



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
ENVIRONMENTAL
MANAGEMENT

Federal Facility Agreement Appendix E

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Savannah River Site Citizens Advisory Board
January 27, 2015

Purpose

- *Provide information discussed in responses to Citizens Advisory Board Recommendation #279, Federal Facility Agreement (FFA) Update Provided Annually*
 - Information briefing on Revision 0 Fiscal Year (FY) 2015 Appendix E Submittal
 - Anticipated Effects of Regulatory Comments on Revision 1 Fiscal Year 2015 Appendix E Submittal
- *Meet Citizens Advisory Board Facilities Disposition and Site Remediation Committee Annual Work Plan Commitment*

Acronyms

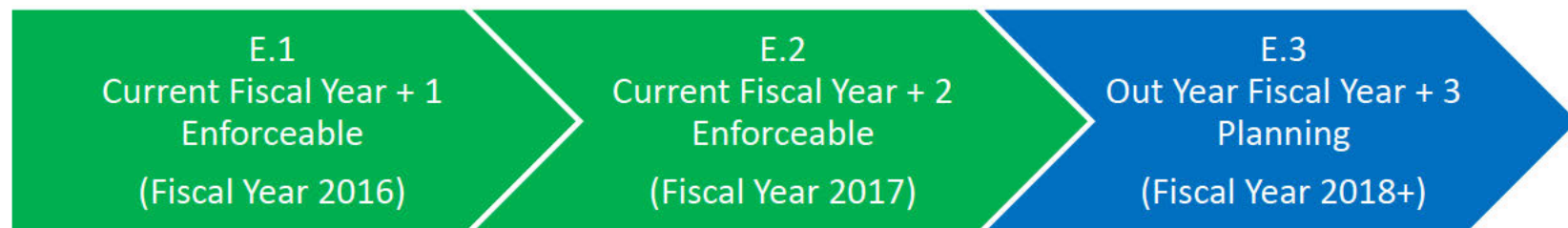
- *BRA – Baseline Risk Assessment*
- *CAB – Citizens Advisory Board*
- *CERCLA – Comprehensive Environmental Response, Compensation and Liability Act*
- *CMI/RAIP – Corrective Measures Implementation/Remedial Action Implementation Plan*
- *CMS/FS – Corrective Measures Study/Feasibility Study*
- *DOE – U. S. Department of Energy*
- *EPA – U. S. Environmental Protection Agency*
- *FFA – Federal Facility Agreement*
- *FY – Fiscal Year*
- *LUCIP – Land Use Control Implementation Plan*
- *RA – Remedial Action*
- *RCRA – Resource Conservation and Recovery Act*
- *RFI/RI – RCRA Facility Investigation/Remedial Investigation*
- *ROD – Record of Decision*
- *SB/PP – Statement of Basis/Proposed Plan*
- *SCDHEC – South Carolina Department of Health and Environmental Control*
- *SRS – Savannah River Site*

Federal Facility Agreement (FFA)

- *Established August 1993*
 - A legally binding agreement among Department of Energy, Environmental Protection Agency, and South Carolina Department of Health and Environmental Control
 - Includes administrative requirements, enforceable schedules, and milestones for actions and documents
 - Lists the Resource Conservation and Recovery Act (RCRA) / Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) “waste units” and other potential releases that must be addressed, and describes a process for any additional ones
 - Includes requirements for Removal from Service of some of the Savannah River Site Liquid Waste tanks
 - Spells out authorities and responsibilities of the three agencies, and procedures for resolving disputes

