Overview of Environmental Project Management For NAS Review

Karen Adams, ***Federal Project Director***

Brian Hennessey, ***Federal Facility Agreement Program Manager***

David Bender, ***Director, Infrastructure & Area Completion Division***

U.S. Department of Energy – Savannah River Operations Office
February 8, 2021

Environmental Overview – PBS-030, Soil & Water Remediation

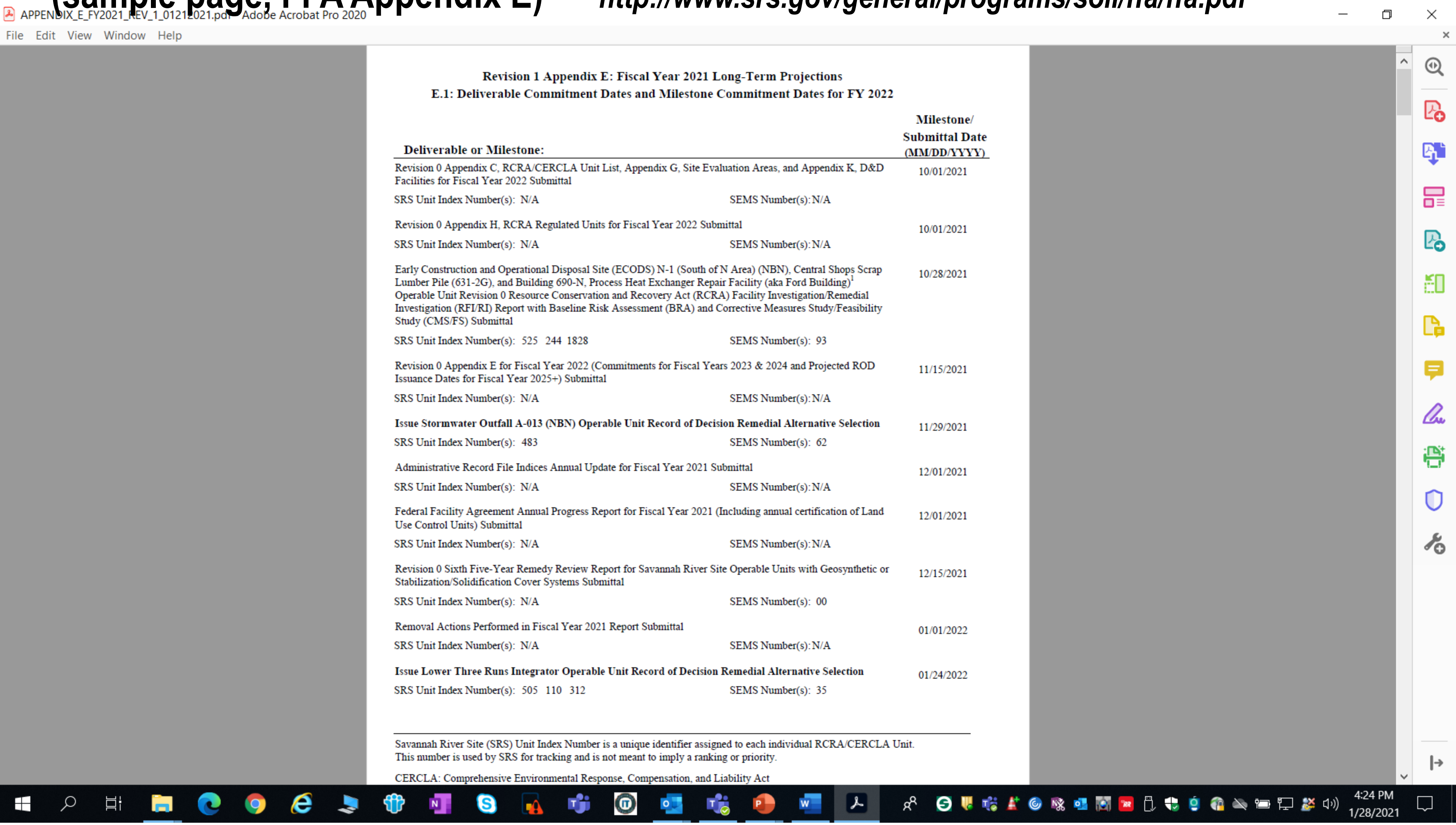
- **Objectives**
  - Remediate contaminated soil, surface water, and groundwater
  - Decommission inactive facilities after they have been deactivated by the operating organization
- **To Date**
  - 411 of 515 waste units completed
    - *Remedy selected, including No Action, and systems operating as required*
    - *18 groundwater plumes being evaluated and/or remediated*
    - *5 major Savannah River Site (SRS) streams and the Savannah River in assessment*
    - *73 waste units require post-closure care*
  - 296 of 1127 facilities decommissioned
  - 38 remediation systems operational (3 active, 14 low energy, 21 passive)
  - 5 of 14 Areas Closed: T Area, M Area, R Area, P Area, and B Area
  - As of December 30, 2020, Area Completion Projects has achieved all 3,949 *Federal Facility Agreement* (FFA) milestones and Resource Conservation and Recovery Act (RCRA) Permit commitments on or ahead of schedule
- **External Stakeholders (Regulators)**
  - Environmental Protection Agency Region 4 (EPA) for FFA
  - South Carolina Department of Health & Environmental Control (SCDHEC) for FFA and RCRA permit

Environmental Projects/Activities – Selection, Outcomes & End Dates

- **“Projects”: all units listed in FFA and RCRA permit**
- **Project portfolio for any given year reflects FFA commitments, prioritized each year via DOE submittal and regulator approval of Appendix E, “Long Term Projections;” and RCRA permit corrective actions**
  - SRS currently has enforceable milestones for FY21-23, and planning milestones for FY24 and beyond
  - EM-HQ approves FFA milestones before we submit them for EPA and SCDHEC approval (*EM Guidance for Agreements, Milestones, and Decision Documents*, 2007)
  - Operation & maintenance of “completed” projects also represents significant work scope
- **Project Outcomes – the cleanup objectives/end states agreed to by the Core Team (DOE-SR, EPA Region 4, and SCDHEC) through project scoping and decision making**
  - Dependent upon assumed future land use and exposure assumptions
- **End Dates – shown in performance baseline and project schedules, generally not imposed by regulators**
  - End date for SRS cleanup is constrained by continuing missions in several SRS areas and limited funding for decommissioning of excess facilities

Enforceable Milestones Determine Projects for Execution

(sample page, FFA Appendix E) *http://www.srs.gov/general/programs/soil/ffa/ffa.pdf*



Revision 1 Appendix E: Fiscal Year 2021 Long-Term Projections

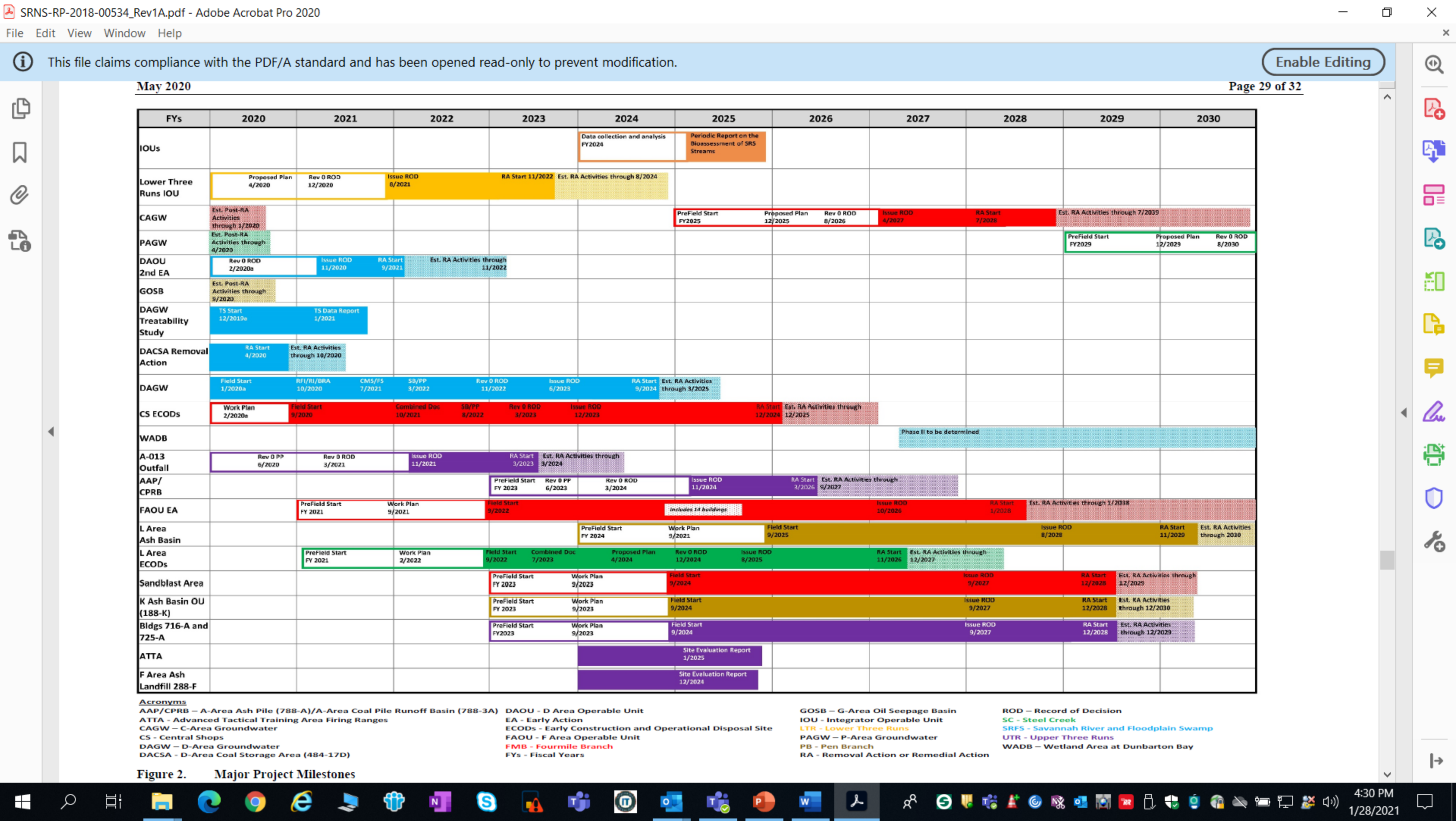
E.1: Deliverable Commitment Dates and Milestone Commitment Dates for FY 2022

Deliverable or Milestone:	**Milestone/ Submittal Date (MM/DD/YYYY)**
Revision 0 Appendix C, RCRA/CERCLA Unit List, Appendix G, Site Evaluation Areas, and Appendix K, D&D Facilities for Fiscal Year 2022 Submittal SRS Unit Index Number(s): N/A SEMS Number(s): N/A	10/01/2021
Revision 0 Appendix H, RCRA Regulated Units for Fiscal Year 2022 Submittal SRS Unit Index Number(s): N/A SEMS Number(s): N/A	10/01/2021
Early Construction and Operational Disposal Site (ECODS) N-1 (South of N Area) (NBN), Central Shops Scrap Lumber Pile (631-2G), and Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building)[1] Operable Unit Revision 0 Resource Conservation and Recovery Act (RCRA) Facility Investigation/Remedial Investigation (RFI/RI) Report with Baseline Risk Assessment (BRA) and Corrective Measures Study/Feasibility Study (CMS/FS) Submittal SRS Unit Index Number(s): 525 244 1828 SEMS Number(s): 93	10/28/2021
Revision 0 Appendix E for Fiscal Year 2022 (Commitments for Fiscal Years 2023 & 2024 and Projected ROD Issuance Dates for Fiscal Year 2025+) Submittal SRS Unit Index Number(s): N/A SEMS Number(s): N/A	11/15/2021
Issue Stormwater Outfall A-013 (NBN) Operable Unit Record of Decision Remedial Alternative Selection SRS Unit Index Number(s): 483 SEMS Number(s): 62	11/29/2021
Administrative Record File Indices Annual Update for Fiscal Year 2021 Submittal SRS Unit Index Number(s): N/A SEMS Number(s): N/A	12/01/2021
Federal Facility Agreement Annual Progress Report for Fiscal Year 2021 (Including annual certification of Land Use Control Units) Submittal SRS Unit Index Number(s): N/A SEMS Number(s): N/A	12/01/2021
Revision 0 Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Geosynthetic or Stabilization/Solidification Cover Systems Submittal SRS Unit Index Number(s): N/A SEMS Number(s): 00	12/15/2021
Removal Actions Performed in Fiscal Year 2021 Report Submittal SRS Unit Index Number(s): N/A SEMS Number(s): N/A	01/01/2022
Issue Lower Three Runs Integrator Operable Unit Record of Decision Remedial Alternative Selection SRS Unit Index Number(s): 505 110 312 SEMS Number(s): 35	01/24/2022

Savannah River Site (SRS) Unit Index Number is a unique identifier assigned to each individual RCRA/CERCLA Unit. This number is used by SRS for tracking and is not meant to imply a ranking or priority.

