



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Federal Facility Agreement Appendix E: Major Proposed Changes for Fiscal Year 2014

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Facilities Disposition and Site Remediation Committee
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Purpose

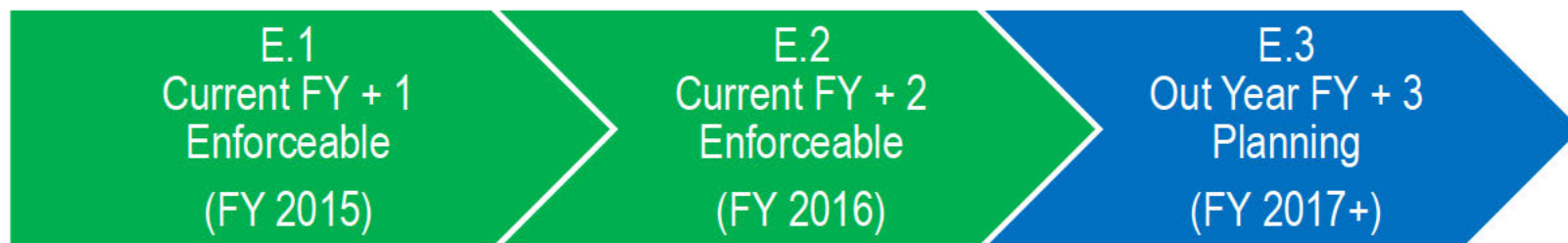
- Provide information discussed in responses to Citizens Advisory Board Recommendation #279, Federal Facility Agreement (FFA) Update Provided Annually
 - Information briefing on Revision 0 FY 2014 Appendix E Submittal
- Meet Citizens Advisory Board Facilities Disposition and Site Remediation Committee Annual Work Plan Commitment

Acronyms

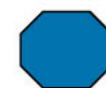
- **BRA** – Baseline Risk Assessment
- **CERCLA** – Comprehensive Environmental Response, Compensation and Liability Act
- **CPRB** – Coal Pile Runoff Basin
- **CMI/RAIP** – Corrective Measures Implementation/Remedial Action Implementation Plan
- **CMS/FS** – Corrective Measures Study/Feasibility Study
- **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
- **NBN** – No Building Number
- **RA** – Remedial Action
- **RCRA** – Resource Conservation and Recovery Act
- **RFI/RI** – RCRA Facility Investigation/Remedial Investigation
- **ROD** – Record of Decision
- **RSER/EE/CA** – Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis
- **SB/PP** – Statement of Basis/Proposed Plan
- **SCDHEC** – South Carolina Department of Health and Environmental Control
- **SRS** – Savannah River Site

- *Established August 1993*
 - A legally binding agreement among Department of Energy (DOE), Environmental Protection Agency (EPA), and South Carolina Department of Health and Environmental Control (SCDHEC).
 - 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 SRS Liquid Waste tanks
 - Spells out authorities and responsibilities of the three agencies, and procedures for resolving disputes

- *Provides a lifecycle list of cleanup milestones for SRS Waste Sites*
 - Made up of Appendices E.1, E.2, and E.3
 - Appendix E.1 contains Enforceable Milestones for the next Fiscal Year (FY + 1)
 - Appendix E.2 contains Enforceable Milestones for Fiscal Year + 2
 - Appendix E.3 contains Planning Milestones for Fiscal Year + 3 and beyond
- *DOE updates Appendix E annually and submits for review to SCDHEC and EPA in November. Due to government shutdown, the submittal date was extended to December 3, 2013.*



FFA Appendix E Schedule



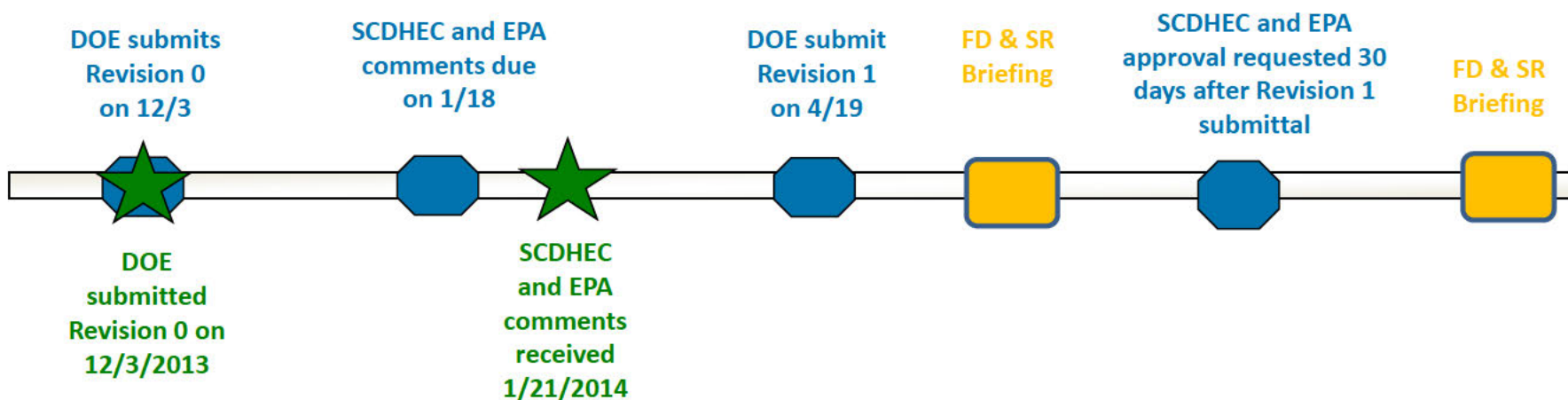
Appendix E dates
(per FFA)



