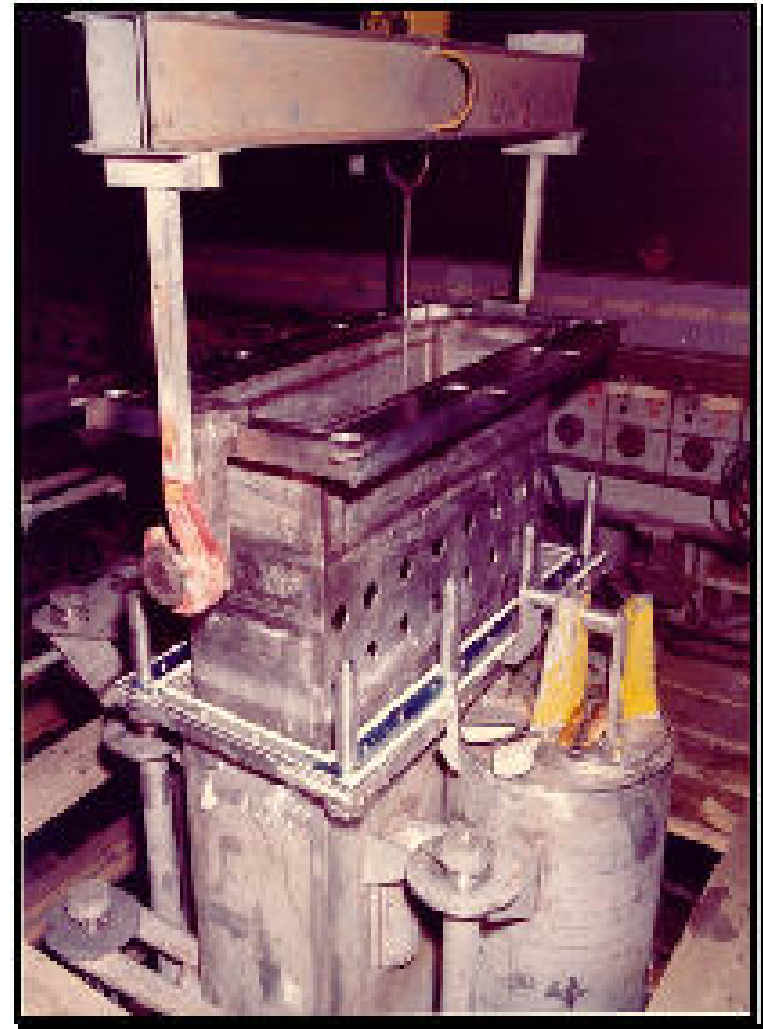
# Nuclear Materials Disposition Process



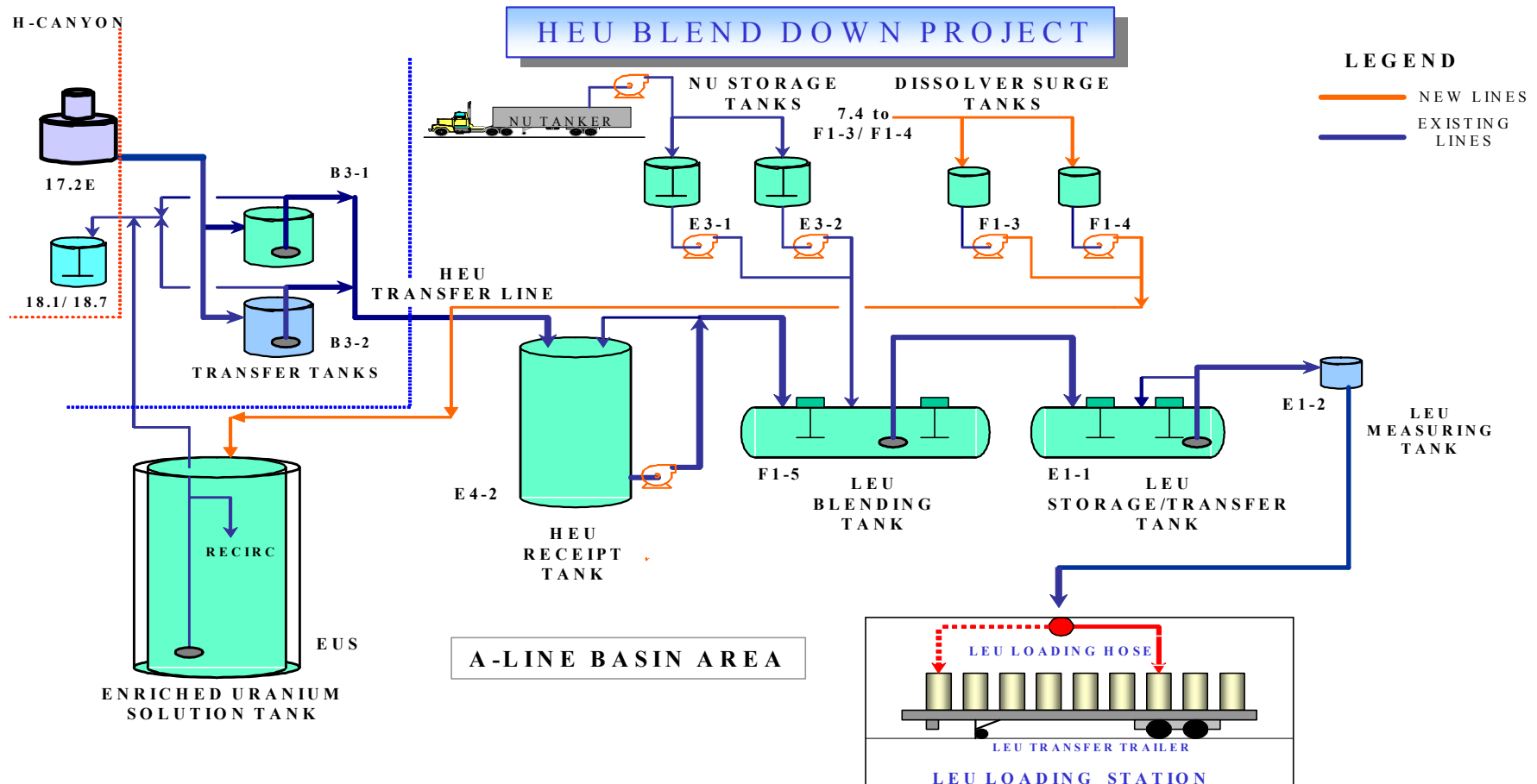
# *FY10 Goals*

## *H-Canyon/HB Line*

- **Complete Un-irradiated HEU dissolution by September 2010**
  - **Expecting final HEU receipts**
    - **HEU-Molybdenum**
    - **Aberdeen**
    - **SPR II**
- **Load 20 LEU trailers by September 2010**
- **After Un-irradiated HEU campaign is complete, transition to Spent Nuclear Fuel**



# HEU TO LEU



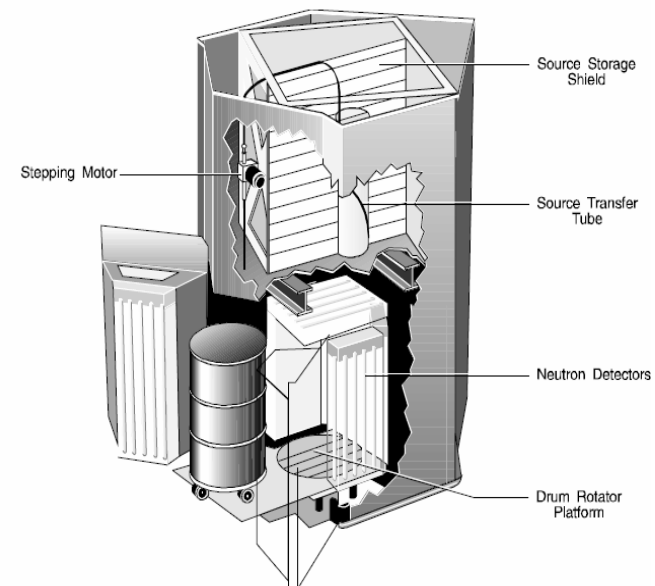
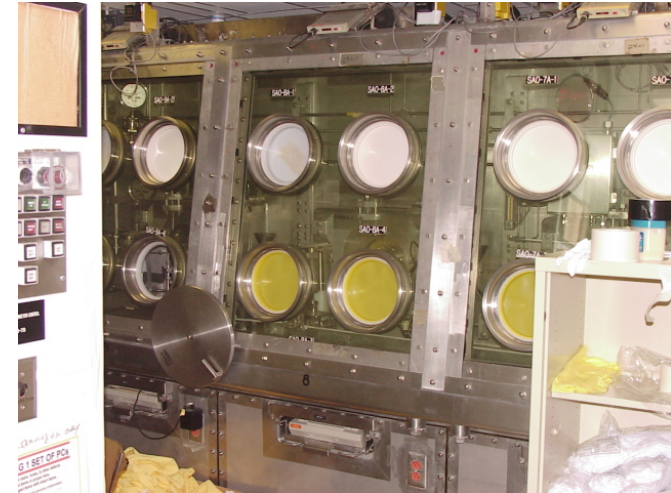
## *FY10 Goals H-Canyon/HB Line*

- **Continue dissolving plutonium**
  - **This material will come from**
    - **Long term Pu surveillance program**
    - **Excess Pu that is unsuitable for MOX feed or disposition through WIPP**
- **Support Hanford's de-inventory of Low activity Pu material**



# *FY10 Goals K-Area Complex*

- **Continue long term Pu surveillance program**
  - ▣ DOE technical standard requires 15 destructive examinations and 40 non-destructive examinations per year
- **Complete fabrication and installation of Californium 'Shuffler'**
- **Begin design of new storage vault**





# *Summary and Path Forward*

- **All of the aforementioned goals are dependent upon the actual FY10 funding that is received.**
- **There are a number of studies being finalized and/or initiated that may change the goals presented here.**
- **Alan Gunter will discuss the purpose of these studies.**