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

Regulatory Milestones Shape Program/System Plan/Baseline



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May 2020

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FYs	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
IOUs					Data collection and analysis FY2024	Periodic Report on the Bioassessment of SRS Streams					
Lower Three Runs IOU	Proposed Plan 4/2020	Rev 0 ROD 12/2020 Issue ROD 8/2021		RA Start 11/2022 Est. RA Activities through 8/2024							
CAGW	Est. Post-RA Activities through 1/2020					PreField Start FY2025 Proposed Plan 12/2025	Rev 0 ROD 8/2026	Issue ROD 4/2027	RA Start 7/2028	Est. RA Activities through 7/2039	
PAGW	Est. Post-RA Activities through 4/2020									PreField Start FY2029 Proposed Plan 12/2029	Rev 0 ROD 8/2030
DAOU 2nd EA	Rev 0 ROD 2/2020a	Issue ROD 11/2020 RA Start 9/2021	Est. RA Activities through 11/2022								
GOSB	Est. Post-RA Activities through 9/2020										
DAGW Treatability Study	TS Start 12/2019a	TS Data Report 1/2021									
DACSA Removal Action	RA Start 4/2020 Est. RA Activities through 10/2020										
DAGW	Field Start 1/2020a	RFI/RI/BRA 10/2020 CMS/FS 7/2021	SB/PP 3/2022 Rev 0 ROD 11/2022	Issue ROD 6/2023	RA Start 9/2024 Est. RA Activities through 3/2025						
CS ECODs	Work Plan 2/2020a Field Start 9/2020		Combined Doc 10/2021 SB/PP 8/2022	Rev 0 ROD 3/2023 Issue ROD 12/2023		RA Start 12/2024	Est. RA Activities through 12/2025				
WADB								Phase II to be determined			
A-013 Outfall	Rev 0 PP 6/2020	Rev 0 ROD 3/2021	Issue ROD 11/2021	RA Start 3/2023 Est. RA Activities through 3/2024							
AAP/ CPRB				PreField Start FY 2023 Rev 0 PP 6/2023	Rev 0 ROD 3/2024	Issue ROD 11/2024	RA Start 3/2026 Est. RA Activities through 9/2027				
FAOU EA		PreField Start FY 2021 Work Plan 9/2021	Field Start 9/2022		Includes 14 buildings			Issue ROD 10/2026	RA Start 1/2028 Est. RA Activities through 1/2038		
L Area Ash Basin					PreField Start FY 2024 Work Plan 9/2021	Field Start 9/2025			Issue ROD 8/2028		RA Start 11/2029 Est. RA Activities through 2030
L Area ECODs		PreField Start FY 2021	Work Plan 2/2022 Field Start 9/2022	Combined Doc 7/2023	Proposed Plan 4/2024	Rev 0 ROD 12/2024 Issue ROD 8/2025		RA Start 11/2026 Est. RA Activities through 12/2027			
Sandblast Area				PreField Start FY 2023 Work Plan 9/2023	Field Start 9/2024			Issue ROD 9/2027		RA Start 12/2028 Est. RA Activities through 12/2029	
K Ash Basin OU (188-K)				PreField Start FY 2023 Work Plan 9/2023	Field Start 9/2024			Issue ROD 9/2027		RA Start 12/2028 Est. RA Activities through 12/2030	
Bldgs 716-A and 725-A				PreField Start FY2023 Work Plan 9/2023	Field Start 9/2024			Issue ROD 9/2027		RA Start 12/2028 Est. RA Activities through 12/2029	
ATTA						Site Evaluation Report 1/2025					
F Area Ash Landfill 288-F						Site Evaluation Report 12/2024					

Acronyms

AAP/CPRB – A-Area Ash Pile (788-A)/A-Area Coal Pile Runoff Basin (788-3A)
ATTA - Advanced Tactical Training Area Firing Ranges
CAGW – C-Area Groundwater
CS - Central Shops
DAGW – D-Area Groundwater
DACSA - D-Area Coal Storage Area (484-17D)

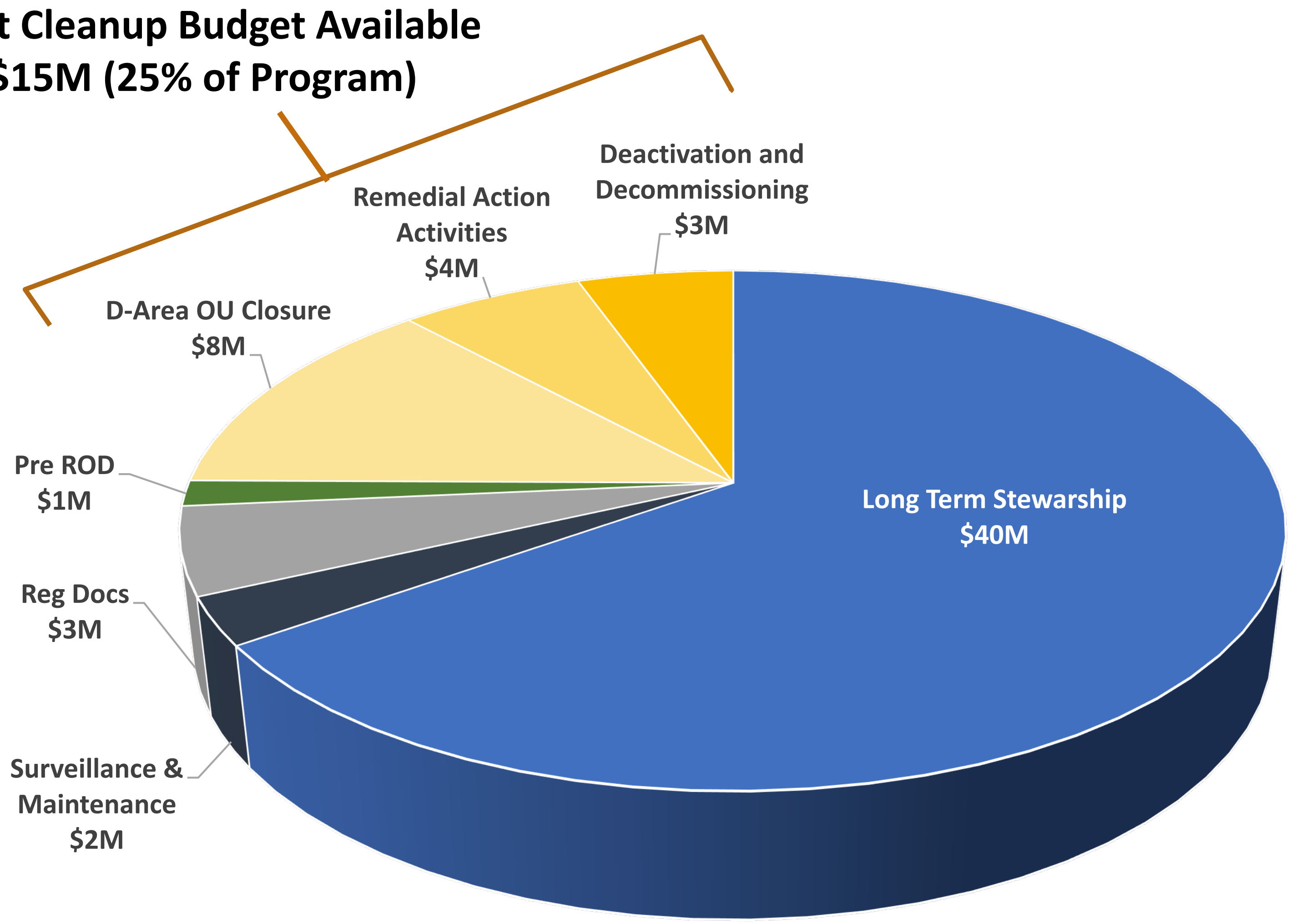
DAOU - D Area Operable Unit
EA - Early Action
ECODs - Early Construction and Operational Disposal Site
FAOU - F Area Operable Unit
FMB - Fourmile Branch
FYs - Fiscal Years

GOSB – G-Area Oil Seepage Basin
IOU - Integrator Operable Unit
LTR - Lower Three Runs
PAGW – P-Area Groundwater
PB - Pen Branch
RA - Removal Action or Remedial Action

ROD – Record of Decision
SC - Steel Creek
SRFS - Savannah River and Floodplain Swamp
UTR - Upper Three Runs
WADB – Wetland Area at Dunbarton Bay

Figure 2. Major Project Milestones

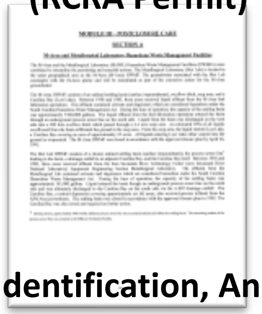
Environmental Cleanup (PBS-30) – FY21 Program Baseline



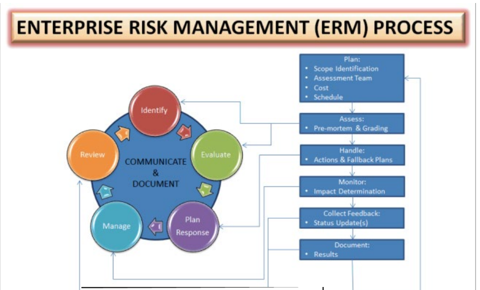
FY21 - PBS30 Program Baseline ($60.8M)

Environmental Cleanup - Planning To Authorization for Execution (CD-0 to CD-3)*

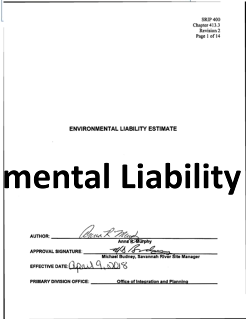
Environmental Laws and Regulations (RCRA Permit)



Risk Identification, Analysis, and Management



ENTERPRISE RISK MANAGEMENT (ERM) PROCESS



SRIP 400
Chapter 413.3
Revision 2
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ENVIRONMENTAL LIABILITY ESTIMATE

AUTHOR: Anna R. Murphy
Anna R. Murphy

APPROVAL SIGNATURE:
Michael Budney, Savannah River Site Manager

EFFECTIVE DATE: April 9, 2018

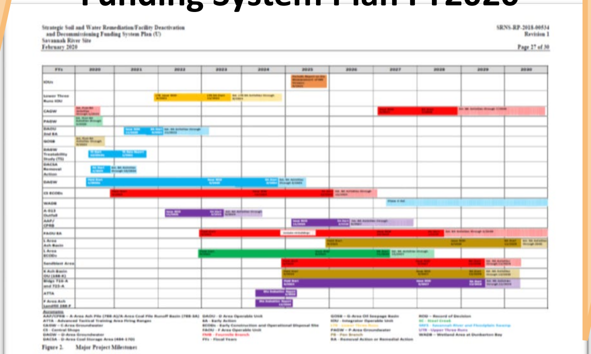
PRIMARY DIVISION OFFICE: Office of Integration and Planning

Environmental Liability Estimate

Mission Need (CD-0)

Federal Facility Agreement (FFA) Appendix E1 FY2020

Remediation/Facility D&D Funding System Plan FY2020



Strategic Soil and Water Remediation/Facility Deactivation and Decommissioning Funding System Plan (U)
Savannah River Site
February 2020

SRNS-RP-2018-00534
Revision 1
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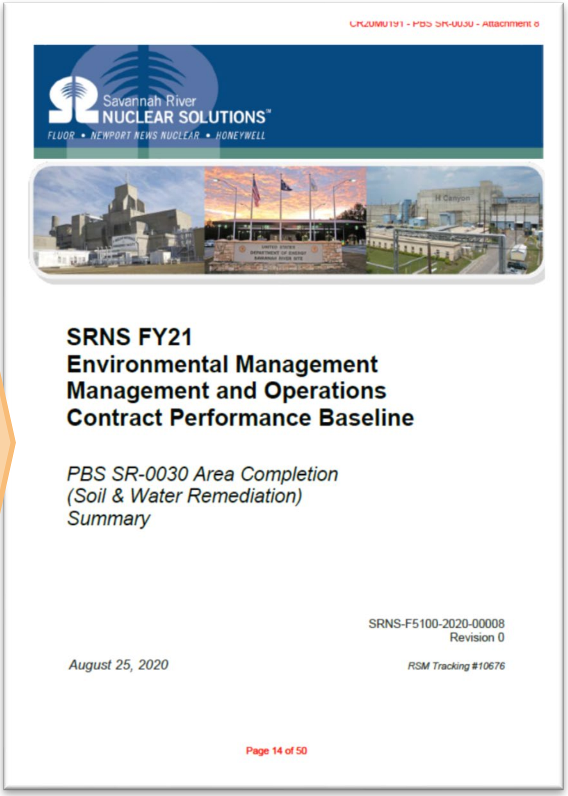
Figure 2. Major Project Milestones

Alternatives Agreed w/ Regulators and Costs Established (CD-1)

*IAW EM Demo Protocol & 413 principles



CR20M0191 - PBS SR-0030 - Attachment 8

Savannah River
NUCLEAR SOLUTIONS℠
FLUOR • NEWPORT NEWS NUCLEAR • HONEYWELL

SRNS FY21
Environmental Management
Management and Operations
Contract Performance Baseline

PBS SR-0030 Area Completion
(Soil & Water Remediation)
Summary

SRNS-F5100-2020-00008
Revision 0

August 25, 2020

RSM Tracking #10676

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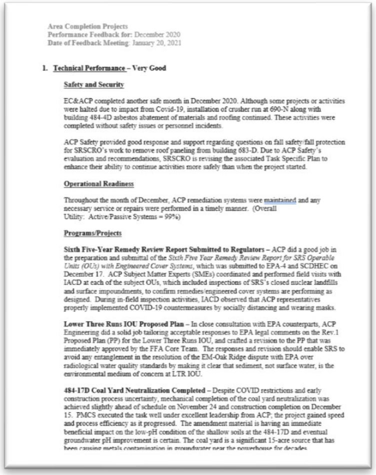
Annual Performance Baseline Approved (CD-2/3)

Environmental Cleanup – Oversight and Performance Measurement (CD-3 to CD-4)*

Monthly Subjective Feedback Meetings and Scorecard Input



Area Completion Projects
Performance Feedback for: December 2020
Date of Feedback Meeting: January 20, 2021

1. **Technical Performance – Very Good**

Safety and Security

EC&ACP completed another safe month in December 2020. Although some projects or activities were halted due to impact from Covid-19, installation of crusher run at 690-N along with building 484-4D asbestos abatement of materials and roofing continued. These activities were completed without safety issues or personnel incidents.

