memorandum

DATE

LAN 1 9 2011

REPLY TO

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

SUBJECT:

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

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:Is

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 Attachment: Memo, Moody to Marcinowski, III, SUBJECT: NEPA 2011 APS for DOE-SRS, Dated:

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

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

Jan-11					
*Title, Location	Estimated Cost	Estimated Schedule (**NEPA Milestones)		Description	
Small Modular Reactor Demonstration		Determination Date:	uncertain	Savannah River Nuclear Solutions, LLC, (SRNS) has signed Memoranda of	
		Transmittal to State:	uncertain	Understanding with GE Hitachi Nuclear Energy and Hyperion Power to collaborate	
		EA Approval:	uncertain	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.	
	\$50,000	FONSI:	uncertain	await a proposal tipe for evaluation.	
New Stormwater NPDES Permit	Ψ30,000	Determination Date:	uncertain	South Carolina Department of Health and Environmental Control (SCDHEC) issued	
New Otorniwater in DEO I crimit		Transmittal to State:	uncertain	a National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater	
		Transmittanto Giato.	arroortaarr	General Permit (IGP) # SCR000000 November 12, with an effective date of January	
		EA Approval:	uncertain	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.	
	\$20,000	FONSI:	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		Description
:		(**NFPA Miles	,	
Environmental Impact Statements, none		Determination Date:	n/a	
		notice of intent (NOI):	n/a	
		Scoping:	n/a	
		Draft	n/a	
		Hearings	n/a	
		Final	n/a	
		record of decision		
		(ROD)	n/a	
Supplement Analysis, High-Level Waste Tank Closure at the Savannah River Site		Supplement Analysis:		DOE plans to prepare a Supplement Analysis to provide more realistic estimates, based on a revised Performance Assessment and new tank cleaning techniques, o
(DOE/EIS-0303-SA1)		Determination Date:	uncertain	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.
	\$20,000	Approval:	uncertain	
	Total Estimated			
	Cost			
	\$20,000			

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

			DOE SRS		
Jan-11					
*Title, Location	Estimated Cost	Estimated Schedule (**NFPA Milestones)		Description	
EA for the Proposed Use of SRS Lands		Determination Date:	Oct-07	In accordance with an Interagency Agreement (IAG) DOE will prepare an EA to	
for Military Training		Transmittal to State:	Mar-08	analyze the potential environmental consequences of the proposed use of SRS	
(DOE/EA-1606)		EA Approval:	Apr-11	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.	
	\$82,700	FONSI:	Apr-11		
DOE CDC is not assessing an					
DOE SKS IS not preparing any programi	matic EAS (PEAS), i	s not supporting the	preparation	n of any PEAs, and does not anticipate initiating any PEAs in the next 12 months.	
	Total Estimated Cost				
	\$82,700				

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

DOE SRS				
*Title, Location	Estimated Cost	Estimated Sc		Description
EIS for the Storage and Management of Elemental Mercury (DOE/EIS-0423)	\$10,000	Determination Date: NOI: Scoping: Draft Hearings Final ROD	Jul-09 Aug-09 Jan-10 Mar-10 Jan-11	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 www.mercurystorageeis.com. 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.
Supplemental EIS, Surplus Plutonium Disposition (DOE/EIS-0283-S2)		Determination Date: NOI: Scoping: Additional Scoping: Draft Hearings Final	Aug-06 Mar-07 Apr-08 Aug-10	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
	\$3,500,000	ROD		potential impacts of using mixed oxide fuel in up to 5 reactors owned by the

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
EIS for the Disposal of Greater-Than- Class-C Low-Level Radioactive Waste (GTCC LLW) DOE/EIS-0375		Determination Date: Advance NOI: NOI: Scoping: Draft: Final:	May-05 May-05 Jul-07 Aug-07	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 http://www.eh.doe.gov/nepa. Additional information on the GTCC LLW EIS can be found at http://www.gtcceis.anl.gov. The draft EIS is scheduled to be issued in early 2011, the final EIS in March 2012, and the ROD schedule is uncertain.
Cumplement Analysis Chant Nyelser	tbd	ROD	tbd	DOE has drafted a Supplement Analysis to summarize the environmental impacts of
Supplement Analysis, Spent Nuclear Fuel Management (DOE/EIS-0279-SA-01)	\$40,000 Total Estimated Cost	Supplement Analysis: Determination Date: Approval:	Oct-06	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.
	\$3,550,000			