Actual FY 2014
Appendix E dates



FD & SR Briefing

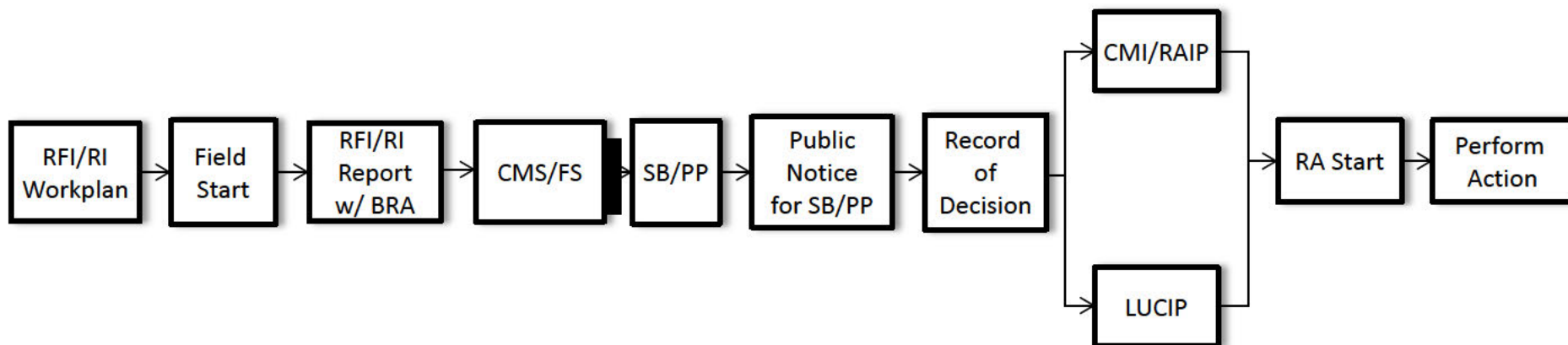


- RCRA Facility Investigation/ Remedial Investigation (RFI/RI) Work Plan
 - Plan used as the basis to determine the extent of contamination
- RFI/RI Report w/ Baseline Risk Assessment (BRA)
 - An assessment of the nature and extent of contamination and the associated health and environmental risks
-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

FFA (RCRA/CERCLA) Documents (cont'd)

- Statement of Basis/ Proposed Plan (SB/PP)
 - Identifies a preferred remedial alternative for the unit and allows for public comment
 - 30 days CERCLA Only
 - 45 days for RCRA/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

FFA 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

FY 2014 Appendix E Key Assumptions Used

- At the time of preparation and submittal of this Appendix E (September-November 2013), a Continuing Resolution for FY 2014 was anticipated, so...
- FY 2013 funding level (as reduced by sequestration) was the assumed available funding for FY 2014
- Environmental Management guidance to SRS was to assume that funding would remain at the FY 2014 level through FY 2015-2016

These were the assumptions on which the Revision 0 Appendix E for FY 2014 was built. However:

- As of today, a federal budget for FY 2014 has been passed, but...
- It is not yet known how the FY 2014 budget will affect the funding available for cleanup (and out year milestones) under the FFA
- The Revision 1 Appendix E submitted on April 21; *update when available*

FY 2014 Appendix E

Proposed Major Changes

- D Area Projects*

- D Area Ash Basin (488-1D): Two year delay in regulatory documents and Removal Action Start
- D-Area Ash Basin (488-2D): Two year delay in regulatory documents and Removal Action Start
- D-Area Ash Landfill (488-4D): Two year delay in Removal Action Start
- D-Area Coal Pile Runoff Basin (CPRB) (489-D): Two year delay in regulatory documents and Removal Action Start