ACP Safety provided good response and support regarding questions on fall safety/fall protection for SRSCRO's work to remove roof paneling from building 683-D. Due to ACP Safety's evaluation and recommendations, SRSCRO is revising the associated Task Specific Plan to enhance their ability to continue activities more safely than when the project started.

Operational Readiness

Throughout the month of December, ACP remediation systems were maintained and any necessary service or repairs were performed in a timely manner. (Overall Utility: Active/Passive Systems = 99%)

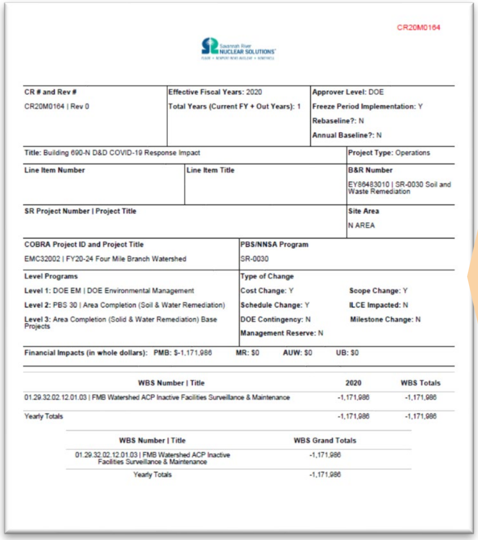
Programs/Projects

Sixth Five-Year Remedy Review Report Submitted to Regulators – ACP did a good job in the preparation and submittal of the *Sixth Five Year Remedy Review Report for SRS Operable Units (OUs) with Engineered Cover Systems*, which was submitted to EPA-4 and SCDHEC on December 17. ACP Subject Matter Experts (SMEs) coordinated and performed field visits with IACD at each of the subject OUs, which included inspections of SRS's closed nuclear landfills and surface impoundments, to confirm remedies/engineered cover systems are performing as designed. During in-field inspection activities, IACD observed that ACP representatives properly implemented COVID-19 countermeasures by socially distancing and wearing masks.

Lower Three Runs IOU Proposed Plan – In close consultation with EPA counterparts, ACP Engineering did a solid job tailoring acceptable responses to EPA legal comments on the Rev.1 Proposed Plan (PP) for the Lower Three Runs IOU, and crafted a revision to the PP that was immediately approved by the FFA Core Team. The responses and revision should enable SRS to avoid any entanglement in the resolution of the EM-Oak Ridge dispute with EPA over radiological water quality standards by making it clear that sediment, not surface water, is the environmental medium of concern at LTR IOU.

484-17D Coal Yard Neutralization Completed – Despite COVID restrictions and early construction process uncertainty, mechanical completion of the coal yard neutralization was achieved slightly ahead of schedule on November 24 and construction completion on December 15. PMCS executed the task well under excellent leadership from ACP; the project gained speed and process efficiency as it progressed. The amendment material is having an immediate beneficial impact on the low-pH condition of the shallow soils at the 484-17D and eventual groundwater pH improvement is certain. The coal yard is a significant 15-acre source that has been causing metals contamination in groundwater near the powerhouse for decades.

Baseline Change Proposals



CR20M0164

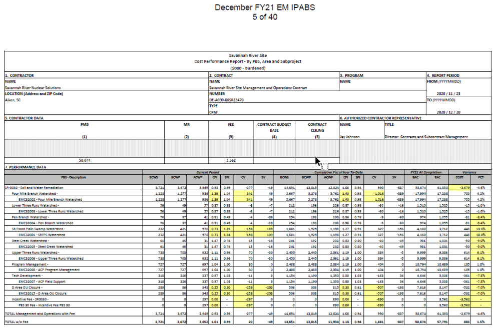
Savannah River NUCLEAR SOLUTIONS

CR # and Rev # CR20M0164 | Rev 0
Effective Fiscal Years: 2020
Total Years (Current FY + Out Years): 1
Approver Level: DOE
Freeze Period Implementation: Y
Rebaseline?: N
Annual Baseline?: N
Title: Building 690-N D&D COVID-19 Response Impact
Project Type: Operations
Line Item Number
Line Item Title
B&R Number EY86483010 | SR-0030 Soil and Waste Remediation
SR Project Number | Project Title
Site Area N AREA
COBRA Project ID and Project Title EMC32002 | FY20-24 Four Mile Branch Watershed
PBS/NNSA Program SR-0030
Level Programs
Level 1: DOE EM | DOE Environmental Management
Level 2: PBS 30 | Area Completion (Soil & Water Remediation)
Level 3: Area Completion (Solid & Water Remediation) Base Projects
Type of Change
Cost Change: Y
Scope Change: Y
Schedule Change: Y
ILCE Impacted: N
DOE Contingency: N
Milestone Change: N
Management Reserve: N
Financial Impacts (in whole dollars): **PMB:** $-1,171,986 **MR:** $0 **AUW:** $0 **UB:** $0

WBS Number | Title	2020	WBS Totals
01.29.32.02.12.01.03 | FMB Watershed ACP Inactive Facilities Surveillance & Maintenance	-1,171,986	-1,171,986
Yearly Totals	-1,171,986	-1,171,986

WBS Number | Title	WBS Grand Totals
01.29.32.02.12.01.03 | FMB Watershed ACP Inactive Facilities Surveillance & Maintenance	-1,171,986
Yearly Totals	-1,171,986

Monthly Baseline Performance Reviews EVMS / IPABS



December FY21 EM IPABS
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Savannah River Site
Cost Performance Report - By PBS, Area and Subproject
($000 - Burdened)

1. CONTRACTOR
NAME Savannah River Nuclear Solutions
LOCATION (Address and ZIP Code) Aiken, SC
2. CONTRACT
NAME Savannah River Site Management and Operations Contract
NUMBER DE-AC09-08SR22470
TYPE CPAF
3. PROGRAM
NAME
4. REPORT PERIOD
FROM *(YYYYMMDD)* 2020 / 11 / 23
TO *(YYYYMMDD)* 2020 / 12 / 20

5. CONTRACTOR DATA

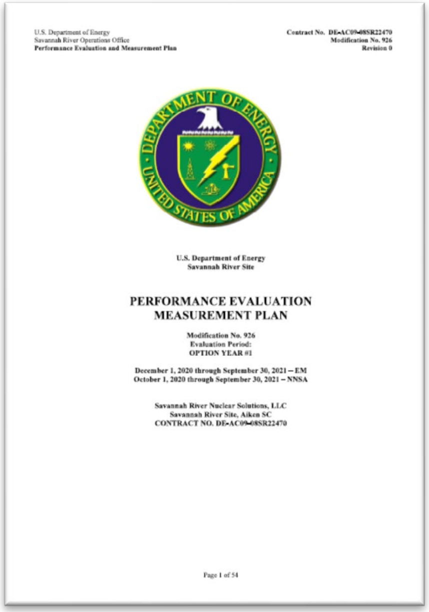
PMB (1)	MR (2)	FEE (3)	CONTRACT BUDGET BASE (4)	CONTRACT CEILING (5)
58,674		3,562		

6. AUTHORIZED CONTRACTOR REPRESENTATIVE
NAME Jay Johnson
TITLE Director, Contracts and Subcontract Management

7. PERFORMANCE DATA

	Current Period							*Cumulative Fiscal Year To-Date*							*FY21 At Completion*		*Variance*	
PBS - Description	BCWS	BCWP	ACWP	CPI	SPI	CV	SV	BCWS	BCWP	ACWP	CPI	SPI	CV	SV	BAC	EAC	COST	PCT
SR-0030 - Soil and Water Remediation	3,721	3,672	3,949	0.93	0.99	-277	-49	14,651	13,815	12,824	1.08	0.94	990	-837	58,674	61,353	-2,679	-4.6%
Four Mile Branch Watershed -	1,228	1,277	936	1.36	1.04	341	49	5,667	5,278	3,762	1.40	0.93	1,516	-389	17,994	17,238	755	4.2%
EMC32002 - Four Mile Branch Watershed	1,228	1,277	936	1.36	1.04	341	49	5,667	5,278	3,762	1.40	0.93	1,516	-389	17,994	17,238	755	4.2%
Lower Three Runs Watershed -	56	49	57	0.87	0.88	-8	-7	212	196	226	0.87	0.93	-30	-16	1,510	1,525	-15	-1.0%
EMC32003 - Lower Three Runs Watershed	56	49	57	0.87	0.88	-8	-7	212	196	226	0.87	0.93	-30	-16	1,510	1,525	-15	-1.0%
Pen Branch Watershed -	76	37	41	0.91	0.49	-4	-39	254	193	203	0.96	0.76	-9	-60	974	1,055	-81	-8.4%
EMC32004 - Pen Branch Watershed	76	37	41	0.91	0.49	-4	-39	254	193	203	0.96	0.76	-9	-60	974	1,055	-81	-8.4%
SR Flood Plain Swamp Watershed -	232	421	578	0.73	1.81	-156	189	1,681	1,525	1,198	1.27	0.91	327	-156	4,160	3,712	448	10.8%
EMC32001 - SRFPS Watershed	232	421	578	0.73	1.81	-156	189	1,681	1,525	1,198	1.27	0.91	327	-156	4,160	3,712	448	10.8%
Steel Creek Watershed -	61	46	31	1.47	0.74	15	-16	241	192	232	0.83	0.80	-40	-49	981	1,031	-50	-5.0%
EMC32005 - Steel Creek Watershed	61	46	31	1.47	0.74	15	-16	241	192	232	0.83	0.80	-40	-49	981	1,031	-50	-5.0%
Upper Three Runs Watershed -	733	703	632	1.11	0.96	70	-30	2,450	2,445	2,061	1.19	1.00	384	-5	9,999	9,386	614	6.1%
EMC32006 - Upper Three Runs Watershed	733	703	632	1.11	0.96	70	-30	2,450	2,445	2,061	1.19	1.00	384	-5	9,999	9,386	614	6.1%
Program Management -	727	727	697	1.04	1.00	30	0	2,488	2,488	2,084	1.19	1.00	404	0	10,794	10,689	105	1.0%
EMC32008 - ACP Program Management	727	727	697	1.04	1.00	30	0	2,488	2,488	2,084	1.19	1.00	404	0	10,794	10,689	105	1.0%
Tech Development -	318	326	337	0.97	1.03	-11	8	1,154	1,190	1,353	0.88	1.03	-163	36	4,646	5,008	-361	-7.8%
EMC32007 - ACP Field Support	318	326	337	0.97	1.03	-11	8	1,154	1,190	1,353	0.88	1.03	-163	36	4,646	5,008	-361	-7.8%
D Area OU Closure -	289	86	343	0.25	0.30	-258	-203	506	308	815	0.38	0.61	-507	-198	7,616	8,147	-532	-7.0%
EMC32015 - D Area OU Closure	289	86	343	0.25	0.30	-258	-203	506	308	815	0.38	0.61	-507	-198	7,616	8,147	-532	-7.0%
Incentive Fee - SR0030 -	0	0	297	0.00	-	-297	0	0	0	890	0.00	-	-890	0	0	3,562	-3,562	-
PBS 30 Fee - Incentive Fee PBS 30	0	0	297	0.00	-	-297	0	0	0	890	0.00	-	-890	0	0	3,562	-3,562	-
TOTAL Management and Operations with Fee	3,721	3,672	3,949	0.93	0.99	-277	-49	14,651	13,815	12,824	1.08	0.94	990	-837	58,674	61,353	-2,679	-4.6%
TOTAL w/o Fee	3,721	3,672	3,652	1.01	0.99	20	-49	14,651	13,815	11,934	1.16	0.94	1,881	-837	58,674	57,791	883	1.5%

Performance Based Incentives (PEMP)



U.S. Department of Energy
Savannah River Operations Office
Performance Evaluation and Measurement Plan

Contract No. DE-AC09-08SR22470
Modification No. 926
Revision 0

U.S. Department of Energy
Savannah River Site

PERFORMANCE EVALUATION
MEASUREMENT PLAN

Modification No. 926
Evaluation Period:
OPTION YEAR #1

December 1, 2020 through September 30, 2021 – EM
October 1, 2020 through September 30, 2021 – NNSA

