

SAVANNAH RIVER SITE COLD WAR
HISTORIC PROPERTY DOCUMENTATION

Aiken County, South Carolina

300/M AREA FABRICATION



FUEL & TARGET



NEW SOUTH ASSOCIATES

PROVIDING PERSPECTIVES ON THE PAST

ABSTRACT

This documentation was prepared in accordance with a Memorandum of Agreement (MOA) signed by the Department of Energy–Savannah River (DOE-SR) and the South Carolina Historic Preservation Office (SHPO) dated February 27, 2003, as well as the Consolidated MOA of August 2004. The MOA stipulated that a thematic study and photographic documentation be produced that told the story of 300/M Area’s genesis, its operational history, and its closure. New South Associates prepared the narrative and Westinghouse Savannah River Company (WSRC) completed the photographic documentation. M Area is the site of Savannah River Plant’s fuel and target fabrication facilities operated from 1955 through the end of the Cold War, producing fuel elements to be irradiated in the Site’s heavy-water moderated and cooled reactors. This effort called upon the expertise of scientists, engineers, and operations personnel. Over time, the physical characteristics of the fuel elements changed in size and configuration allowing greater area for heat transfer that was needed for increased reactor powers. These changes were accompanied by further changes in cladding technology. With the shutdown of the plant’s reactors by 1988 and the end of the Cold War, fuel element production ceased. Deactivation and decontamination of the M Area facilities began in the 1990s. The photographic documentation and oral history were completed between 2003 and 2005 and the research and compilation of the narrative history were completed in 2005.

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ACRONYM LIST

ACHP	ADVISORY COUNCIL ON HISTORIC PRESERVATION
AMCP	ASSISTANT MANGER FOR CLOSURE PROJECTS
AM&F	AMERICAN MACHINE AND FOUNDRY
AEC	ATOMIC ENERGY COMMISSION
AEC SROO	ATOMIC ENERGY COMMISSION SAVANNAH RIVER OPERATIONS OFFICE
AED	ATOMIC ENERGY DIVISION – DU PONT COMPANY
AOE	ASSESSMENT OF EFFECT
CAB	SAVANNAH RIVER SITE CITIZEN’S ADVISORY BOARD
CERCLA	COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT
CFR	CODE OF FEDERAL REGULATIONS
CNTA	CITIZENS FOR NUCLEAR TECHNOLOGY AWARENESS
COE	U. S. ARMY CORPS OF ENGINEERS
CRM	CULTURAL RESOURCE MANAGEMENT
CRMP	CULTURAL RESOURCE MANAGEMENT PLAN
CSRA	CENTRAL SAVANNAH RIVER AREA
DECP	DECOMMISSIONING PROJECT (DOE-SR)
D&D	DECOMMISSION AND DEMOLITION
DOD	DEPARTMENT OF DEFENSE
DOE	U. S. DEPARTMENT OF ENERGY
DOE	DETERMINATION OF ELIGIBILITY
DOE FPO	U. S. DEPARTMENT OF ENERGY FEDERAL PRESERVATION OFFICER
DOE-SR	U. S. DEPARTMENT OF ENERGY SAVANNAH RIVER
DWPF	DEFENSE WASTE PROCESSING FACILITY
ECS	EMERGENCY COOLING SYSTEMS
EM	ENVIRONMENTAL MANAGEMENT
EOC	EMERGENCY OPERATIONS CENTER – SRS
EPA	U. S. ENVIRONMENTAL PROTECTION AGENCY
ERDA	ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
FFA	FEDERAL FACILITIES AGREEMENT
FRA	FEDERAL RECORDS ACT
GS	GIRDLER SYSTEM
HABS	HISTORIC AMERICAN BUILDING SURVEY
HAER	HISTORIC AMERICAN ENGINEERING RECORD
HWCTR	HEAVY WATER COMPONENTS TEST REACTOR
INL	IDAHO NATIONAL LABORATORY
IRM	INFORMATION RESOURCE MANAGEMENT DEPARTMENT - SRS
JCAE	JOINT COMMITTEE ON ATOMIC ENERGY
LANL	LOS ALAMOS NATIONAL LABORATORY
LTBT	LIMITED TEST BAN TREATY
LTR	LATTICE TEST REACTOR