Operable Unit	RSER/EE/CA		Action Memorandum			Removal Action Start
	Current Date	Proposed Date	Current Date	Proposed Date	Current Date	Proposed Date
D-Area Ash Basin (1D)	02/29/2016	03/01/2018	08/31/2016	08/31/2018	10/01/2016	10/01/2018
D-Area Ash Basin (2D)	02/26/2015	02/26/2017	08/31/2015	08/31/2017	10/01/2015	10/01/2017
D-Area Ash Landfill (4D)	02/27/2014	No change.	08/28/2014	No change.	10/01/2014	10/01/2016
D-Area CPRB (489-D)	02/26/2015	02/26/2017	08/31/2015	08/31/2017	09/28/2015	09/28/2017

FY 2014 Appendix E

Proposed Major Changes (cont'd)

- *Wetland Area at Dunbarton Bay*
 - One year delay in regulatory documents and RA Start

Milestone	Current Due Date	Proposed Due Date
Issue ROD	08/06/2014	08/06/2015
RA Start	11/05/2015	11/05/2016

- *Consolidated Incineration Facility*
 - Three year delay in regulatory documents and RA Start

Milestone	Current Due Date	Proposed Due Date
Issue Early Action ROD	9/2017	9/2020
Early RA Start	9/2018	9/2021

FY 2014 Appendix E

FY 2015 and FY 2016 Proposed Milestones

- *E.1 (FY 2015) and E.2 (FY 2016)*

FY 2015

- **Field Starts**

- Upper Three Runs Integrator Operable Unit Fourth Phase II

- **Statement of Basis/ Proposed Plan (SB/PP)**

- C Area Groundwater Operable Unit (Castor Creek) Interim Action

- **Record of Decision**

- C Area Operable Unit Early Action
- C Area Groundwater Operable Unit (Castor Creek) Interim Action

- **Issue Record of Decision**

- A-Area Ash Pile (788-A), A-Area Coal Pile Runoff Basin (788-3A) and Stormwater Outfall A-013 (NBN) Interim Action
- Wetland Area at Dunbarton Bay
- C Area Operable Unit Early Action

- **Post-Record of Decision Documents**

- A-Area Ash Pile (788-A), A-Area Coal Pile Runoff Basin (788-3A), and Stormwater Outfall A-013 (NBN) Interim Corrective Measures Implementation/ Remedial Action Implementation Plan (CMI/RAIP)

- **Post-Remedial Action Start Documents**

- Ten (10) Reports that Discuss the Performance of the Selected Remedial Action (RA)

- **Integrator Operable Unit Periodic Reports**

- Pen Branch Integrator Operable Unit Periodic Report #4

- **High Level Radioactive Waste Tanks**

- Complete Operational Closure of Four (4) Tanks (unchanged)

- *E.1 (FY 2015) and E.2 (FY 2016)*

FY 2016

- **Site Evaluation Reports**

- Combined Spills from 701-1F Spill

- **Field Starts**

- Pen Branch Integrator Operable Unit Fourth Phase II
- D-Area Groundwater Operable Unit
- G-Area Oil Seepage Basin Operable Unit

- **Corrective Measures Study/ Feasibility Study (CMS/FS)**

- P Area Groundwater Operable Unit Focused

- **Record of Decision**

- D Area Operable Unit

- **Issue Record of Decision**

- C Area Groundwater Operable Unit (Castor Creek) Early Action

- **Remedial Action Start**

- A-Area Ash Pile (788-A), A-Area Coal Pile Runoff Basin (788-3A), and Stormwater Outfall A-013 (NBN) Interim

- **Post-Remedial Action Start Documents**

- Eleven (11) Reports that Discuss the Performance of the Selected Remedial Action

- **Integrator Operable Unit Periodic Reports**

- Fourmile Branch Integrator Operable Unit Periodic Report #5

- **High Level Radioactive Waste Tanks**

- Complete Bulk Waste Removal Efforts for Two (2) Tanks (unchanged)