Savannah River Nuclear Solutions, LLC
Savannah River Site, Aiken SC
CONTRACT NO. DE-AC09-08SR22470

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Site Tracking Analysis & Reports (STAR) Assessments and Reports

Assessment No. 2020-SA-000916
AMIES Oversight Project

☐ Show applicable STAR Actions

INITIATION

2020-SA-000916 *(Management Directed)*
Assessment Unit: DOE:IACD
Facility Assessed: MO:ECACP
Schd: 1/10/2020
FAM Appr Due Date: ---
Status: CLOSED (1/9/2020)
itle: Pre-Job Briefing for the Heat Exchanger Repair Facility (Ford Building) 690-N
Program Doc No:
ssessment Type: Operational Awareness
Activity Type: ☐ FR ☐ SSO ☐ MFO
Project: AMIES Oversight
Evaluation Date(s): 12/30/2019 - 12/30/2019
unctional Area Mgr/Approver: Bender, David (D8836) (Approved: 1/2/2020)
Assessment Coordinator/Delegate: Bryan, Charles (B9257) (Closed:1/9/2020)
ssessor/Team Members: 1 Adams, Karen (B6331) 4 Hrs (2 Fld Hrs) (Submitted: 1/2/2020)
Functional Area: 07 Environmental Protection And Waste Management
Personnel Contacted: None
Documents Reviewed: None

urpose/Scope
he purpose of this STAR entry is to document the contractors safety awareness by attending pre-job briefings, issue review and field observations to erify safety and operational standards and expectations are met. The scope of this entry documents my participation in the pre-job for the deactivation o e 690-N facility.

ssessment Results:
he pre-job briefing was to ensure the subcontractor (CTI) was knowledgeable of the work to be performed as well as the SRS entry requirements, mergency notification information (phone numbers, shelter locations), Site policies (fitness for duty, time out, whistleblower, respectful workplace), and b hazards (asbestos abatement, RAD work, noise exposure, biohazards, lead exposure and universal waste). Other programs in support of the work ere also present at the briefing to ensure their responsibilities were known to the subcontractor (RadCon, waste management, sampling and afety). Other topics discussed were remote worker (the construction site is considered remote, three way communication, proper PPE and flammables). he work includes asbestos abatement and low level rad area. Asbestos is present in the mastic around the windows and doors. Rad contamination has een detected inside the building. Rad surveys have been performed as high as can be reached without leaving the floor. Any work required in areas bove "arms length", must be surveyed.
he work scope and project overview was given and the subcontractor was given an opportunity to ask questions if anything was unclear or if anyone was ncomfortable with the activities to be performed. Lessons learned were discussed. This work will require overhead work with scaffolding. Lessons arned from previous jobs, including a dropped tool from overhead, were discussed.
o observations were noted.

oteworthy Practices:

DOE-SR Assessment Information

ontractor Notification
Sent By:
Sent Dt:
External Assessment Contact Info:
AS Effectiveness:
CAS Elements: ☐ Assessment ☐ Issues Management ☐ Lessons Learned ☐ Event Reporting ☐ Performance Measures ☐ Worker Feedback

Criterion / LOIs
o LOIs Identified

APPROVALS / REVIEWS None
DISTRIBUTION None
ATTACHMENTS

Monthly Program Reviews

U.S. DEPARTMENT OF ENERGY
SRS

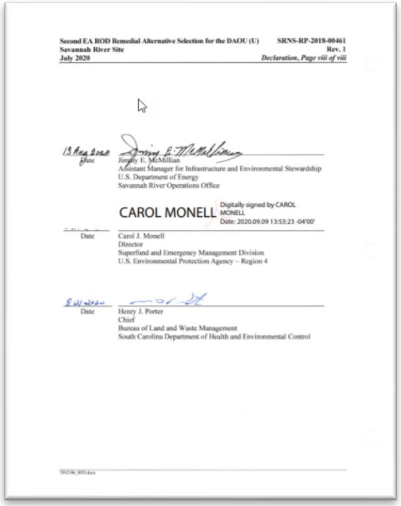
EC&ACP Monthly Review
December 2020

Savannah River Nuclear Solutions, LLC
25 January 2021

SAVANNAH RIVER SITE • AIKEN • SC • WWW.SRS.GOV

Environmental Cleanup – Completion Approval and Verification (CD-4)*

RCRA /CERCLA Documents and Reports



Second EA ROD Remedial Alternative Selection for the DAOU (U) SRNS-RP-2018-00461
Savannah River Site Rev. 1
July 2020 *Declaration, Page viii of viii*

13 Aug 2020
Date

Jimmy E. McMillian
Assistant Manager for Infrastructure and Environmental Stewardship
U.S. Department of Energy
Savannah River Operations Office

CAROL MONELL Digitally signed by CAROL MONELL
Date: 2020.09.09 13:53:23 -04'00'

Date

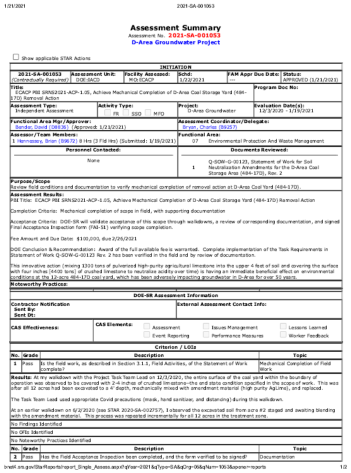
Carol J. Monell
Director
Superfund and Emergency Management Division
U.S. Environmental Protection Agency – Region 4

8/21/2020
Date

Henry J. Porter
Chief
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

Record of Decisions

STAR Assessments and Reports



1/21/2021 2021-SA-001053

Assessment Summary
Assessment No. 2021-SA-001053
D-Area Groundwater Project

☐ Show applicable STAR Actions

INITIATION

2021-SA-001053 *(Contractually Required)*	**Assessment Unit:** DOE:IACD	**Facility Assessed:** MO:ECACP	**Schd:** 1/22/2021	**FAM Appr Due Date:** ---	**Status:** APPROVED (1/21/2021)

Title: ECACP PBI SRNS2021-ACP-1.05, Achieve Mechanical Completion of D-Area Coal Storage Yard (484-17D) Removal Action

Program Doc No:

Assessment Type: Independent Assessment

Activity Type: ☐ FR ☐ SSO ☐ MFO

Project: D-Area Groundwater

Evaluation Date(s): 12/3/2020 - 1/19/2021

Functional Area Mgr/Approver: Bender, David (D8836) (Approved: 1/21/2021)

Assessment Coordinator/Delegate: Bryan, Charles (B9257)

Assessor/Team Members: 1 Hennessey, Brian (B9672) 8 Hrs (3 Fld Hrs) (Submitted: 1/19/2021)

Functional Area: 07 Environmental Protection And Waste Management

Personnel Contacted: None

Documents Reviewed: 1 Q-SOW-G-00123, Statement of Work for Soil Neutralization Amendments for the D-Area Coal Storage Area (484-17D), Rev. 2

Purpose/Scope
Review field conditions and documentation to verify mechanical completion of removal action at D-Area Coal Yard (484-17D).

Assessment Results:
PBI Title: ECACP PBI SRNS2021-ACP-1.05, Achieve Mechanical Completion of D-Area Coal Storage Yard (484-17D) Removal Action

Completion Criteria: Mechanical completion of scope in field, with supporting documentation

Acceptance Criteria: DOE-SR will validate acceptance of this scope through walkdowns, a review of corresponding documentation, and signed Final Acceptance Inspection form (FAI-51) verifying scope completion.

Fee Amount and Due Date: $100,000, due 2/26/2021

DOE Conclusion & Recommendation: Award of the full available fee is warranted. Complete implementation of the Task Requirements in Statement of Work Q-SOW-G-00123 Rev. 2 has been verified in the field and by review of documentation.

This innovative action (mixing 1300 tons of pulverized high-purity agricultural limestone into the upper 4 feet of soil and covering the surface with four inches [4400 tons] of crushed limestone to neutralize acidity over time) is having an immediate beneficial effect on environmental conditions at the 12-acre 484-17D coal yard, which has been adversely impacting groundwater in D-Area for over 50 years.

Noteworthy Practices:

DOE-SR Assessment Information

Contractor Notification
Sent By:
Sent Dt:

External Assessment Contact Info:

CAS Effectiveness:

CAS Elements: ☐ Assessment ☐ Event Reporting ☐ Issues Management ☐ Performance Measures ☐ Lessons Learned ☐ Worker Feedback

Criterion / LOIs

No.	Grade	Description	Topic
1	Pass	Is the field work, as described in Section 3.1.1, Field Activities, of the Statement of Work complete?	Mechanical Completion of Field Work

Results: At my walkdown with the Project Task Team Lead on 12/3/2020, the entire surface of the coal yard within the boundary of operation was observed to be covered with 2-4 inches of crushed limestone--the end state condition specified in the scope of work. This was after all 12 acres had been excavated to a 4' depth, mechanically mixed with amendment material (high purity AgLime), and replaced.

The Task Team Lead used appropriate Covid precautions (mask, hand sanitizer, and distancing) during this walkdown.

At an earlier walkdown on 6/2/2020 (see STAR 2020-SA-002757), I observed the excavated soil from acre #2 staged and awaiting blending with the amendment material. This process was repeated incrementally for all 12 acres in the treatment zone.

No Findings Identified

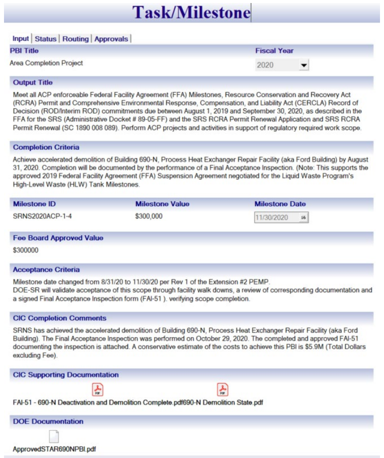
No OFIs Identified

No Noteworthy Practices Identified

No.	Grade	Description	Topic
2	Pass	Has the Field Acceptance Inspection been completed, and the form verified to be signed?	Documentation

bnet4.srs.gov/StarReports/report_Single_Assess.aspx?qYear=2021&qType=SA&qOrg=05&qNum=1053&opener=reports 1/2

Performance Based Incentives (PEMP)



Task/Milestone

Input | Status | Routing | Approvals |

PBI Title
Area Completion Project

Fiscal Year
2020

Output Title
Meet all ACP enforceable Federal Facility Agreement (FFA) Milestones, Resource Conservation and Recovery Act (RCRA) Permit and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD/Interim ROD) commitments due between August 1, 2019 and September 30, 2020, as described in the FFA for the SRS (Administrative Docket # 89-05-FF) and the SRS RCRA Permit Renewal Application and SRS RCRA Permit Renewal (SC 1890 008 089). Perform ACP projects and activities in support of regulatory required work scope.

Completion Criteria
Achieve accelerated demolition of Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building) by August 31, 2020. Completion will be documented by the performance of a Final Acceptance Inspection. (Note: This supports the approved 2019 Federal Facility Agreement (FFA) Suspension Agreement negotiated for the Liquid Waste Program's High-Level Waste (HLW) Tank Milestones.

Milestone ID	Milestone Value	Milestone Date
SRNS2020ACP-1-4	$300,000	11/30/2020

Fee Board Approved Value
$300000

Acceptance Criteria
Milestone date changed from 8/31/20 to 11/30/20 per Rev 1 of the Extension #2 PEMP.
DOE-SR will validate acceptance of this scope through facility walk downs, a review of corresponding documentation and a signed Final Acceptance Inspection form (FAI-51). verifying scope completion.

CIC Completion Comments
SRNS has achieved the accelerated demolition of Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building). The Final Acceptance Inspection was performed on October 29, 2020. The completed and approved FAI-51 documenting the inspection is attached. A conservative estimate of the costs to achieve this PBI is $5.9M (Total Dollars excluding Fee).

CIC Supporting Documentation
FAI-51 - 690-N Deactivation and Demolition Complete.pdf690-N Demolition State.pdf

DOE Documentation
ApprovedSTAR690NPBI.pdf

dhec
Healthy People. Healthy Communities.

ENVIRONMENTAL COMPLIANCE &
AUG 12 2020
AREA COMPLETION PROJECTS

August 6, 2020

Brian T. Hennessey
SRS Remedial Project Manager
Area Completion Projects
U. S. Department of Energy
Savannah River Operations Office
P. O. Box A
Aiken, South Carolina 29802

RE: Decommissioning Project Final Report (DPFR): Building 728-N, Shipping Cask and Railroad Car Repair Facility, Revision 1, V-PCOR-N-00022, June 30, 2020 (Cover letter dated July 8, 2020; Received July 9, 2020) and Savannah River Site's Responses to Regulatory Comments on the Revision 0 Document

Dear Mr. Hennessey:

The South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced documents with respect to the Memorandum of Agreement for Achieving an Accelerated Cleanup Vision for the Savannah River Site (SRS). The Department agrees that the facility remnants should be added to the Federal Facility Agreement (FFA) Appendix C.4, D&D Facilities (or Remnants) that May Warrant Response Action.

