

CNS | consolidated nuclear security, llc
PANTEX PLANT | Y-12 NATIONAL SECURITY COMPLEX

Y-12 NATIONAL SECURITY COMPLEX ACTIVITIES IN SUPPORT OF MO99: FY18 UPDATE

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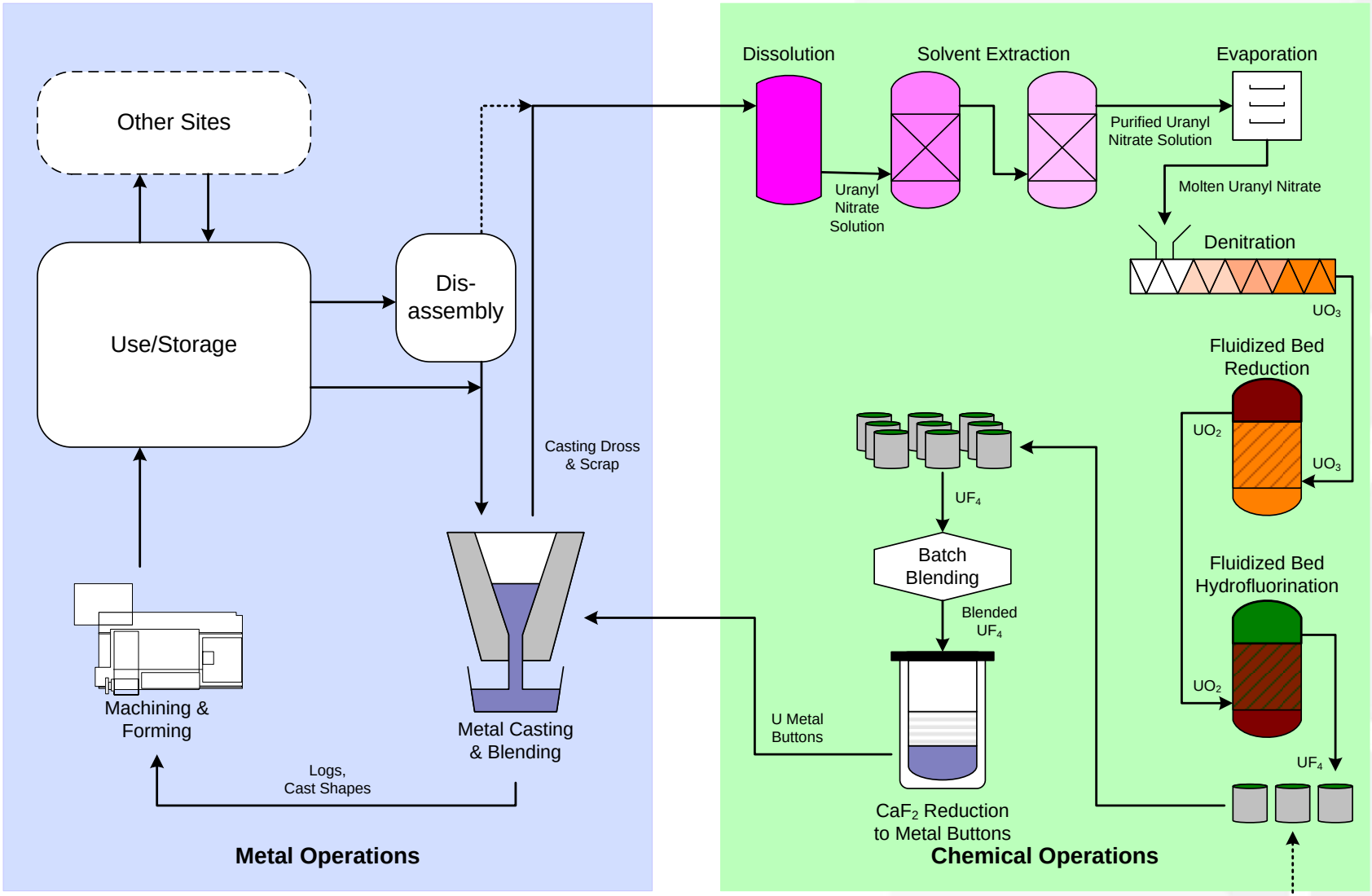
The Y-12 National Security Complex

The Y-12 National Security Complex

- **Located in Oak Ridge, Tennessee**
- **Operating production facility specializing in uranium material safeguards, technologies, and manufacturing:**
  - Uranium Metal Production
  - Uranium Oxide Production
  - Uranium Alloy Production
  - Technology Development Facilities
  - On-Site Source Material Availability

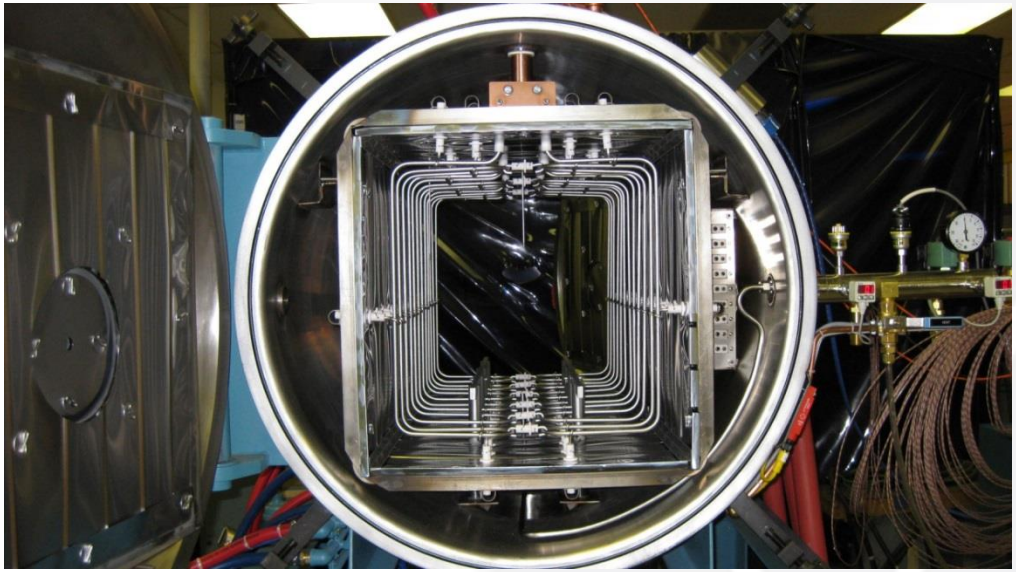
- **This presentation will focus on the capabilities that may support the Mo^{99} community**

Uranium Processing at Y-12 - Simplified



LEU-Foil Target Development & Manufacturing

Rolling Mill



Heat Treatment Furnace Development

Target as Manufactured

Additional Capabilities

- Swaging
- Annealing (Heat Treatment or In-Mold)
- Precision Machining
- Dimensional Inspection (CMM)
- Analytical Chemistry
- Metallography

Recent Activities

- **Supporting multiple customers with research and development activities**
- **Upgrading infrastructure to support additional research and prototyping activities**
- **Independent research to examine coating technologies**
  - Physical Vapor Deposition
  - Electroplating