

Final Site-Wide Environmental Impact Statement for the Y-12 National Security Complex

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U.S. Department of Energy
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Y-12 Site Office

COVER SHEET

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Abstract: NNSA, a separately organized agency within DOE, is responsible for maintaining the safety, reliability, and security of the U.S. nuclear weapons stockpile to meet national security requirements. NNSA manages nuclear weapons programs and facilities, including those at the Y-12 National Security Complex (Y-12) at Oak Ridge, Tennessee. This Final Y-12 SWEIS analyzes the potential environmental impacts of the reasonable alternatives for ongoing and foreseeable future operations and activities at Y-12, including alternatives for changes to site infrastructure and levels of operation (using production capacity as the key metric for comparison).

Five alternatives are analyzed in this Y-12 SWEIS: (1) No Action Alternative (maintain the status quo); (2) Uranium Processing Facility (UPF) Alternative; (3) Upgrade-in-Place Alternative; (4) Capability-sized UPF Alternative; and (5) No Net Production/Capability-sized UPF Alternative. This document assesses the potential environmental impacts of operations and applicable plans on land uses, socioeconomic characteristics and environmental justice, prehistoric and historic cultural resources, visual resources, geology and soils, biological resources, wetlands, water, air quality, noise, traffic and transportation, utilities and energy, waste management, human health and safety, intentional destructive acts, and accidents. The Capability-sized UPF Alternative is NNSA's preferred alternative.

Public Involvement: NNSA distributed the Draft Y-12 SWEIS in October 2009. The public comment period for the Draft Y-12 SWEIS began on October 30, 2009, with publication of the Environmental Protection Agency's Notice of Availability in the *Federal Register* (74 FR 56189). That notice invited public comment on the Draft Y-12 SWEIS through January 4, 2010, and provided for two public hearings to receive comments on the Draft Y-12 SWEIS. During the comment period, two public hearings were held in Oak Ridge, Tennessee, on November 17 and

18, 2009. At the first hearing, NNSA announced an extension of the comment period until January 29, 2010. That announcement was formalized with a notice in the *Federal Register* on December 28, 2009 (74 FR 68599).

All comments received during the comment period were considered during the preparation of the Final Y-12 SWEIS. All late comments were also considered. The Final SWEIS contains revisions and new information based in part on comments received on the Draft SWEIS. Following issuance of the Draft SWEIS, NNSA determined that a Haul Road was needed to support UPF construction. The Final SWEIS also includes information and analysis of a Haul Road extension corridor for the UPF, including a detailed Wetlands Assessment that was prepared in accordance with 10 Code of Federal Regulations (CFR) 1022, "Compliance with Floodplain and Wetlands Environmental Review Requirements" for the purpose of fulfilling NNSA's responsibilities under Executive Order 11990, "Protection of Wetlands." The Wetlands Assessment is contained in Appendix G. The comments received on that assessment, and NNSA's responses to those comments, are contained in Volume II of the Final SWEIS. In accordance with 40 CFR 1502.9(c)(1), NNSA determined, with respect to the Haul Road, that there were no substantial changes in the proposed action that are relevant to environmental concerns, nor significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. Consequently, NNSA determined that a Supplemental Draft Y-12 SWEIS was not required.

Vertical change bars in the margins of the Final SWEIS indicate the locations of revisions and new information (in the Summary, small changes are indicated by a double underline). Volume II contains the comments received on the Draft SWEIS and NNSA's responses to the comments. NNSA will use the analysis presented in this Final SWEIS, as well as other information, in preparing the Record(s) of Decision (RODs) regarding Y-12. NNSA will issue one or more RODs no sooner than 30 days after the U.S. Environmental Protection Agency publishes a Notice of Availability of this Final SWEIS in the *Federal Register*. This document and related information are available on the Internet at www.y12sweis.com and DOE's NEPA website at www.nepa.energy.gov/DOE_NEPA_documents.htm.

DOE/EIS-0387

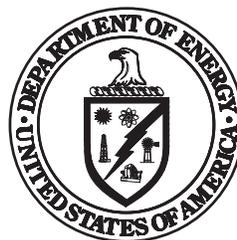
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Volume II:
Comment Response Document

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Prepared by:

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ACRONYMS AND ABBREVIATIONS

CCC	Complex Command Center
CEQ	Council on Environmental Quality
CERCLA	<i>Comprehensive Environmental Response, Compensation, and Liability Act</i>
CFR	Code of Federal Regulations
CMC	Consolidating Manufacturing Complex
CRD	Comment Response Document
CTBT	Comprehensive Test Ban Treaty
D&D	decontamination and decommissioning
DDF	Dedicated Dismantlement Facility
DNFSB	Defense Nuclear Facility Safety Board
DoD	Department of Defense
DOE	U.S. Department of Energy
DOE-NE	U.S. Department of Energy Office of Nuclear Energy
EFPC	East Fork Poplar Creek
EIS	Environmental Impact Statement
ES&H	environment, safety and health
ETTP	East Tennessee Technology Park
EU	enriched uranium
FR	<i>Federal Register</i>
GAO	Government Accountability Office
GHG	Greenhouse gas
GTRI	Global Threat Reduction Initiative
HEU	highly enriched uranium
HEUMF	Highly Enriched Uranium Materials Facility
HVAC	heating, ventilation, and air conditioning
IFDP	Integrated Facility Disposition Project
LCF	latent cancer fatality
LEP	Life Extension Program
LEU	low-enriched uranium
LLC	Limited life component
LLW	low-level waste
MEI	maximally exposed individual
MLLW	mixed low-level waste
NEPA	<i>National Environmental Policy Act</i>
NHPA	<i>National Historical Preservation Act</i>
NHL	National Historic Landmarks
NNSA	National Nuclear Security Administration
NOI	Notice of Intent
NPR	Nuclear Posture Review
NPT	Nuclear Nonproliferation Treaty
NRC	Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NWSP	Nuclear weapons stockpile plan
OREPA	Oak Ridge Environmental Peace Alliance

ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
PDDs	Presidential Decision Directives
R&D	research and development
ROD	Record of Decision
RRW	Reliable Replacement Warhead
SHPO	State Historic Preservation Officer
SPEIS	Supplemental Programmatic Environmental Impact Statement
START	Strategic Arms Reduction Talks
SWEIS	Site-Wide Environmental Impact Statement
TCE	Trichloroethylene
TN	Tennessee
UPF	Uranium Processing Facility