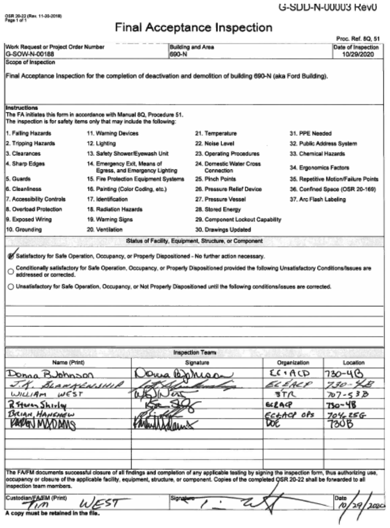
If you have any questions, please contact Leigh Beatty at 803-642-1637 or via e-mail at beattykl@dhec.sc.gov.

Sincerely,

Gregory N. O'Quinn

Gregory N. O'Quinn
SC Department of Health and Environmental Control
Midlands EA – Aiken

Decommissioning Project Final Reports



G-SDD-N-00003 Rev0

OSR 20-22 (Rev. 11-30-2018)
Page 1 of 1

Final Acceptance Inspection

Proc. Ref. 8Q, 51

Work Request or Project Order Number	Building and Area	Date of Inspection
G-SOW-N-00188	690-N	10/29/2020

Scope of Inspection
Final Acceptance Inspection for the completion of deactivation and demolition of building 690-N (aka Ford Building).

Instructions
The FA initiates this form in accordance with Manual 8Q, Procedure 51.
The inspection is for safety items only that may include the following:

1. Falling Hazards
2. Tripping Hazards
3. Clearances
4. Sharp Edges
5. Guards
6. Cleanliness
7. Accessibility Controls
8. Overload Protection
9. Exposed Wiring
10. Grounding
11. Warning Devices
12. Lighting
13. Safety Shower/Eyewash Unit
14. Emergency Exit, Means of Egress, and Emergency Lighting
15. Fire Protection Equipment Systems
16. Painting (Color Coding, etc.)
17. Identification
18. Radiation Hazards
19. Warning Signs
20. Ventilation
21. Temperature
22. Noise Level
23. Operating Procedures
24. Domestic Water Cross Connection
25. Pinch Points
26. Pressure Relief Device
27. Pressure Vessel
28. Stored Energy
29. Component Lockout Capability
30. Drawings Updated
31. PPE Needed
32. Public Address System
33. Chemical Hazards
34. Ergonomics Factors
35. Repetitive Motion/Failure Points
36. Confined Space (OSR 20-169)
37. Arc Flash Labeling

Status of Facility, Equipment, Structure, or Component

● Satisfactory for Safe Operation, Occupancy, or Properly Dispositioned - No further action necessary.
○ Conditionally satisfactory for Safe Operation, Occupancy, or Properly Dispositioned provided the following Unsatisfactory Conditions/Issues are addressed or corrected.
○ Unsatisfactory for Safe Operation, Occupancy, or Not Properly Dispositioned until the following conditions/issues are corrected.

Inspection Team

Name (Print)	Signature	Organization	Location
Donna B Johnson	Donna B Johnson	EC + ACP	730-4B
J.K. BLANKENSHIP		EC&ACP	730-4B
WILLIAM WEST		STR	707-53B
R Steven Shirley		EC&ACP	730-4B
BRIAN HANCHEW		EC&ACP OPS	704-25G
KAREN MCADAMS		DOE	730B

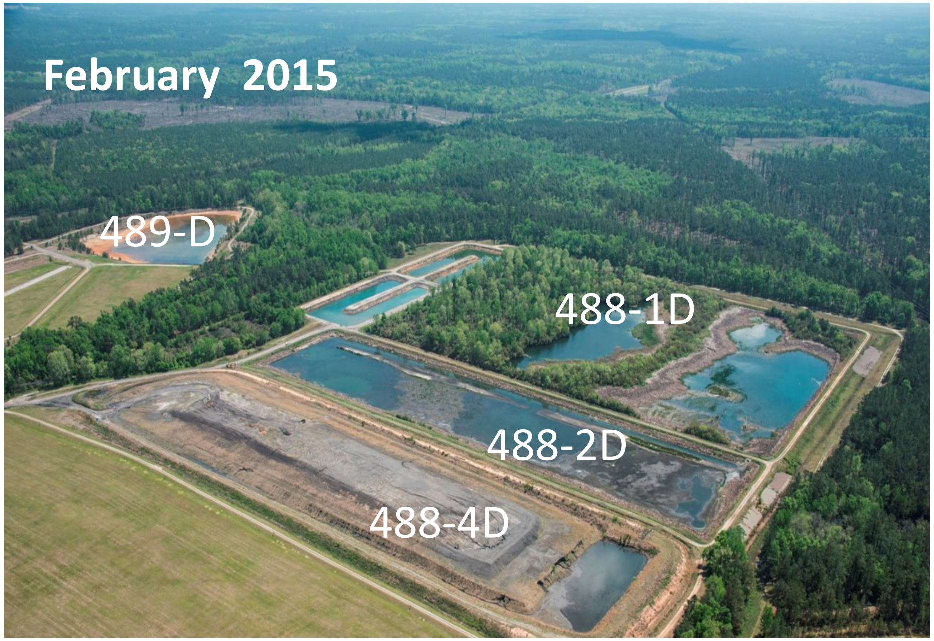
The FA/FM documents successful closure of all findings and completion of any applicable testing by signing the inspection form, thus authorizing use, occupancy or closure of the applicable facility, equipment, structure, or component. Copies of the completed OSR 20-22 shall be forwarded to all inspection team members.

Custodian/FA/FM (Print)	Signature	Date
Tim WEST		10/29/2020

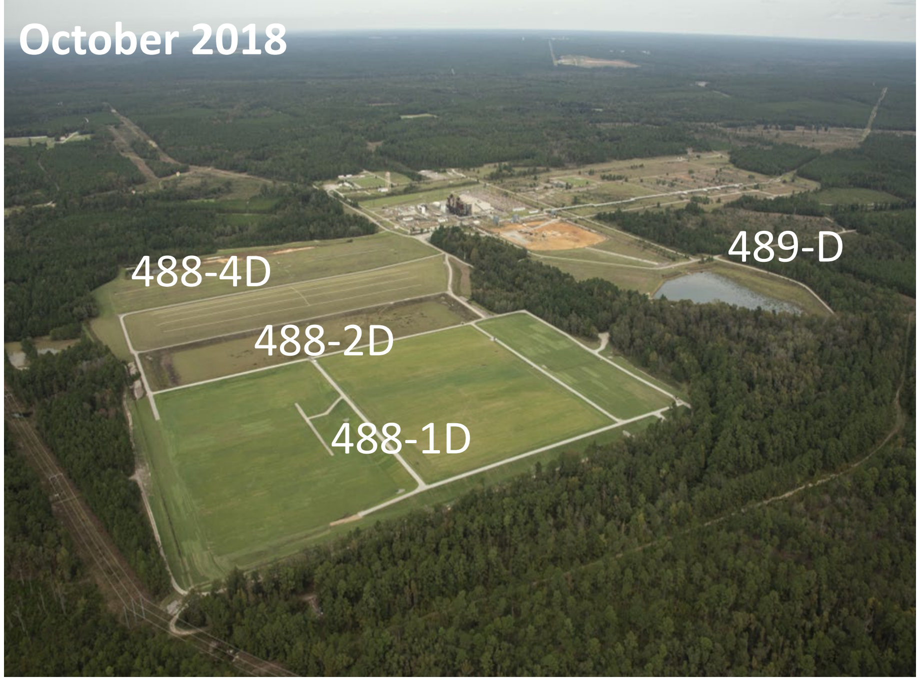
A copy must be retained in the file.

Final Acceptance Inspection

DOE O 413.3B – D Area Ash Project



The D Area Ash Project (DAAP) was an EM project. The project was conducted as a CERCLA Removal Action remediating 4 earthen facilities that supported the D Area Coal Fired Powerhouse during operation. The powerhouse was shutdown in April 2010.



DAAP was a DOE O 413.3B project that received CD-0 approval December 2014 and received CD-4 approval in June 2019. A multi-year project with a TPC of $74.2M. The project was completed ahead of schedule and under budget.

Environmental Cleanup – Deactivation and Decommissioning 690-N: Mission Need (CD-0)*

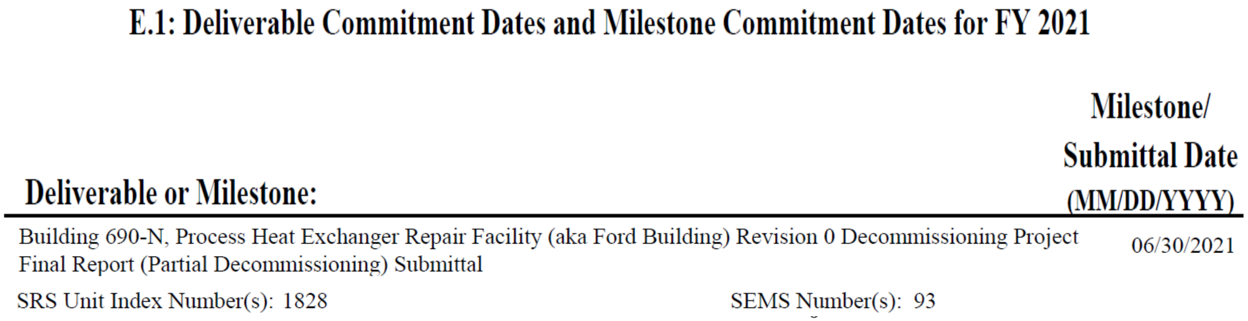
*IAW EM Demo Protocol & 413 principles

The 690-N facility was used to repair reactor components and was a radioactively contaminated facility. The D&D of the facility began in September 2019 and is scheduled to be completed in 2Q21. Project TPC is estimated at $7.2M.

FEDERAL FACILITY AGREEMENT

FOR THE

SAVANNAH RIVER SITE



E.1: Deliverable Commitment Dates and Milestone Commitment Dates for FY 2021

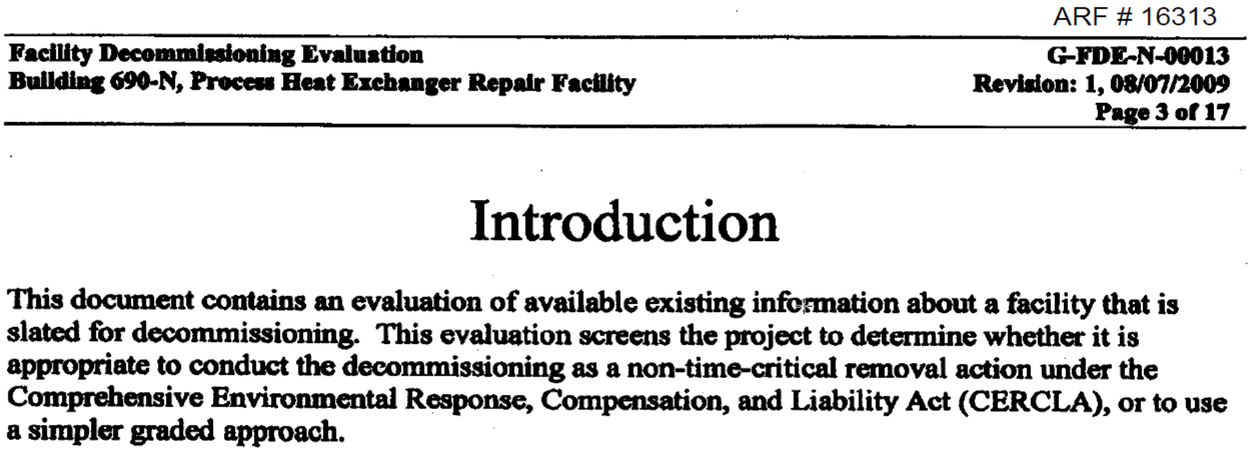
Deliverable or Milestone:		Milestone/ Submittal Date (MM/DD/YYYY)
Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building) Revision 0 Decommissioning Project Final Report (Partial Decommissioning) Submittal		06/30/2021
SRS Unit Index Number(s): 1828	SEMS Number(s): 93	

Environmental Cleanup – Deactivation and Decommissioning 690-N: Planning (CD-1)*

RCRA and CERCLA Documentation

FDE proposes the degree of CERCLA involvement
In facility decommissioning, in accordance with
the SRS tailored decommissioning approach.

Facility Decommissioning Evaluation Document



ARF # 16313

Facility Decommissioning Evaluation
Building 690-N, Process Heat Exchanger Repair Facility

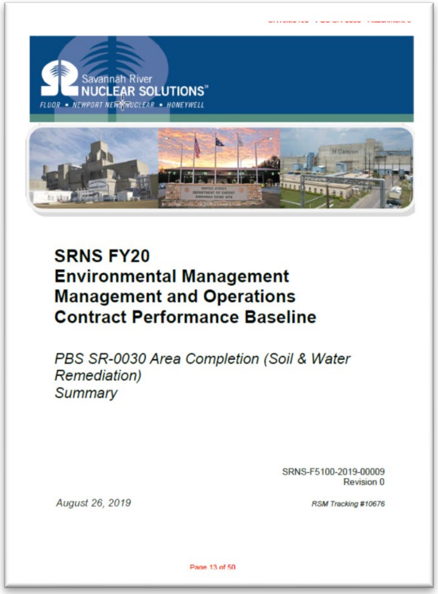
G-FDE-N-00013
Revision: 1, 08/07/2009
Page 3 of 17

Introduction

This document contains an evaluation of available existing information about a facility that is slated for decommissioning. This evaluation screens the project to determine whether it is appropriate to conduct the decommissioning as a non-time-critical removal action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or to use a simpler graded approach.

