

United States Government

Department of Energy (DOE)  
Savannah River Operations Office (SR)

# memorandum

DATE:

JAN 19 2011

REPLY TO

ATTN OF: EQMD (S. A. Danker, [803] 952-8603)

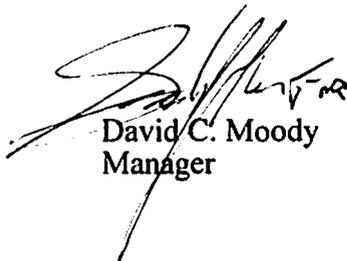
SUBJECT: National Environmental Policy Act (NEPA) 2011 Annual Planning Summary (APS) for DOE Savannah River Site (SRS)

TO: Frank Marcinowski, III, Deputy Assistant Secretary for Technical and Regulatory Support (EM-40), HQ

REFERENCE: Memo, Marcinowski, III to Distribution, "ACTION: Submission of Annual National Environmental Policy Act Planning Summaries," 12/16/10

Attached is the NEPA 2011 APS for the DOE SRS, as required by DOE Order 451.1B, *NEPA Compliance Program*. The planning summary has been coordinated with the National Nuclear Security Administration (NNSA) at SRS that includes the Office of Fissile Materials Disposition Division (NA-26) and the NNSA Savannah River Site Office. The availability of this planning summary will be announced to the public through the *SRS Environmental Bulletin*. As requested, this report is also being submitted via electronic mail.

If you have any questions, please contact me or have your staff contact Andrew R. Grainger, DOE SRS NEPA Compliance Officer, at (803) 952-8001 or Steve Danker at (803) 952-8603.



David C. Moody  
Manager

EQMD:SAD:ls

EQMD-11-010

Attachment:  
NEPA 2011 APS  
for DOE SRS

cc w/attach:  
Jeanie Loving (EM-41), HQ  
Mary E. Martin (NA-56), HQ  
Scott Blake Harris (GC-1), HQ  
Mike Moore (EM-12), HQ

## Annual NEPA Planning Summary Environmental Assessments (EAs) Expected to be Initiated in the Next 12 Months

JAN 19 2011

Department of Energy (DOE) Savannah River Site (SRS)

Jan-11

*Title, Location	Estimated Cost	Estimated Schedule (**NEPA Milestones)		Description
Small Modular Reactor Demonstration	\$50,000	Determination Date:	uncertain	Savannah River Nuclear Solutions, LLC, (SRNS) has signed Memoranda of Understanding with GE Hitachi Nuclear Energy and Hyperion Power to collaborate on small modular reactor development and explore the potential of deploying prototype reactors as part of a proposed demonstration of small modular reactor technologies. DOE anticipates that SRNS will enter into similar agreements with other vendors. DOE would conduct the appropriate NEPA review of proposals if and when they come forward. Inclusion of this item as an EA does not mean that DOE has determined that an EA is the appropriate NEPA review; that determination must await a proposal ripe for evaluation.
		Transmittal to State:	uncertain	
		EA Approval:	uncertain	
New Stormwater NPDES Permit	\$20,000	Determination Date:	uncertain	South Carolina Department of Health and Environmental Control (SCDHEC) issued a National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater General Permit (IGP) # SCR000000 November 12, with an effective date of January 1, 2011. Additional NEPA evaluation is expected because the industrial-sector-based IGP is more prescriptive than the current permit; it includes specific pollutants that must be monitored for each sector, and it will require increased monitoring frequency and inspections. The new IGP also will require that hardness-dependent metals be evaluated against their concentrations as the concentrations relate to actual hardness levels of the receiving waters. Because the hardness levels in SRS streams are relatively low, the hardness-dependent metals benchmarks also are expected to be low. A Notice of Intent for coverage under the IGP must be submitted to SCDHEC within 90 days of the effective date (January 1, 2011) for any facility to be able to continue the discharge of industrial stormwater. A Pollution Prevention Plan (PPP) is in preparation. SRS storm water outfalls and best management practices will require review to ensure NEPA coverage in DOE/EA-1563. A revised FONSI or new EA is anticipated.
		Transmittal to State:	uncertain	
		EA Approval:	uncertain	
	Total Estimated Cost			
	\$70,000			