Federal Facility Agreement Appendix E

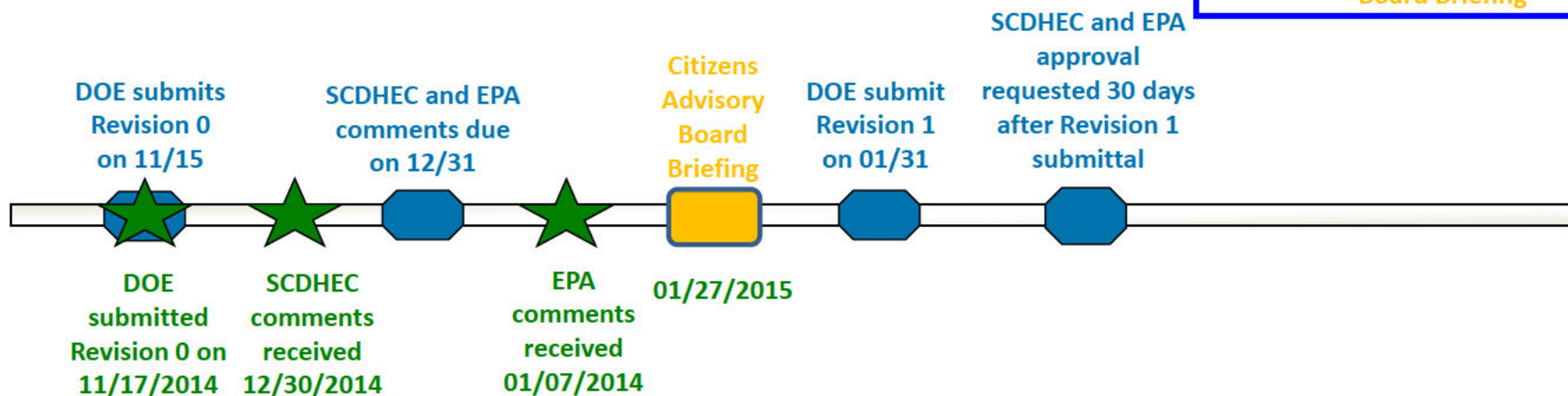
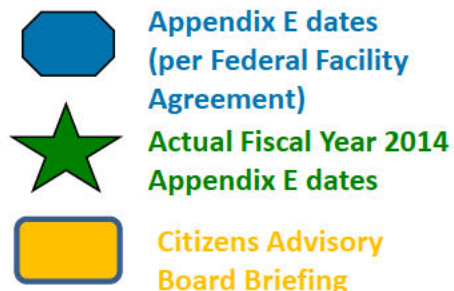
- *Provides a lifecycle list of cleanup milestones for Savannah River Site Waste Sites*
 - Made up of Appendices E.1, E.2, and E.3
 - Appendix E.1 contains Enforceable Milestones for the next Fiscal Year (Fiscal Year + 1)
 - Appendix E.2 contains Enforceable Milestones for Fiscal Year + 2
 - Appendix E.3 contains Planning Milestones for Fiscal Year + 3 and beyond
- *Department of Energy updates Appendix E annually and submits for review to South Carolina Department of Health and Environmental Control and Environmental Protection Agency in November.*



DOE – Department of Energy

SCDHEC – South Carolina Department of Environmental Health and Control

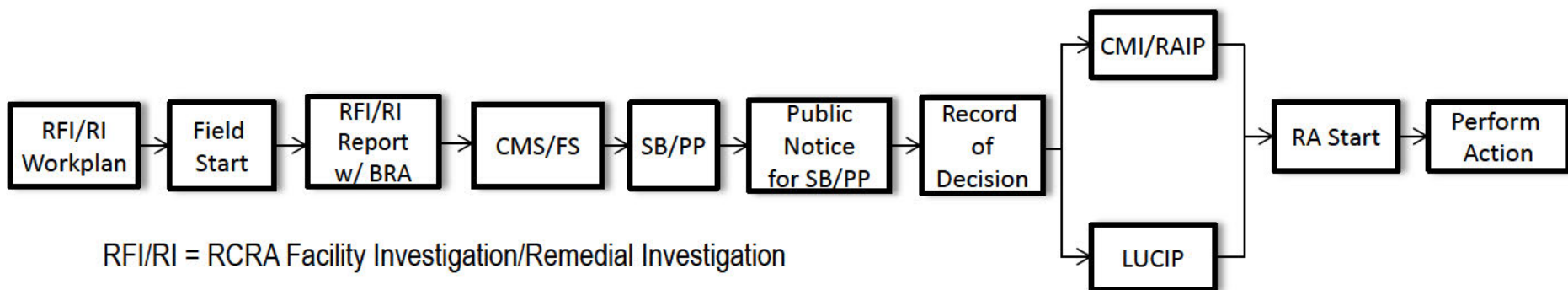
EPA – Environmental Protection Agency



- Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation (RFI/RI) Work Plan
 - Plan used as the basis to determine the extent of contamination
- Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation (RFI/RI) Report with Baseline Risk Assessment (BRA)
 - An assessment of the nature and extent of contamination and the associated health and environmental risks
- Corrective Measures Study/ Feasibility Study (CMS/FS)
 - Development and analysis of the range of cleanup alternatives for the unit