Environmental Cleanup – Deactivation and Decommissioning 690-N: Baseline (CD-2)*

PBS30 Baseline Document



Savannah River NUCLEAR SOLUTIONS℠
FLUOR • NEWPORT NEWS NUCLEAR • HONEYWELL

SRNS FY20
Environmental Management
Management and Operations
Contract Performance Baseline

PBS SR-0030 Area Completion (Soil & Water Remediation)
Summary

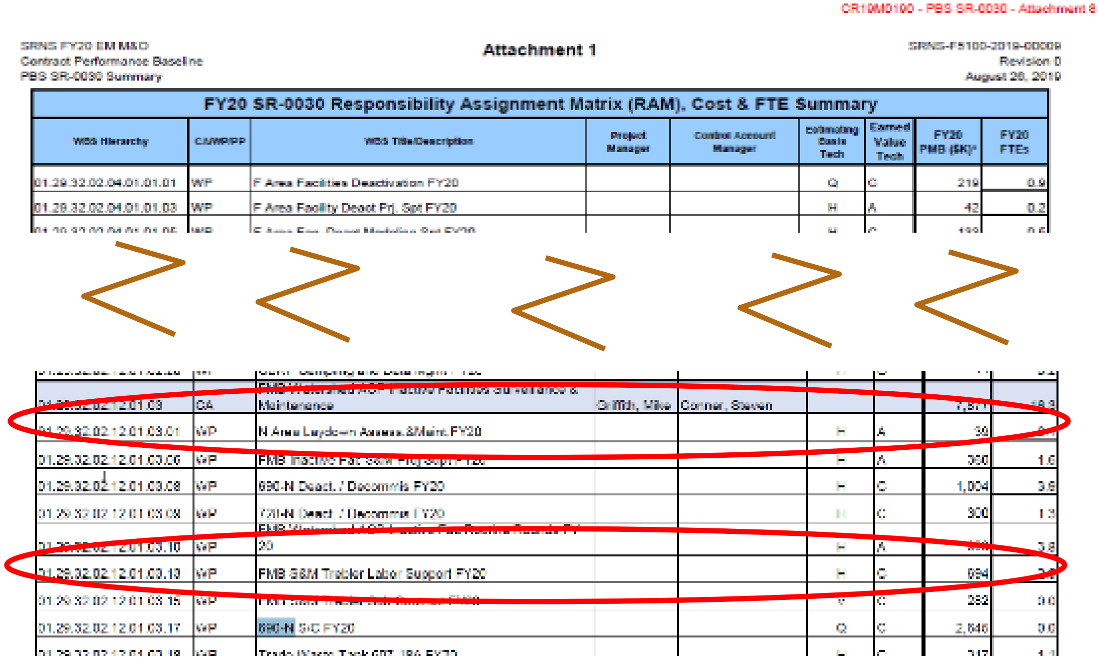
SRNS-F5100-2019-00009
Revision 0

August 26, 2019

RSM Tracking #10676

Page 13 of 50

Responsibility Matrix, Cost & FTE Summary by WBS



CR19M0190 - PBS SR-0030 - Attachment 8

SRNS FY20 EM M&O
Contract Performance Baseline
PBS SR-0030 Summary

Attachment 1

SRNS-F5100-2019-00009
Revision 0
August 26, 2019

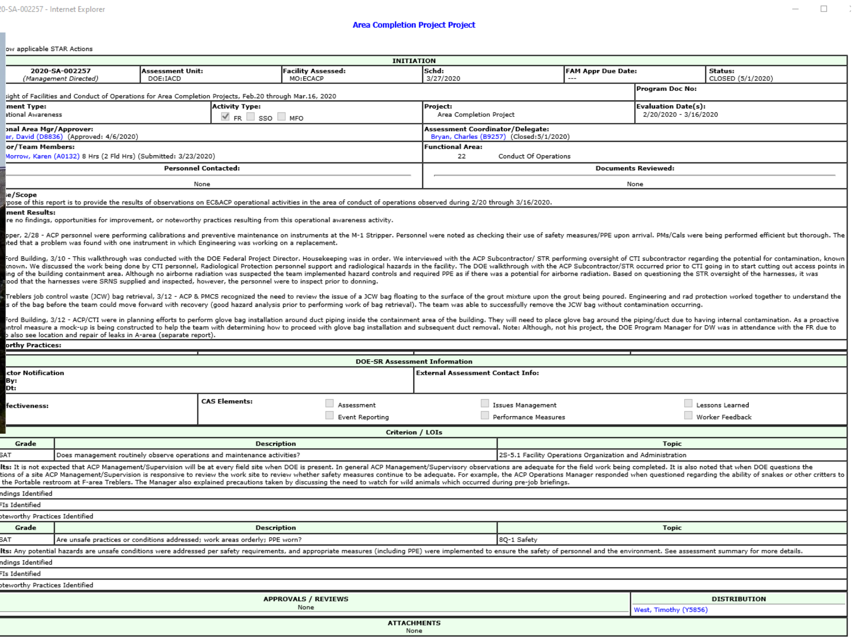
FY20 SR-0030 Responsibility Assignment Matrix (RAM), Cost & FTE Summary

WBS Hierarchy	CA/WP/PP	WBS Title/Description	Project Manager	Control Account Manager	Estimating Basis Tech	Earned Value Tech	FY20 PMB ($K)*	FY20 FTEs
01.29.32.02.04.01.01.01	WP	F Area Facilities Deactivation FY20			Q	C	219	0.9
01.29.32.02.04.01.01.03	WP	F Area Facility Deact Prj. Spt FY20			H	A	42	0.2
01.29.32.02.12.01.03	CA	FMB Watershed ACP Inactive Facilities Surveillance & Maintenance	Griffith, Mike	Conner, Steven			[illegible]	18.3
01.29.32.02.12.01.03.01	WP	N Area Laydown Assess.&Maint.FY20			H	A	39	[illegible]
01.29.32.02.12.01.03.06	WP	FMB Inactive Fac S&M Proj Supt FY20			H	A	360	1.6
01.29.32.02.12.01.03.08	WP	690-N Deact. / Decommis FY20			H	C	1,004	3.6
01.29.32.02.12.01.03.09	WP	720-N Deact. / Decommis FY20			H	C	300	1.3
01.29.32.02.12.01.03.10	WP	FMB Watershed ACP Inactive Fac Routine Rounds FY20			H	A	[illegible]	3.8
01.29.32.02.12.01.03.13	WP	FMB S&M Trebler Labor Support FY20			H	C	694	[illegible]
01.29.32.02.12.01.03.15	WP	[illegible]			V	C	282	0.0
01.29.32.02.12.01.03.17	WP	690-N S/C FY20			Q	C	2,846	0.0

Performance-Based Incentive for 690-N D&D

SRNS2020 ACP-1.04	Achieve accelerated demolition of Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building) by August 31, 2020. Completion will be documented by the performance of a Final Acceptance Inspection. (Note: This supports the approved 2019 Federal Facility Agreement (FFA) Suspension Agreement negotiated for the Liquid Waste Program's High-Level Waste (HLW) Tank Milestones.	DOE-SR will validate acceptance of this scope through facility walkdowns, a review of corresponding documentation and a signed Final Acceptance Inspection form (FAI-51), verifying scope completion.	11/30/2020	$300,000	Bergram	Kmetz	Adams	COVID19 Impacted

Environmental Cleanup – Deactivation and Decommissioning 690-N: Execution (CD-3)*



2020-SA-002257 - Internet Explorer

Area Completion Project Project

ow applicable STAR Actions

INITIATION

2020-SA-002257 *(Management Directed)*	**Assessment Unit:** DOE:IACD	**Facility Assessed:** MO:ECACP	**Schd:** 3/27/2020	**FAM Appr Due Date:** ---	**Status:** CLOSED (5/1/2020)

sight of Facilities and Conduct of Operations for Area Completion Projects, Feb.20 through Mar.16, 2020

Program Doc No:

ment Type: ational Awareness

Activity Type: ☑ FR ☐ SSO ☐ MFO

Project: Area Completion Project

Evaluation Date(s): 2/20/2020 - 3/16/2020

onal Area Mgr/Approver: er, David (D8836) (Approved: 4/6/2020)

Assessment Coordinator/Delegate: Bryan, Charles (B9257) (Closed:5/1/2020)

or/Team Members: Morrow, Karen (A0132) 8 Hrs (2 Fld Hrs) (Submitted: 3/23/2020)

Functional Area: 22 Conduct Of Operations

Personnel Contacted: None

Documents Reviewed: None

e/Scope

rpose of this report is to provide the results of observations on EC&ACP operational activities in the area of conduct of operations observed during 2/20 through 3/16/2020.

ment Results:

re no findings, opportunities for improvement, or noteworthy practices resulting from this operational awareness activity.

pper, 2/28 - ACP personnel were performing calibrations and preventive maintenance on instruments at the M-1 Stripper. Personnel were noted as checking their use of safety measures/PPE upon arrival. PMs/Cals were being performed efficient but thorough. The
oted that a problem was found with one instrument in which Engineering was working on a replacement.

Ford Building, 3/10 - This walkthrough was conducted with the DOE Federal Project Director. Housekeeping was in order. We interviewed with the ACP Subcontractor/ STR performing oversight of CTI subcontractor regarding the potential for contamination, known
known. We discussed the work being done by CTI personnel, Radiological Protection personnel support and radiological hazards in the facility. The DOE walkthrough with the ACP Subcontractor/STR occurred prior to CTI going in to start cutting out access points in
ing of the building containment area. Although no airborne radiation was suspected the team implemented hazard controls and required PPE as if there was a potential for airborne radiation. Based on questioning the STR oversight of the harnesses, it was
ood that the harnesses were SRNS supplied and inspected, however, the personnel were to inspect prior to donning.

Treblers job control waste (JCW) bag retrieval, 3/12 - ACP & PMCS recognized the need to review the issue of a JCW bag floating to the surface of the grout mixture upon the grout being poured. Engineering and rad protection worked together to understand the
s of the bag before the team could move forward with recovery (good hazard analysis prior to performing work of bag retrieval). The team was able to successfully remove the JCW bag without contamination occurring.

Ford Building, 3/12 - ACP/CTI were in planning efforts to perform glove bag installation around duct piping inside the containment area of the building. They will need to place glove bag around the piping/duct due to having internal contamination. As a proactive
ntrol measure a mock-up is being constructed to help the team with determining how to proceed with glove bag installation and subsequent duct removal. Note: Although, not his project, the DOE Program Manager for DW was in attendance with the FR due to
 also see location and repair of leaks in A-area (separate report).

orthy Practices:

DOE-SR Assessment Information

ctor Notification
By:
Dt:

External Assessment Contact Info:

fectiveness:

CAS Elements: ☐ Assessment ☐ Event Reporting ☐ Issues Management ☐ Performance Measures ☐ Lessons Learned ☐ Worker Feedback

Criterion / LOIs

No.	Grade	Description	Topic
1	SAT	Does management routinely observe operations and maintenance activities?	2S-5.1 Facility Operations Organization and Administration

Results: It is not expected that ACP Management/Supervision will be at every field site when DOE is present. In general ACP Management/Supervisory observations are adequate for the field work being completed. It is also noted that when DOE questions the conditions of a site ACP Management/Supervision is responsive to review the work site to review whether safety measures continue to be adequate. For example, the ACP Operations Manager responded when questioned regarding the ability of snakes or other critters to enter the Portable restroom at F-area Treblers. The Manager also explained precautions taken by discussing the need to watch for wild animals which occurred during pre-job briefings.

No Findings Identified

No OFIs Identified

No Noteworthy Practices Identified

No.	Grade	Description	Topic
2	SAT	Are unsafe practices or conditions addressed; work areas orderly; PPE worn?	8Q-1 Safety

Results: Any potential hazards are unsafe conditions were addressed per safety requirements, and appropriate measures (including PPE) were implemented to ensure the safety of personnel and the environment. See assessment summary for more details.

No Findings Identified

No OFIs Identified

No Noteworthy Practices Identified

APPROVALS / REVIEWS
None

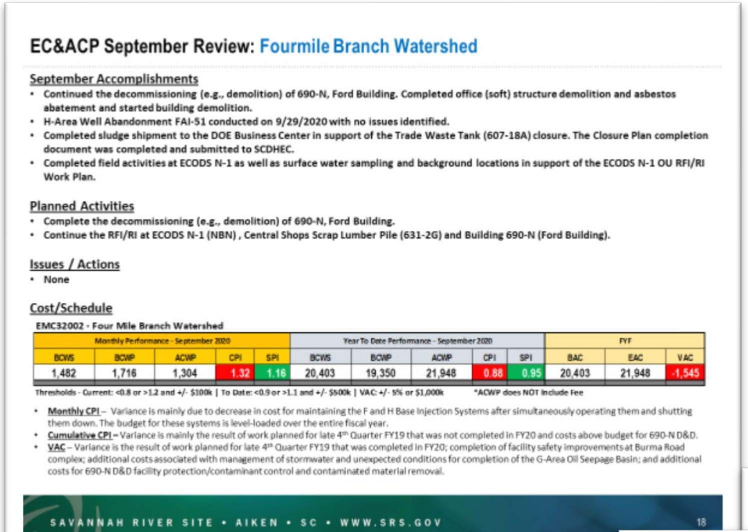
DISTRIBUTION
West, Timothy (Y5856)

ATTACHMENTS
None

During execution of work, DOE field oversight is captured in the STAR database. Any observations or findings are captured and corrective actions tracked.

