



# ***Sodium-Bearing Waste Treatment Project Update***

Presented at the Citizens Advisory Board Meeting,  
September 14, 2011

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**Department of Energy-Idaho**



***EM*** *Environmental Management*

## ***Sodium Bearing Waste Treatment Project Mission***

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- New Facility to Treat 900,000 Gallons of Radioactive Liquid Waste currently stored in underground tanks at the INTEC Tank Farm
- Idaho Settlement Agreement Requires Treatment of Tank Waste by December 2012
- Consent Order requires the remaining INTEC Tank Farm tanks to be emptied by December 2012
  - Tank Farm tanks secondary containments non-compliant with RCRA



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# *IWTU Facility*

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## *IWTU Site Prep-March 2007*

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## *IWTU Site Prep-May 2007*

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## *IWTU Base Mat Preparation-July 2007*

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## *Photo of Construction Site – September 17, 2007*



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## *Photo of Construction Site – October 10, 2007*



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## Photo of Construction Site – November 1, 2007

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## Photo of Construction Site – March 4, 2008



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## *Construction May 2008*

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## *IWTU Lift*

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## *IWTU Construction-July 2009*

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## ***Project Status***

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- Project Construction was completed on June 3, 2011
- Overall Project completion is approximately 96%.
- All Systems in testing
- Contractor Management Self Assessment (MSA) initiated August 8
- Hot Nitrogen Integrated Systems Test initiated August 15, 2011 (1-day early)
- Main Processing system (reforming process and material handling) has been heated



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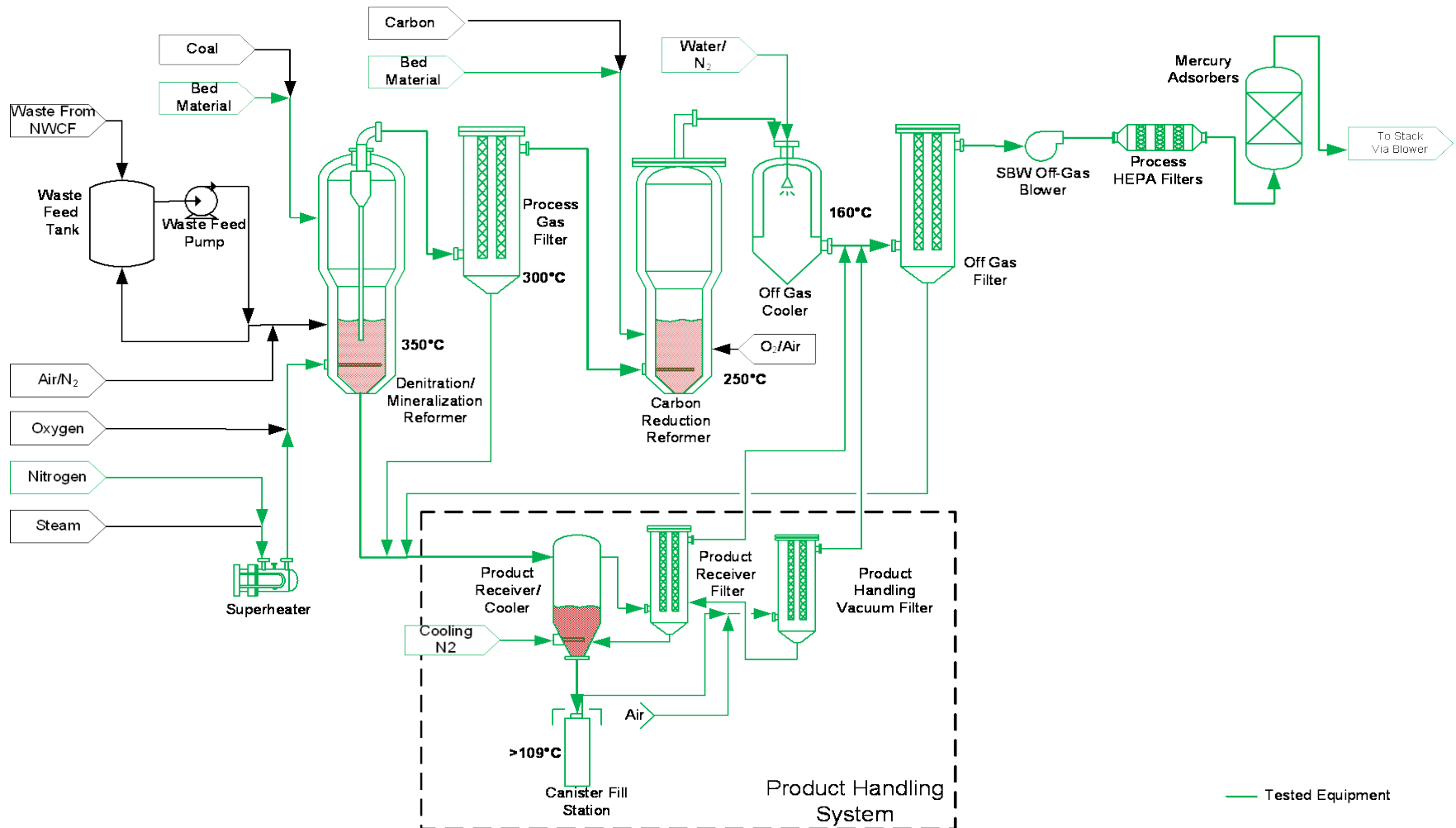
## *Project Status*

