



# Y-12: URANIUM AND CANNED SUBASSEMBLIES

#### **Complex Transformation – Preferred Alternative**

NNSA is moving forward with a vision to achieve a smaller, safer, more secure, and less expensive enterprise that leverages the scientific and technical capabilities of our workforce, and meets national security requirements. The current Complex Transformation Supplemental Programmatic Environmental Impact Statement (SPEIS) effort is a major step in this process, and updates a Programmatic Environmental Impact Statement that is now more than a decade old. Our transformation strategy embraces the notion of modern "centers of excellence" by focusing on core competencies, eliminating redundancies, and maximizing the consolidation of special nuclear materials (SNM).

# Y-12 (OAK RIDGE, TENNESSEE)

Y-12 manufactures uranium components for nuclear weapons, cases, and nuclear components comprising canned subassemblies; performs quality evaluation and surveillance activities on subassemblies and components; maintains Category I/II quantities of SNM (special nuclear materials that require the highest level of security); conducts component dismantlement, storage, and disposition of their nuclear materials; and supplies highly enriched uranium for use in naval reactors.

#### **MISSION HIGHLIGHTS**

Y-12 will be the *Center of Excellence for Uranium and Canned Subassemblies,* and its mission will be enhanced by:

- Storage of enriched uranium in the Highly Enriched Uranium Materials Facility (HEUMF);
- Processing of enriched uranium and performing research and development (R&D) activities within the Uranium Processing Facility (UPF); and
- Manufacturing of non-HEU components and subassemblies within the Consolidated Manufacturing Complex (CMC).

# **TRANSFORMATIONAL CHANGES**

The new, modern, efficient, and less expensive *Center for Excellence for Uranium and Canned Subassemblies* will over the next 10 years:

• Reduce its high security area by 90%;







### Y-12: URANIUM AND CANNED SUBASSEMBLIES

# **TRANSFORMATIONAL CHANGES (Cont.)**

- Reduce its nuclear operations footprint by 60%;
- Reduce its total building footprint by 50%;
- Over a decade or so, up to 20% to 30% fewer staff supporting nuclear weapons activities. These reductions are expected through natural attrition and transfer of personnel to other positions supporting essential national security needs.

#### This graphic shows the proposed reduction in Y-12's high security area footprint (highlighted in red) and the proposed elimination of numerous old buildings.