## Annual NEPA Planning Summary Environmental Impact Statements (EISs) and Supplement Analyses (SAs) Expected to be Initiated in the Next 24 Months

DOE SRS  
Jan-11

*Title, Location	Estimated Cost	Estimated Schedule (**NEPA Milestones)	Description
Environmental Impact Statements, none		Determination Date: n/a notice of intent (NOI): n/a Scoping: n/a Draft: n/a Hearings: n/a Final record of decision (ROD): n/a	
Supplement Analysis, High-Level Waste Tank Closure at the Savannah River Site (DOE/EIS-0303-SA1)	\$20,000	Supplement Analysis: Determination Date: uncertain Approval: uncertain	DOE plans to prepare a Supplement Analysis to provide more realistic estimates, based on a revised Performance Assessment and new tank cleaning techniques, of the environmental impacts of tank closure activities described in the High-Level Waste Tank Closure EIS (DOE/EIS 0303). DOE does not anticipate a need to amend the Tank Closure EIS ROD.
	<b>Total Estimated Cost</b>		
	\$20,000		

\* Please include projected NEPA milestones, if planned.

## Annual NEPA Planning Summary Status of Ongoing NEPA Compliance Activities: Environmental Assessments (EAs)

DOE SRS Jan-11				
*Title, Location	Estimated Cost	Estimated Schedule (**NEPA Milestones)		Description
EA for the Proposed Use of SRS Lands for Military Training (DOE/EA-1606)		Determination Date:	Oct-07	In accordance with an Interagency Agreement (IAG) DOE will prepare an EA to analyze the potential environmental consequences of the proposed use of SRS lands for military training. The purpose of the proposed action is to provide the U.S. Army with greater flexibility in developing training missions and strategies in response to rapidly changing world conditions. The IAG was approved in September 2009. The draft and final EA are scheduled to be available in February and April 2011, respectively.
		Transmittal to State:	Mar-08	
EA Approval:	Apr-11			
	\$82,700	FONSI:	Apr-11	
DOE SRS is not preparing any programmatic EAs (PEAs), is not supporting the preparation of any PEAs, and does not anticipate initiating any PEAs in the next 12 months.				
	Total Estimated Cost			
	\$82,700			

\* Please include projected NEPA milestones, if planned.

## Annual NEPA Planning Summary Status of Ongoing NEPA Compliance Activities: Environmental Impact Statements (EISs) and Supplement Analyses (SAs)