Environmental Cleanup – Deactivation and Decommissioning 690-N: Execution (CD-3)*

PBS 30 Monthly Project Review



EC&ACP September Review: Fourmile Branch Watershed

September Accomplishments

- Continued the decommissioning (e.g., demolition) of 690-N, Ford Building. Completed office (soft) structure demolition and asbestos abatement and started building demolition.
- H-Area Well Abandonment FAI-51 conducted on 9/29/2020 with no issues identified.
- Completed sludge shipment to the DOE Business Center in support of the Trade Waste Tank (607-18A) closure. The Closure Plan completion document was completed and submitted to SCDHEC.
- Completed field activities at ECODS N-1 as well as surface water sampling and background locations in support of the ECODS N-1 OU RFI/RI Work Plan.

Planned Activities

- Complete the decommissioning (e.g., demolition) of 690-N, Ford Building.
- Continue the RFI/RI at ECODS N-1 (NBN) , Central Shops Scrap Lumber Pile (631-2G) and Building 690-N (Ford Building).

Issues / Actions

- None

Cost/Schedule

EMC32002 - Four Mile Branch Watershed

Monthly Performance - September 2020					Year To Date Performance - September 2020					FYF		
BCWS	BCWP	ACWP	CPI	SPI	BCWS	BCWP	ACWP	CPI	SPI	BAC	EAC	VAC
1,482	1,716	1,304	1.32	1.16	20,403	19,350	21,948	0.88	0.95	20,403	21,948	-1,545

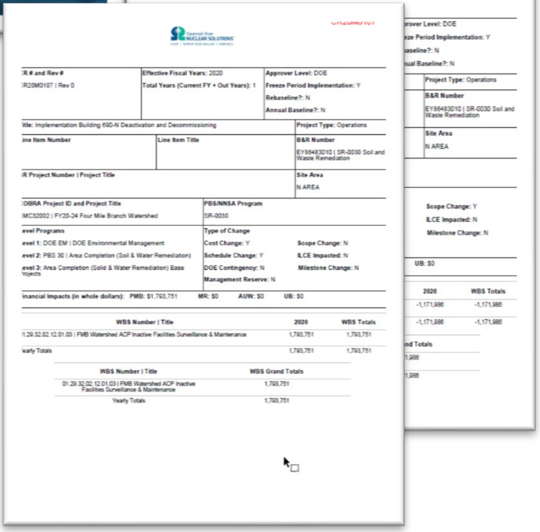
Thresholds - Current: <0.8 or >1.2 and +/- $100k | To Date: <0.9 or >1.1 and +/- $500k | VAC: +/- 5% or $1,000k *ACWP does NOT Include Fee

- **Monthly CPI** – Variance is mainly due to decrease in cost for maintaining the F and H Base Injection Systems after simultaneously operating them and shutting them down. The budget for these systems is level-loaded over the entire fiscal year.
- **Cumulative CPI** – Variance is mainly the result of work planned for late 4th Quarter FY19 that was not completed in FY20 and costs above budget for 690-N D&D.
- **VAC** – Variance is the result of work planned for late 4th Quarter FY19 that was completed in FY20; completion of facility safety improvements at Burma Road complex; additional costs associated with management of stormwater and unexpected conditions for completion of the G-Area Oil Seepage Basin; and additional costs for 690-N D&D facility protection/contaminant control and contaminated material removal.

SAVANNAH RIVER SITE • AIKEN • SC • WWW.SRS.GOV 18

\\Winsan1\boe teams\ACP Month

Baseline Change Proposals



CR20M0164

rover Level: DOE
eze Period Implementation: Y
aseline?: N
ual Baseline?: N

Project Type: Operations

B&R Number
EY86483010 | SR-0030 Soil and Waste Remediation

Site Area
N AREA

Scope Change: Y
ILCE Impacted: N
Milestone Change: N

UB: $0

2020	WBS Totals
-1,171,986	-1,171,986
-1,171,986	-1,171,986

R # and Rev #
R20M0107 | Rev 0

Effective Fiscal Years: 2020
Total Years (Current FY + Out Years): 1

Approver Level: DOE
Freeze Period Implementation: Y
Rebaseline?: N
Annual Baseline?: N

itle: Implementation Building 690-N Deactivation and Decommissioning

Project Type: Operations

ine Item Number

Line Item Title

B&R Number
EY86483010 | SR-0030 Soil and Waste Remediation

R Project Number | Project Title

Site Area
N AREA

OBRA Project ID and Project Title
MC32002 | FY20-24 Four Mile Branch Watershed

PBS/NNSA Program
SR-0030

evel Programs
evel 1: DOE EM | DOE Environmental Management
evel 2: PBS 30 | Area Completion (Soil & Water Remediation)
evel 3: Area Completion (Solid & Water Remediation) Base rojects

Type of Change
Cost Change: Y
Schedule Change: Y
DOE Contingency: N
Management Reserve: N
Scope Change: N
ILCE Impacted: N
Milestone Change: N

inancial Impacts (in whole dollars): PMB: $1,793,751 MR: $0 AUW: $0 UB: $0

WBS Number | Title	2020	WBS Totals
1.29.32.02.12.01.03 | FMB Watershed ACP Inactive Facilities Surveillance & Maintenance	1,793,751	1,793,751
early Totals	1,793,751	1,793,751

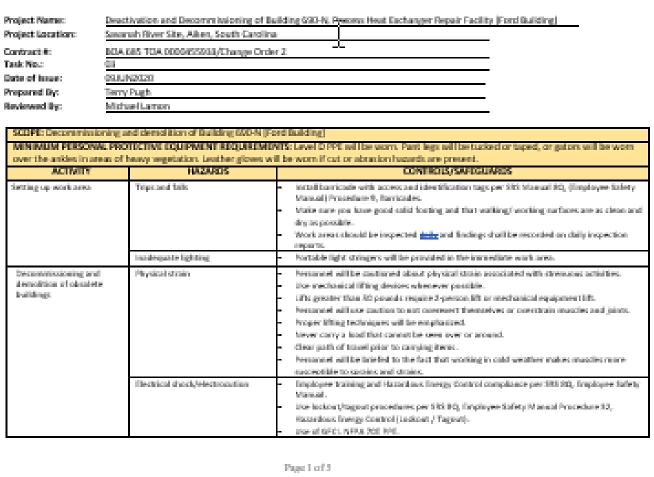
WBS Number | Title	WBS Grand Totals
01.29.32.02.12.01.03 | FMB Watershed ACP Inactive Facilities Surveillance & Maintenance	1,793,751
Yearly Totals	1,793,751

During execution, PBS 30 monthly project reviews are held to status subproject cost, scope and schedule variances. The baseline is managed using a baseline change proposal process.

Environmental Cleanup – Deactivation and Decommissioning 690-N: Execution (CD-3)*

ESH&Q requirements are met through hazardous review walk throughs of the job site, WSHP once all subcontractor submittals are received, a Notice to Proceed is issued.

Worker Safety & Health Plan



TSP: Decommissioning and Demolition

Project Name: Deactivation and Decommissioning of Building 690-N, Process Heat Exchanger Repair Facility (Ford Building)
Project Location: Savannah River Site, Aiken, South Carolina
Contract #: BOA 685 TOA 0000455033/Change Order 2
Task No.: 03
Date of Issue: 03JUN2020
Prepared By: Terry Pugh
Reviewed By: Michael Lamon

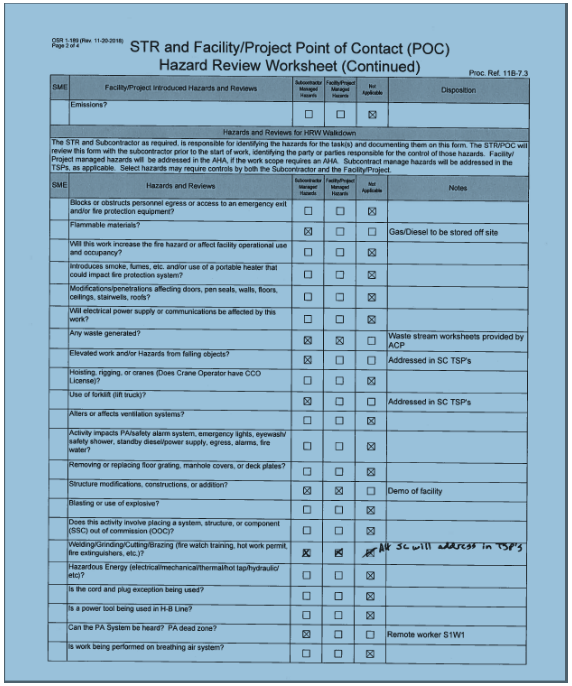
SCOPE: Decommissioning and demolition of Building 690-N (Ford Building)

MINIMUM PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS: Level D PPE will be worn. Pant legs will be tucked or taped, or gators will be worn over the ankles in areas of heavy vegetation. Leather gloves will be worn if cut or abrasion hazards are present.

ACTIVITY	HAZARDS	CONTROLS/SAFEGUARDS
Setting up work area	Trips and falls	
	Inadequate lighting	
Decommissioning and demolition of obsolete buildings	Physical strain	
	Electrical shock/electrocution	

Page 1 of 3

Hazard Review Checklist



OSR 1-189 (Rev. 11-20-2018)
Page 2 of 4

STR and Facility/Project Point of Contact (POC) Hazard Review Worksheet (Continued)

Proc. Ref. 11B-7.3

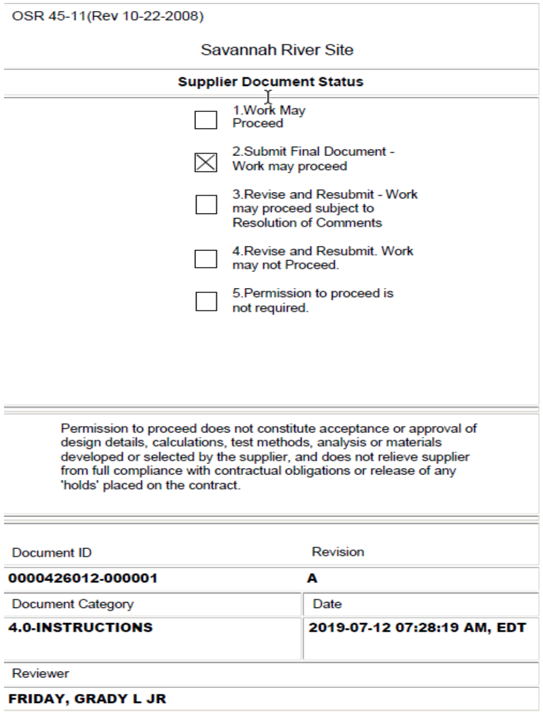
SME	Facility/Project Introduced Hazards and Reviews	Subcontractor Managed Hazards	Facility/Project Managed Hazards	Not Applicable	Disposition
	Emissions?	☐	☐	☒	

Hazards and Reviews for HRW Walkdown

The STR and Subcontractor as required, is responsible for identifying the hazards for the task(s) and documenting them on this form. The STR/POC will review this form with the subcontractor prior to the start of work, identifying the party or parties responsible for the control of those hazards. Facility/ Project managed hazards will be addressed in the AHA, if the work scope requires an AHA. Subcontract manage hazards will be addressed in the TSPs, as applicable. Select hazards may require controls by both the Subcontractor and the Facility/Project.

