DUF_6 Conversion Project

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DUF_6 Conversion Project

The DUF_6 Project is a first-of-a-kind chemical processing operation operated by B&W Conversion Services, LLC

DUF_6 Facility at Portsmouth, OH GDP

- Three lines – six conversion units
- 186 employees at Portsmouth

DUF_6 Facility at Paducah, KY GDP

- Four lines – eight conversion units
- 190 employees at Paducah

DUF_6 Office Lexington, KY

- 37 employees at Lexington

The DUF_6 Mission

Convert approximately 800,000 metric tons of depleted uranium hexafluoride (DUF_6) into hydrofluoric acid for commercial reuse and stable uranium oxide for storage, reuse, or disposal.

DUF_6 Conversion Project

Project Objectives

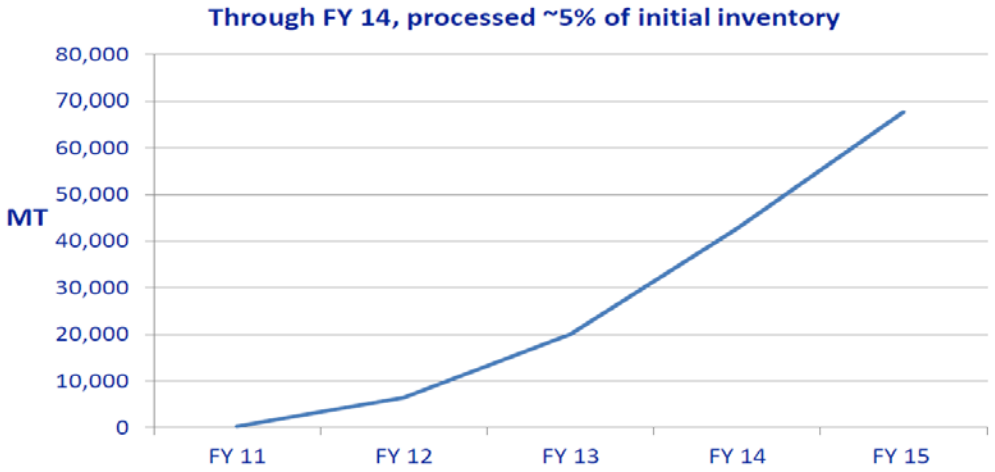
- Cylinder/Yard Management
- Converting Depleted Uranium Hexafluoride into Uranium Oxide and Aqueous Hydrofluoric Acid.

FY2014 Production Results

- Processed 22,596 metric tons of DUF_6 representing a 66% increase over FY13.
- 3,500,000 gallons of Hydrofluoric Acid safely recycled into commerce.
- Facility availability increased from ~55% to ~80%.

DUF_6 Conversion Project

Transitioning from start-up to sustained facility availability and predictable production output.



2014 productivity initiatives:

- Discharge chute/rotary valve
- Oxide powder transfer
- Process Off-gas System (POS) reliability
- Fluid bed stability
- Cylinder feed variability

Opportunities ahead:

- Replace product coolers
- Vacuum pump redesign
- Hydrogen generators
- Software upgrades
- OPH filters
- Feed nozzle limitations
- Conversion unit heat transfer

DUF_6 Progress

Transitioning from startup to sustained facility availability and predictable production output.

Increases in plant availability:

	Ports	Pad
FY12	26%	35%
FY13	58%	51%
FY14	80%	81%

- FY 2014 Production of 22,596 MT met 72% of full production/design capacity.
- Keeping the plants on-line is key to meeting production goals.

FY14 Accomplishments

- Project surpassed 1.7 Million safe work hours without lost time injury.
- Successfully completed ISMS Phase I / II Review.
- Significant increase in facility availability from ~50% to 80%.
- Converted 22,597 MT a 66% increase and 99.5% of FY14 goal.
- Safely shipped over 3,500,000 gallons of hydrofluoric acid.
- Regulatory cylinder inspections completed at both plants.
- Nevada National Security Site Audit resulted in no findings.
- Achieved $3.23 M in validated cost savings.