DOE SRS

Jan-11

*Title, Location	Estimated Cost	Estimated Schedule (**NEPA Milestones)	Description	
<b>EIS for the Storage and Management of Elemental Mercury (DOE/EIS-0423)</b>	\$10,000	Determination Date:	As directed by the Mercury Export Ban Act of 2008, DOE will evaluate seven sites, including SRS, for long-term storage of elemental mercury. SRS is an alternative site for a new mercury storage facility. A scoping meeting was held in North Augusta, SC on July 30, 2009. DOE issued the draft EIS in January 2010 with the public comment period ending on March 30. The draft EIS is available at <a href="http://www.mercurystorageeis.com">www.mercurystorageeis.com</a> . A public hearing was held on March 4, 2010, in North Augusta, SC. The final EIS was issued in January 2011. The Waste Control Specialists facility near Andrews, Texas is the preferred alternative site listed in the final EIS.	
		NOI:		Jul-09
		Scoping:		Aug-09
		Draft		Jan-10
		Hearings		Mar-10
		Final		Jan-11
<b>Supplemental EIS, Surplus Plutonium Disposition (DOE/EIS-0283-S2)</b>	\$3,500,000	ROD	In 2007 DOE began preparation of an SEIS to evaluate the potential environmental impacts of plutonium disposition capabilities that would be constructed and operated at SRS. DOE now intends to revise the scope of the SPD SEIS to refine the quantity and types of surplus weapons usable plutonium and evaluate additional alternatives for the disposition of these materials. Separately, as a result of additional studies the Deputy Secretary has authorized preparation of a conceptual design for a project that would combine the proposed functions of the Pit Disassembly and Conversion Facility (PDCF) and the Plutonium Preparation Project (PuP) and install the required equipment in the K-Area Complex at SRS. Therefore, DOE issued a revised Notice of Intent in July 2010 that invited public scoping comments on a revised scope. DOE will evaluate alternatives for disposition of surplus non-pit plutonium and surplus clean metal and oxide plutonium materials. Alternatives for disposition of non-pit plutonium will be processing in H-Canyon for vitrification in the Defense Waste Processing Facility, disposition using the Mixed Oxide Fuel Fabrication Facility, a can-in-canister vitrification project, and preparation for disposal at WIPP. In addition DOE will evaluate project alternatives for disposition of surplus plutonium pits, clean metal and clean oxide in a stand-alone PDCF and PuP facility, and a combined project that would install the equipment for both PDCF and PuP in the K-Area Complex at SRS. DOE will also analyze the potential impacts of using mixed oxide fuel in up to 5 reactors owned by the Tennessee Valley Authority (TVA), with TVA as a cooperating agency with DOE for the preparation and review of the document.	
		Determination Date:		Aug-06
		NOI:		Mar-07
		Scoping:		Apr-08
		Additional Scoping:		Aug-10
		Draft		
		Hearings		
Final				

\* Please include projected NEPA milestones, if planned.

## Annual NEPA Planning Summary Status of Ongoing NEPA Compliance Activities: Environmental Impact Statements (EISs) and Supplement Analyses (SAs) (cont)

DOE SRS  
Jan-11

*Title, Location	Estimated Cost	Estimated Schedule (**NEPA Milestones)		Description
<b>EIS for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste (GTCC LLW)</b> DOE/EIS-0375	tbd	Determination Date:	May-05	DOE will evaluate GTCC LLW disposal in a geologic repository, in intermediate depth boreholes, and in enhanced near surface disposal facilities. Candidate locations for these disposal facilities would be: the Idaho National Laboratory in Idaho; the Los Alamos National Laboratory and Waste Isolation Pilot Plant in New Mexico; the Nevada Test Site and the proposed Yucca Mountain repository in Nevada; the Savannah River Site in South Carolina; the Oak Ridge Reservation in Tennessee; and the Hanford Site in Washington. DOE would also evaluate generic commercial disposal at arid and humid locations. In addition, DOE proposes to include DOE LLW and transuranic waste having characteristics similar to GTCC LLW and which may not have an identified path to disposal (hereafter referred to as GTCC-like waste) in the scope of this EIS. DOE's GTCC-like waste is owned or generated by DOE. The use of the term "GTCC-like" does not have the intent or effect of creating a new classification of radioactive waste. The NOI is available on the internet at <a href="http://www.eh.doe.gov/nepa">http://www.eh.doe.gov/nepa</a> . Additional information on the GTCC LLW EIS can be found at <a href="http://www.gtcceis.anl.gov">http://www.gtcceis.anl.gov</a> . The draft EIS is scheduled to be issued in early 2011, the final EIS in March 2012, and the ROD schedule is uncertain.
		Advance NOI:	May-05	
		NOI:	Jul-07	
		Scoping:	Aug-07	
		Draft:		
		Final:		
<b>Supplement Analysis, Spent Nuclear Fuel Management</b> (DOE/EIS-0279-SA-01)	\$40,000	ROD	tbd	DOE has drafted a Supplement Analysis to summarize the environmental impacts of managing aluminum-clad spent nuclear fuel from foreign and domestic reactors by processing in H-Canyon rather than using the Melt-and-Dilute process. DOE would issue an amended ROD to document the decision.
		Supplement Analysis:		
		Determination Date:	Oct-06	
		Approval:		
	<b>Total Estimated Cost</b>			
	<b>\$3,550,000</b>			