SME	Hazards and Reviews	Subcontractor Managed Hazards	Facility/Project Managed Hazards	Not Applicable	Notes
	Blocks or obstructs personnel egress or access to an emergency exit and/or fire protection equipment?	☐	☐	☒	
	Flammable materials?	☒	☐	☐	Gas/Diesel to be stored off site
	Will this work increase the fire hazard or affect facility operational use and occupancy?	☐	☐	☒	
	Introduces smoke, fumes, etc. and/or use of a portable heater that could impact fire protection system?	☐	☐	☒	
	Modifications/penetrations affecting doors, pen seals, walls, floors, ceilings, stairwells, roofs?	☐	☐	☒	
	Will electrical power supply or communications be affected by this work?	☐	☐	☒	
	Any waste generated?	☒	☒	☐	Waste stream worksheets provided by ACP
	Elevated work and/or Hazards from falling objects?	☒	☐	☐	Addressed in SC TSP's
	Hoisting, rigging, or cranes (Does Crane Operator have CCO License)?	☐	☐	☒	
	Use of forklift (lift truck)?	☒	☐	☐	Addressed in SC TSP's
	Alters or affects ventilation systems?	☐	☐	☒	
	Activity impacts PA/safety alarm system, emergency lights, eyewash/ safety shower, standby diesel/power supply, egress, alarms, fire water?	☐	☐	☒	
	Removing or replacing floor grating, manhole covers, or deck plates?	☐	☐	☒	
	Structure modifications, constructions, or addition?	☒	☒	☐	Demo of facility
	Blasting or use of explosive?	☐	☐	☒	
	Does this activity involve placing a system, structure, or component (SSC) out of commission (OOC)?	☐	☐	☒	
	Welding/Grinding/Cutting/Brazing (fire watch training, hot work permit, fire extinguishers, etc.)?	☒	☒	~~☒~~	All SC will address in TSP's
	Hazardous Energy (electrical/mechanical/thermal/hot tap/hydraulic/ etc)?	☐	☐	☒	
	Is the cord and plug exception being used?	☐	☐	☒	
	Is a power tool being used in H-B Line?	☐	☐	☒	
	Can the PA System be heard? PA dead zone?	☒	☐	☐	Remote worker S1W1
	Is work being performed on breathing air system?	☐	☐	☒	

Notice to Proceed



OSR 45-11(Rev 10-22-2008)

Savannah River Site

Supplier Document Status

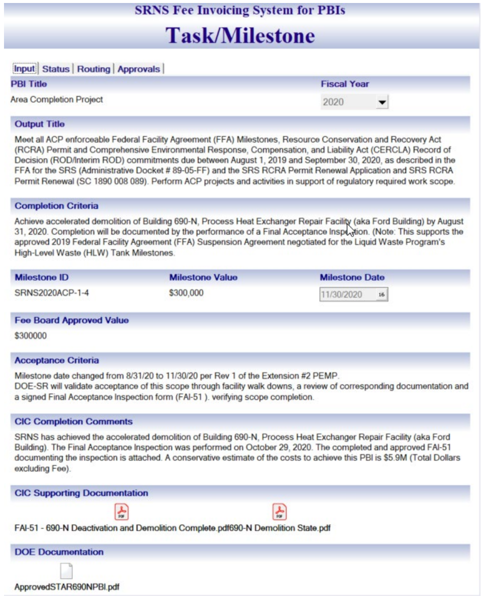
☐ 1.Work May Proceed
☒ 2.Submit Final Document - Work may proceed
☐ 3.Revise and Resubmit - Work may proceed subject to Resolution of Comments
☐ 4.Revise and Resubmit. Work may not Proceed.
☐ 5.Permission to proceed is not required.

Permission to proceed does not constitute acceptance or approval of design details, calculations, test methods, analysis or materials developed or selected by the supplier, and does not relieve supplier from full compliance with contractual obligations or release of any 'holds' placed on the contract.

Document ID	Revision
0000426012-000001	**A**
Document Category	Date
4.0-INSTRUCTIONS	**2019-07-12 07:28:19 AM, EDT**
Reviewer	
FRIDAY, GRADY L JR	

Environmental Cleanup – Deactivation and Decommissioning 690-N: Closeout (CD-4)*

PBI Validation



SRNS Fee Invoicing System for PBIs

Task/Milestone

PBI Title
Area Completion Project

Fiscal Year
2020

Output Title

Meet all ACP enforceable Federal Facility Agreement (FFA) Milestones, Resource Conservation and Recovery Act (RCRA) Permit and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD/Interim ROD) commitments due between August 1, 2019 and September 30, 2020, as described in the FFA for the SRS (Administrative Docket # 89-05-FF) and the SRS RCRA Permit Renewal Application and SRS RCRA Permit Renewal (SC 1890 008 089). Perform ACP projects and activities in support of regulatory required work scope.

Completion Criteria

Achieve accelerated demolition of Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building) by August 31, 2020. Completion will be documented by the performance of a Final Acceptance Inspection. (Note: This supports the approved 2019 Federal Facility Agreement (FFA) Suspension Agreement negotiated for the Liquid Waste Program's High-Level Waste (HLW) Tank Milestones.

Milestone ID	Milestone Value	Milestone Date
SRNS2020ACP-1-4	$300,000	11/30/2020

Fee Board Approved Value
$300000

Acceptance Criteria

Milestone date changed from 8/31/20 to 11/30/20 per Rev 1 of the Extension #2 PEMP.
DOE-SR will validate acceptance of this scope through facility walk downs, a review of corresponding documentation and a signed Final Acceptance Inspection form (FAI-51). verifying scope completion.

CIC Completion Comments

SRNS has achieved the accelerated demolition of Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building). The Final Acceptance Inspection was performed on October 29, 2020. The completed and approved FAI-51 documenting the inspection is attached. A conservative estimate of the costs to achieve this PBI is $5.9M (Total Dollars excluding Fee).

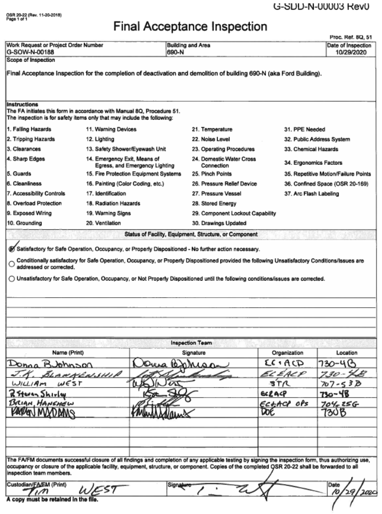
CIC Supporting Documentation

FAI-51 - 690-N Deactivation and Demolition Complete.pdf690-N Demolition State.pdf

DOE Documentation

ApprovedSTAR690NPBI.pdf

FAI



G-SDD-N-00003 Rev0

OSR 20-22 (Rev. 11-20-2018)
Page 1 of 1

Final Acceptance Inspection

Proc. Ref. 8Q, 51

Work Request or Project Order Number	Building and Area	Date of Inspection
G-SOW-N-00188	690-N	10/29/2020

Scope of Inspection

Final Acceptance Inspection for the completion of deactivation and demolition of building 690-N (aka Ford Building).

Instructions
The FA initiates this form in accordance with Manual 8Q, Procedure 51.
The inspection is for safety items only that may include the following:

1. Falling Hazards
2. Tripping Hazards
3. Clearances
4. Sharp Edges
5. Guards
6. Cleanliness
7. Accessibility Controls
8. Overload Protection
9. Exposed Wiring
10. Grounding
11. Warning Devices
12. Lighting
13. Safety Shower/Eyewash Unit
14. Emergency Exit, Means of Egress, and Emergency Lighting
15. Fire Protection Equipment Systems
16. Painting (Color Coding, etc.)
17. Identification
18. Radiation Hazards
19. Warning Signs
20. Ventilation
21. Temperature
22. Noise Level
23. Operating Procedures
24. Domestic Water Cross Connection
25. Pinch Points
26. Pressure Relief Device
27. Pressure Vessel
28. Stored Energy
29. Component Lockout Capability
30. Drawings Updated
31. PPE Needed
32. Public Address System
33. Chemical Hazards
34. Ergonomics Factors
35. Repetitive Motion/Failure Points
36. Confined Space (OSR 20-169)
37. Arc Flash Labeling

Status of Facility, Equipment, Structure, or Component

☑ Satisfactory for Safe Operation, Occupancy, or Properly Dispositioned - No further action necessary.
○ Conditionally satisfactory for Safe Operation, Occupancy, or Properly Dispositioned provided the following Unsatisfactory Conditions/Issues are addressed or corrected.
○ Unsatisfactory for Safe Operation, Occupancy, or Not Properly Dispositioned until the following conditions/issues are corrected.

Inspection Team

Name (Print)	Signature	Organization	Location
Donna B Johnson	Donna B Johnson	EC+ACP	730-4B
J.K. BLANKENSHIP		EC&ACP	730-4B
WILLIAM WEST		STR	707-53B
R Steven Shirley		EC&ACP	730-4B
BRIAN HANSHEW		EC&ACP OPS	704-25G
KAREN MCADAMS		DOE	730B

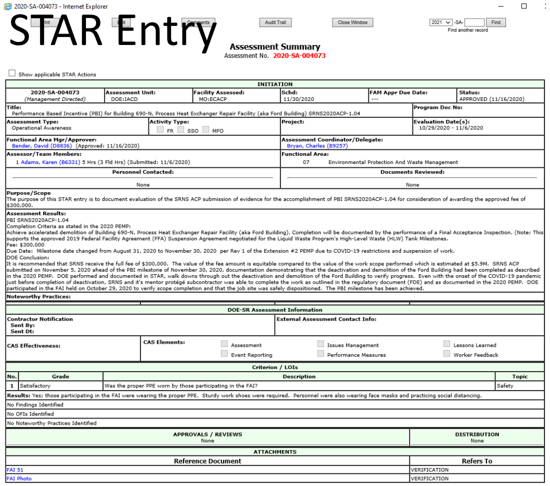
The FA/FM documents successful closure of all findings and completion of any applicable testing by signing the inspection form, thus authorizing use, occupancy or closure of the applicable facility, equipment, structure, or component. Copies of the completed OSR 20-22 shall be forwarded to all inspection team members.

Custodian/FA/FM (Print) Tim WEST
Signature
Date 10/29/2020

A copy must be retained in the file.

At completion of a project, scope is verified through a Final Acceptance Inspection (FAI). Field walk down, FAI and PBI approval are documented in STAR. Decommissioning Project Final Report (DPFR) submitted to regulatory agencies.

STAR Entry



Assessment Summary
Assessment No. 2020-SA-004073

☐ Show applicable STAR Actions

INITIATION

2020-SA-004073 (Management Directed)	**Assessment Unit:** DOE:IACD	**Facility Assessed:** MO:ECACP	**Schd:** 11/30/2020	**FAM Appr Due Date:** ---	**Status:** APPROVED (11/16/2020)

Title: Performance Based Incentive (PBI) for Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building) SRNS2020ACP-1.04
Program Doc No:
Assessment Type: Operational Awareness
Activity Type: ☐ FR ☐ SSO ☐ MFO
Project:
Evaluation Date(s): 10/29/2020 - 11/6/2020
Functional Area Mgr/Approver: Bender, David (D8836) (Approved: 11/16/2020)
Assessment Coordinator/Delegate: Bryan, Charles (B9257)
Assessor/Team Members: 1 Adams, Karen (B6331) 5 Hrs (3 Fld Hrs) (Submitted: 11/6/2020)
Functional Area: 07 Environmental Protection And Waste Management
Personnel Contacted: None
Documents Reviewed: None

Purpose/Scope
The purpose of this STAR entry is to document evaluation of the SRNS ACP submission of evidence for the accomplishment of PBI SRNS2020ACP-1.04 for consideration of awarding the approved fee of $300,000.

Assessment Results:
PBI SRNS2020ACP-1.04
Completion Criteria as stated in the 2020 PEMP:
Achieve accelerated demolition of Building 690-N, Process Heat Exchanger Repair Facility (aka Ford Building). Completion will be documented by the performance of a Final Acceptance Inspection. (Note: This supports the approved 2019 Federal Facility Agreement (FFA) Suspension Agreement negotiated for the Liquid Waste Program's High-Level Waste (HLW) Tank Milestones.
Fee: $300,000
Due Date: Milestone date changed from August 31, 2020 to November 30, 2020 per Rev 1 of the Extension #2 PEMP due to COVID-19 restrictions and suspension of work.
DOE Conclusion:
It is recommended that SRNS receive the full fee of $300,000. The value of the fee amount is equitable compared to the value of the work scope performed which is estimated at $5.9M. SRNS ACP submitted on November 5, 2020 ahead of the PBI milestone of November 30, 2020, documentation demonstrating that the deactivation and demolition of the Ford Building had been completed as described in the 2020 PEMP. DOE performed and documented in STAR, walk downs through out the deactivation and demolition of the Ford Building to verify progress. Even with the onset of the COVID-19 pandemic just before completion of deactivation, SRNS and it's mentor protégé subcontractor was able to complete the work as outlined in the regulatory document (FDE) and as documented in the 2020 PEMP. DOE participated in the FAI held on October 29, 2020 to verify scope completion and that the job site was safely dispositioned. The PBI milestone has been achieved.

Noteworthy Practices:

DOE-SR Assessment Information

Contractor Notification
Sent By:
Sent Dt:
External Assessment Contact Info:

CAS Effectiveness:
CAS Elements: ☐ Assessment ☐ Event Reporting ☐ Issues Management ☐ Performance Measures ☐ Lessons Learned ☐ Worker Feedback

Criterion / LOIs

No.	Grade	Description	Topic
1	Satisfactory	Was the proper PPE worn by those participating in the FAI?	Safety

Results: Yes; those participating in the FAI were wearing the proper PPE. Sturdy work shoes were required. Personnel were also wearing face masks and practicing social distancing.

No Findings Identified
No OFIs Identified
No Noteworthy Practices Identified

APPROVALS / REVIEWS
None

DISTRIBUTION
None

ATTACHMENTS

Reference Document	Refers To
FAI 51	VERIFICATION
FAI Photo	VERIFICATION

Summary

- **PBS 30 has a successful program due to:**
  - positive relationship with the state and federal regulatory agencies, whose requirements establish mission need and preferred project alternatives
  - disciplined program/project management and execution
- **Most PBS 30 projects are far below the DOE Order 413.3B current dollar threshold of $50M. The last DOE 413 project was the D Area Ash Project which was completed in June 2019 with Project Management Executive approval of the Project Completion Validation Report**
- **PBS 30 includes DOE O 413.3B principles and EM Demolition Protocols into all projects performed as outlined in the briefing**

Ongoing Demo
484-4D