



Office of
Environmental
Management

Brookhaven EM Completion Project

American Recovery and Reinvestment Act (ARRA)

Brookhaven National Laboratory
Community Advisory Council

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Discussion Topics

- ❖ ARRA Description
- ❖ Brookhaven Environmental Management (EM) Funding and Goals
- ❖ Brookhaven EM ARRA Projects
- ❖ Description of ARRA Projects



American Recovery and Reinvestment Act

American Recovery and Reinvestment Act was signed into law on Feb. 17, 2009.

The American Recovery and Reinvestment Act is expected to :

- Jump-start our economy
- Create or save millions of jobs
- Address long-neglected challenges
- Provide for transparency and accountability (www.recovery.gov)

The DOE Office of Environmental Management will receive \$6 billion for cleanup complex-wide.



Brookhaven EM Funding and Goals

- ❖ All work is to be completed by 2011.
- ❖ Brookhaven EM will receive \$42 million dollars of ARRA funding to accelerate cleanup activities.
- ❖ Brookhaven ARRA funds will be used for:
 - Job creation and retention
 - “Footprint” reduction of facilities designated for cleanup



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EM Brookhaven ARRA Projects

<u>Facilities/Areas</u>	<u>Scope of Work</u>	<u>Scheduled Completion</u>
Former Hazardous Waste Management Facility Perimeter Area	Remove and remediate the contaminated soils	July 2009
801/811 Transfer Waste Lines	Remove underground lines and remediate the soils	Oct. 2009
Brookhaven Graphite Research Reactor (BGRR) pile removal	Remove graphite pile blocks	Jan. 2010
High Flux Beam Reactor (HFBR) systems Isolation	Prepare Bldg 750 for long-term surveillance and maintenance	May 2010
Bldg 704 and 802 Fanhouses	Remove all structures above ground and below ground and remediate soils	Dec. 2010
Exhaust Stack	Stack demolition and waste disposal	July 2011



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Former Hazardous Waste Management Facility Perimeter Soils

❖ Scope of Work: Remove and remediate contaminated soils

- Spot cleanup of soil contamination found outside the fence area
- Cs-137 is the primary contaminant of concern
- Limited to the top 6 inches to 1 foot
- No groundwater impacts



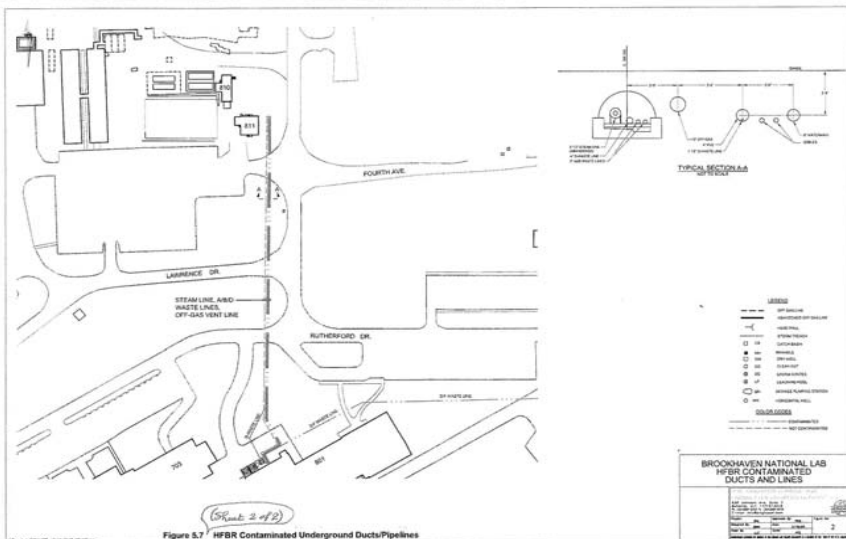


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Bldg 811/801 Transfer Waste Lines (A/B)

Scope of Work: Remove the underground lines and remediate the soils

- A&B Underground Radioactive Liquid Waste Line Removal (from Bldg 811 to Bldg 801)
- The pipe enclosure is 800 feet long and buried at an average depth of 4 feet