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- Interfacing with Contractor Operational Readiness Review and DOE Operational Readiness Review Team Leads regarding Hot Nitrogen Operations Run
- Contractor Operational Readiness Review – Early November
- DOE Operational Readiness Review – Early December
- DOE Issue Authorization Agreement to Operate – December, 31



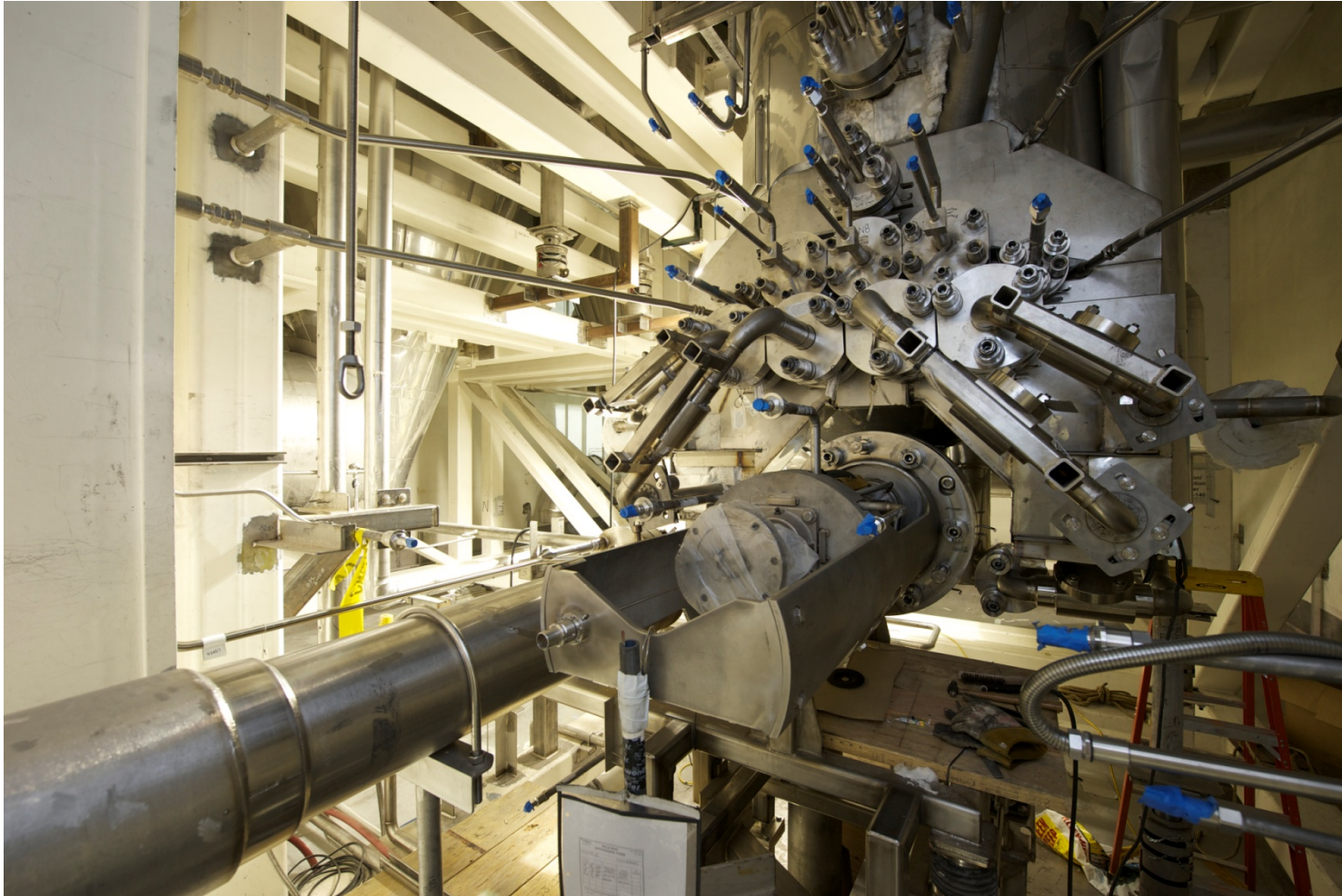
# MSA Demonstration Flowsheet





## *DMR & Auger/Grinder*

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## *HVAC HEPA Filters*

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## *Process Off Gas Line*

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# *Coal Silos*

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## *Feed Material Transfer Conveyor*