- Statement of Basis / Proposed Plan (SB/PP)
 - Identifies a preferred remedial alternative for the unit and allows for public comment
 - 30 days Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Only
 - 45 days for Resource Conservation and Recovery Act (RCRA)/ Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- Record of Decision (ROD)
 - The official report documenting the chosen remedy and why it was selected
- Corrective Measures Implementation / Remedial Action Implementation Plan (CMI/RAIP)
 - Plan used to implement the selected remedy for the unit

Federal Facility Agreement Document Flow



RFI/RI = RCRA Facility Investigation/Remedial Investigation

BRA = Baseline Risk Assessment

CMS/FS = Corrective Measures Study/Feasibility Study

SB/PP = Statement of Basis/Proposed Plan

CMI/RAIP = Corrective Measures Implementation/Remedial Action Implementation Plan

LUCIP = Land Use Control Implementation Plan

RA = Remedial Action

Fiscal Year 2015 Appendix E Proposed Major Changes

- The following changes were proposed so that the Department of Energy could commit to the execution of the D-Area Ash Basins (488-1D, 488-2D), D-Area Ash Landfill (488-4D), and D-Area Coal Pile Runoff Basin (489-D) projects (Total \$79 M) between Fiscal Year 2014 and Fiscal Year 2020.

- Wetland Area at Dunbarton Bay – Two year delay in regulatory documents and Remedial Action (RA) Start

Milestone	Current Due Date	Proposed Due Date
Issue Record of Decision (ROD)	08/06/2015	08/06/2017
Remedial Action (RA) Start	11/05/2016	11/05/2018

- P-Area Groundwater Operable Unit – Two year delay in regulatory documents and Remedial Action (RA) Start

Milestone	Current Due Date	Proposed Due Date
Revision 0 Focused Corrective Measures Study/ Feasibility Study (CMS/FS)	11/01/2015	11/01/2017
Revision 0 Statement of Basis/Proposed Plan (SB/PP)	11/10/2016	11/10/2018
Revision 0 Record of Decision (ROD)	06/28/2017	06/28/2019
Issue Record of Decision (ROD)	03/12/2018	03/12/2020
Remedial Action (RA) Start	06/30/2019	06/30/2021

- A-Area Ash Pile (788-A), A-Area Coal Pile Runoff Basin (788-3A) and Outfall A-013 (NBN) – Four year delay in regulatory documents and Interim Remedial Action (RA) Start

Milestone	Current Due Date	Proposed Due Date
Revision 1.2 Interim Action Statement of Basis/Proposed Plan (SB/PP)	06/22/2016	06/22/2020
Revision 1.3 Interim Action Statement of Basis/Proposed Plan (SB/PP)	10/24/2016	10/24/2020
Revision 0 Interim Record of Decision (ROD)	03/09/2017	03/09/2021
Issue Interim Record of Decision (ROD)	11/28/2017	11/28/2021
Revision 0 Interim Corrective Measures Implementation/Remedial Action Implementation Plan(CMI/RAIP)	02/16/2018	02/16/2022
Interim Remedial Action (RA) Start	03/05/2019	03/05/2023
Revision 0 Interim Post Construction Report (PCR)	06/19/2020	06/19/2024

Fiscal Year 2015 Appendix E Proposed Major Changes (cont'd)

- The final cleanup of these areas was delayed, so the previous area completion dates were preserved as early action dates for the areas listed below. Due to ongoing missions, the final actions for these areas are proposed for Fiscal Year 2039 and beyond.
 - F-Area Operable Unit
 - N-Area Operable Unit
 - K-Area Operable Unit
 - L-Area Operable Unit
 - A-Area Operable Unit
- Due to ongoing missions, the final action regulatory documents and Remedial Action (RA) Starts for the areas listed below were proposed to start in Fiscal Year 2044 and beyond. Note that there is an ongoing early action for the C-Area Operable Unit.
 - C-Area Operable Unit
 - F-Area Tank Farm Operable Unit
 - H-Area Operable Unit
 - H-Area Tank Farm Operable Unit
 - E-Area Low Level Waste Facility