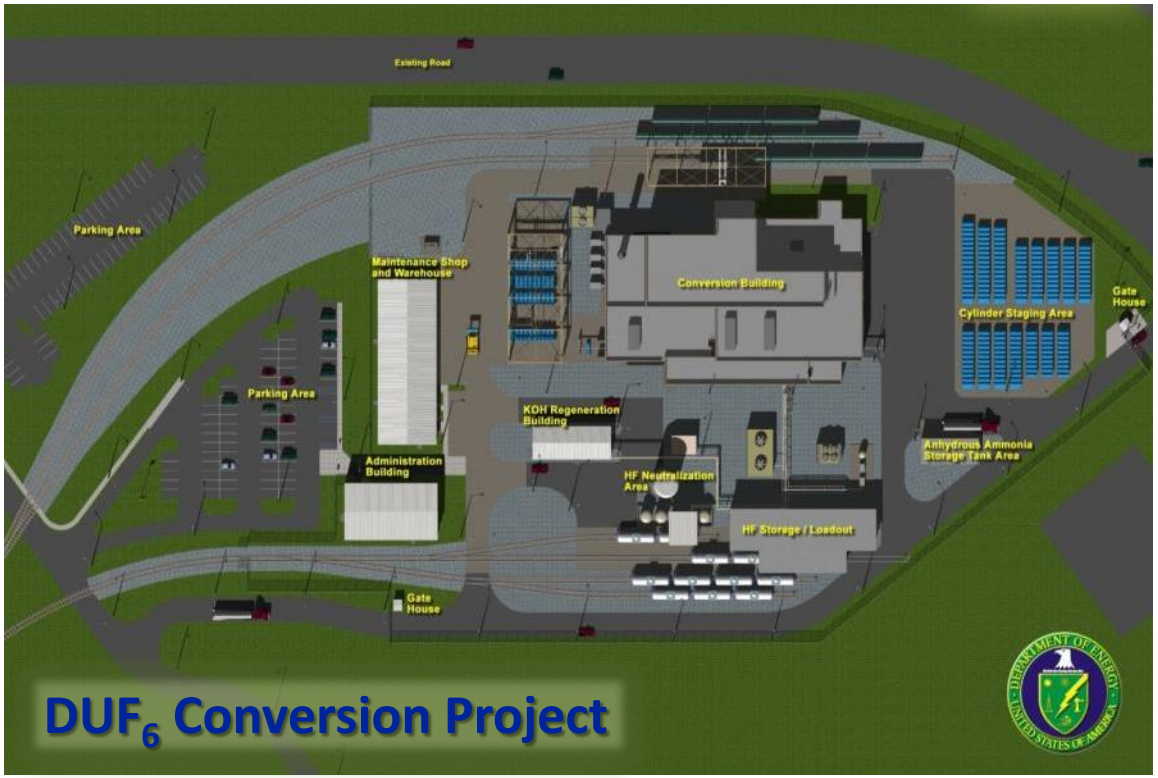
DUF_6 Challenges

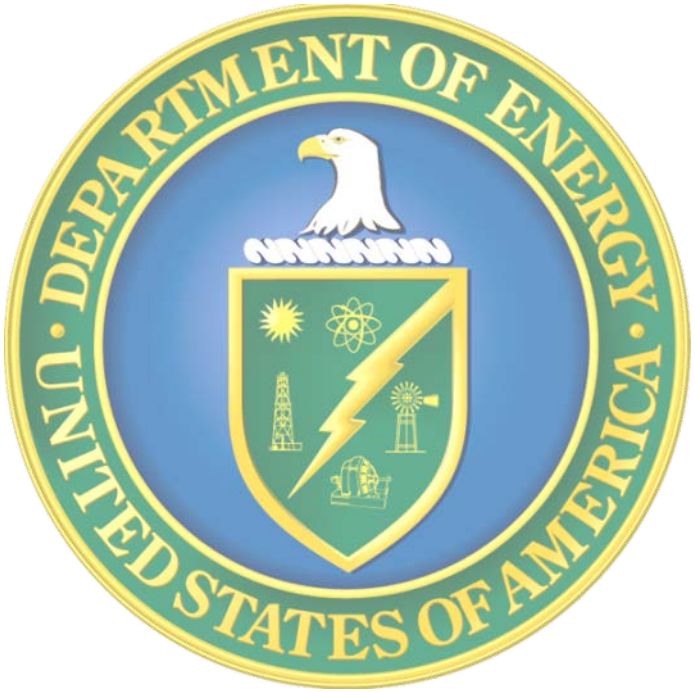
- Cylinder movement
- Equipment reliability
- Equipment lifespan
- Predictive maintenance

Planned Improvements

Planned equipment replacement or improvements to increase availability:

- Replacement Hydrogen Generation Technology
- Improve Autoclave and Conversion Unit Heating Control
- Streamline Cylinder Modification process and Cylinder Movement
- Optimize Oxide transfer process
- Reduce oxide flow restrictions (e.g., valve, blower and piping changes)





Questions/Discussion