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## *Coal, Coke, Bed Material Feeders*

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## *Canister Fill Station*

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## *Transfer Bell Crane & Maintenance Crane*

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# *GAC Bed Filters*

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## *Product Storage Building & Storage Vaults*

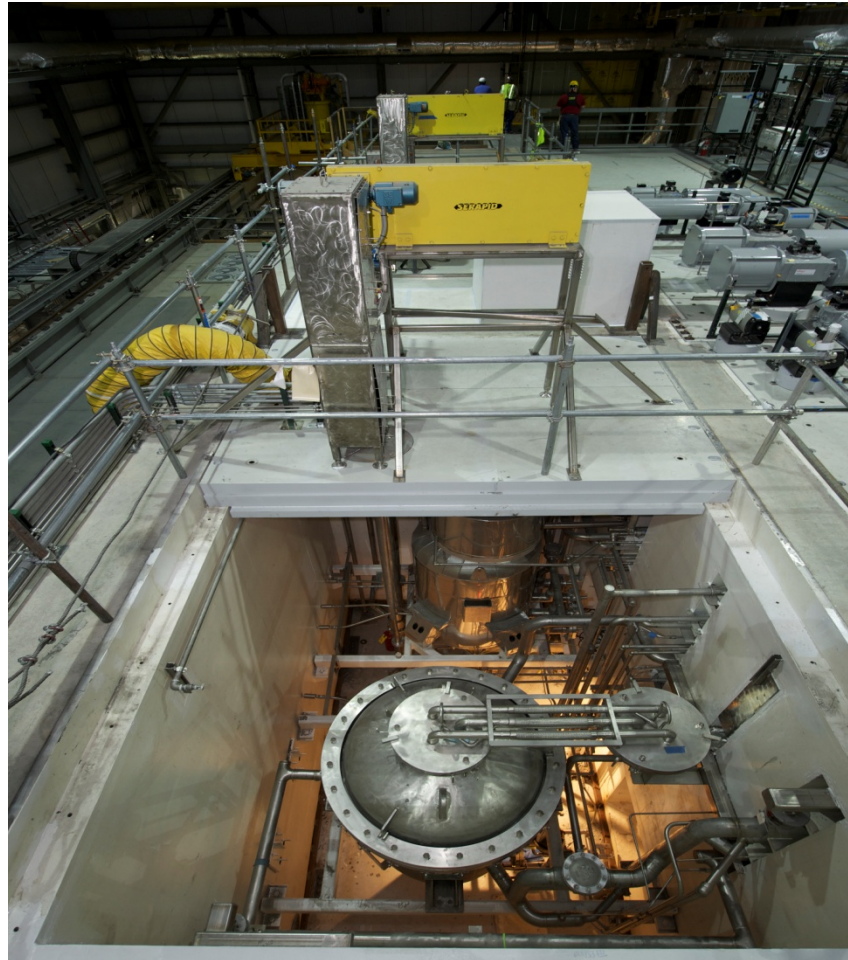
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## *Product Handling Vacuum Filter*

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## *South Pipe Chase/Valve Actuators*



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## *Vault Load Cell*

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## *IWTU Control Room*

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