Fiscal Year 2015 Appendix E Proposed Major Changes (cont'd)

- The milestones for the groundwater operable units were also proposed for revision to ensure assessment/remediation that is after or concurrent with the completion of the Area Operable Units.
 - C-Area Groundwater Operable Unit
 - Central Shops Groundwater Operable Unit
 - K-Area Groundwater Operable Unit
 - General Separations Area Eastern Groundwater Operable Unit
 - General Separations Area Western Groundwater Operable Unit
- The remediation of the D-Area Ash Basins (488-1D, 488-2D), D-Area Ash Landfill (488-4D), and D-Area Coal Pile Runoff Basin (489-D) will be completed by Fiscal Year 2020 under removal actions. However, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) early action decision documents will be developed for these operable units. The schedule for submittal of these early action documents is listed below.
 - Submit Revision 0 Early Action Statement of Basis / Proposed Plan (SB/PP) – February 6, 2018
 - Submit Revision 0 Second Early Action Record of Decision (ROD) – October 2, 2018
 - Issue Second Early Action Record of Decision (ROD) – June 30, 2019
 - Submit Revision 0 Second Early Action Land Use Control Implementation Plan (LUCIP) – July 7, 2019
 - Early Action Remedial (RA) Start – May 1, 2020

Fiscal Year 2015 Appendix E

Proposed Major Changes (cont'd)

- Due to ongoing missions at the D-Area Powerhouse, the submittal of the Final Action D-Area Operable Unit Record of Decision (ROD) is proposed for May 2045.
- The D-Area Groundwater assessment/remediation will coincide with the remediation of the D-Area Ash Basins (488-1D, 488-2D), D-Area Ash Landfill (488-4D), and D-Area Coal Pile Runoff Basin (489-D).

Milestone	Current Due Date	Proposed Due Date
Field Start	09/30/2016	06/30/2020
Issue Record of Decision (ROD)	09/30/2019	06/30/2023
Remedial Action (RA) Start	03/31/2020	09/30/2024

Fiscal Year 2015 Appendix E Impact of Regulatory Comments and Agreements

- The Wetland Area at Dunbarton Bay Issue Record of Decision (ROD) and Remedial Action (RA) Start dates will be revised to June 2017 and September 2018, respectively.
- The majority of the K-Area Groundwater Operable Unit groundwater monitoring wells were sampled in fourth quarter of calendar year 2014. The Department of Energy, Environmental Protection Agency, and South Carolina Department of Health and Environmental Control will meet in the near future to discuss the results of the groundwater monitoring and to develop a path forward until the planned Field Start in September 2042.
- The interim action milestones for the C-Area Groundwater Operable Unit will be deleted as the Department of Energy, Environmental Protection Agency, and South Carolina Department of Health and Environmental Control have determined that an interim action is no longer required. The final action milestones for the C-Area Groundwater Operable Unit will remain as March 2020 (Issue Record of Decision) and June 2021 (Remedial Action Start). In addition, milestones for the submittal of a Revision 0 Focused Corrective Measures Study/Feasibility Study (CMS/FS) in Fiscal Year 2018 and a Revision 0 Statement of Basis/Proposed Plan (SB/PP) in Fiscal Year 2019 will be added to future submittals of Appendix E.

- D-Area Ash Basin (488-1D) Revision 0 Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis Submittal - February 29, 2016



* The residents from Building 719-A, Automotive Repair Facility and Building 729-A, Parts Storage will be separated from the AACU with separate entrances (i.e., F and G) in FY2028, issue RCD is FY2027, and RA Start in FY2029

05/15/2014
The Rev. 01RSEUECCA for 485-2D was submitted on 05/15/2014. The regulatory agreement, the submittal of the Rev. 01RSEUECCA for 485-2D was submitted on 05/15/2014. Therefore, the Rev. 01RSEUECCA submittal was completed ahead of schedule.

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The regulatory approved Fiscal Year 2014 Federal Facility Agreement Appendix E is available online at:

<http://www.srs.gov/general/programs/soil/ffa/ffa.html>

- Accesses the Savannah River Site Area Completion Projects Federal Facility Agreement and supporting documentation pages

<http://www.srs.gov/general/programs/soil/ffa/ffa.pdf>

Questions and Answers

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