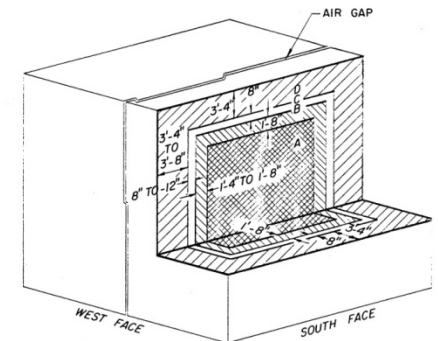
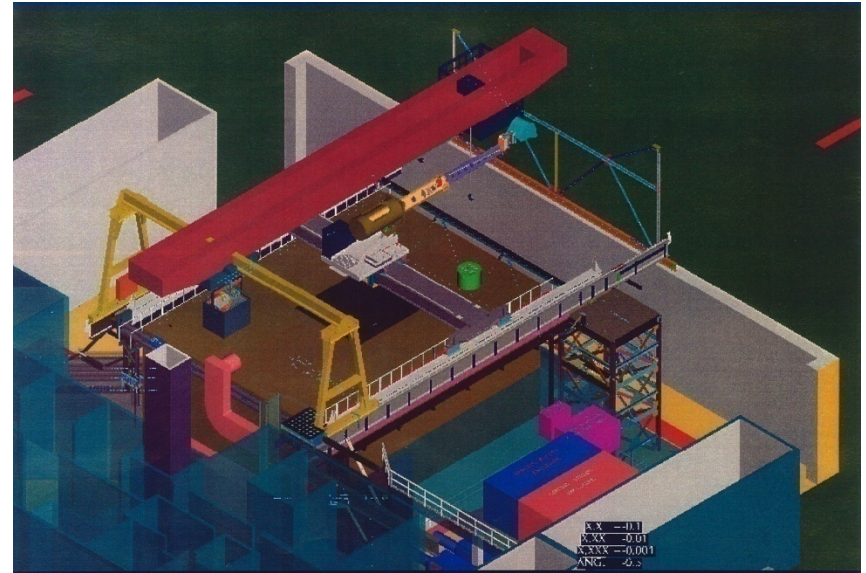




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Brookhaven Graphite Reactor Pile Removal

- ❖ **Scope of Work: Remove all graphite pile blocks**
- The 25-foot graphite cube was built in two sections, separated by a vertical gap.
- More than 68,000 individually machined graphite pieces were used to construct pile.



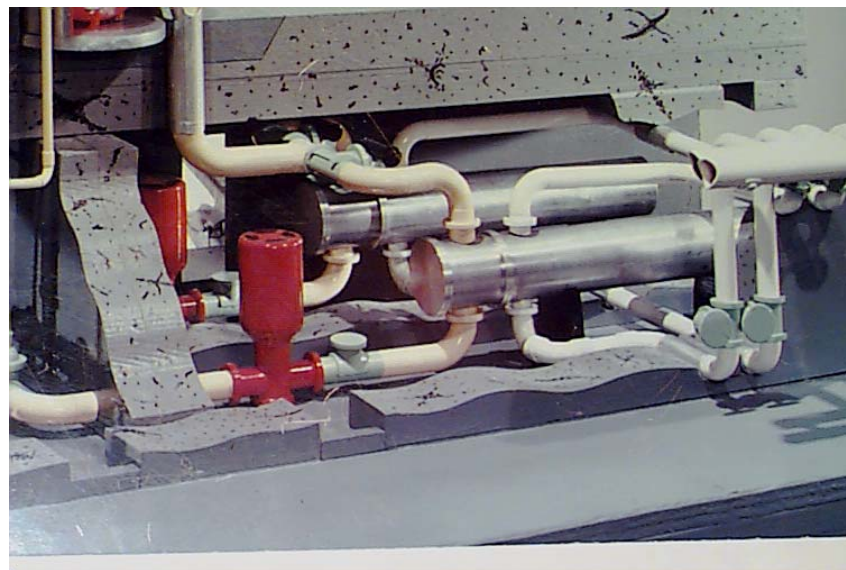
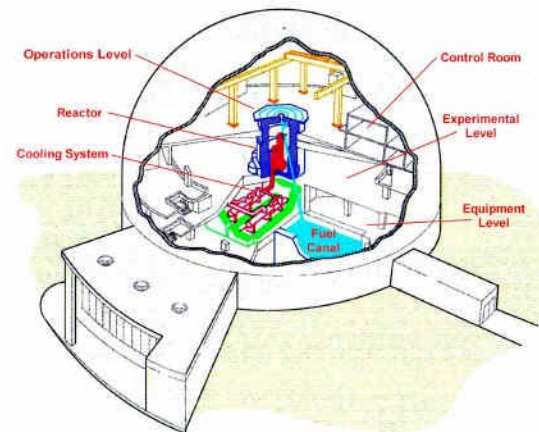
LOCATION OF
FOUR GRADES OF GRAPHITE
FIG. G0401-12

HFBR (Bldg 750) System Isolations

❖ Scope of Work: Stabilize the HFBR (Bldg 750) for long-term S&M

System Isolations include:

- De-energize, drain, lockout/tagout systems
- Cleanout, disposal and isolation of abandoned equipment and fixtures
- Removal of residual D₂O from piping systems and disposal
- Removal of fission chambers, filters and resin beds and disposal





HFBR Bldg 704 and 802 Fanhouses

Scope of Work: Remove all structures above and below ground and remediate soils



Bldg 704 Fanhouse



Bldg 802 Fanhouse



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HFBR Stack

❖ Scope of Work: Stack demolition

- Electrical isolations
- Waste disposal





American Recovery and Reinvestment Act (ARRA)

Any questions?