FY 2014 Appendix E

Proposed Major Changes - Acceleration

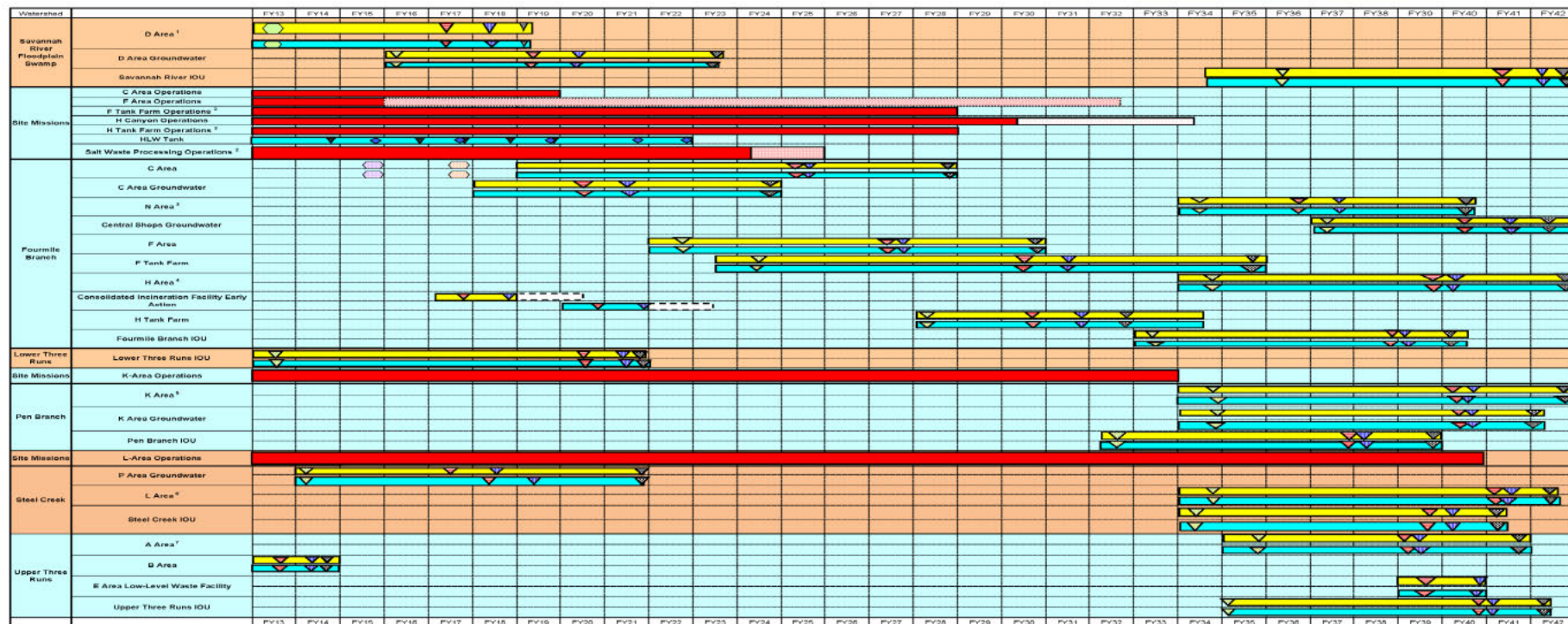
- Separation of operable units to meet the EPA and SCDHEC expectations set forth in their approval of the FY 2013 Appendix E.

Operable Unit	Dates**	Field Start	Issue ROD	RA Start
N Area Operable Unit <ul style="list-style-type: none"> Central Shops Scrap Lumber Pile, 631-2G ECODS N-1, NBN Sandblast Area CMN-001, NBN Building 690-N, Process Heat Exchanger Repair Facility (Ford Building)* 	Current	FY 2034 (12/31/2033)	FY 2037 (03/31/2037)	FY 2038 (6/30/2038)
	Proposed	FY 2020 (9/30/2020)	FY 2023 (9/30/2023)	FY 2025 (12/31/2024)
L Area Operable Unit <ul style="list-style-type: none"> ECODS L-3, NBN L-Area Ash Basin, 188-L L-Area Rubble Pit, 131-1L L-Area Rubble Pit, 131-4L 	Current	FY 2034 (9/30/2034)	FY 2041 (10/30/2041)	FY 2041 (1/31/2041)
	Proposed	FY 2022 (9/30/2022)	FY 2025 (9/30/2025)	FY 2027 (12/31/2026)
A Area Operable Unit <ul style="list-style-type: none"> Building 716-A, Automotive Repair Facility (Remnants) Building 725-A, Paint Shop (Remnants) 	Current	FY 2035 (9/30/2035)	FY 2039 (10/31/2038)	FY 2039 (1/31/2039)
	Proposed	FY 2024 (9/30/2024)	FY 2027 (9/30/2027)	FY 2029 (12/31/2028)
H Area Operable Unit <ul style="list-style-type: none"> Sandblast Area CMH-002, NBN Spill on 02/01/57 of Unknown Seepage Basin Pipe Leak from 904-44G, NBN 	Current	FY 2034 (9/30/2034)	FY 2039 (9/30/2039)	FY 2040 (1/31/2040)
	Proposed	FY 2024 (9/30/2024)	FY 2027 (9/30/2027)	FY 2029 (12/31/2028)
K Area Operable Unit <ul style="list-style-type: none"> K-Area Ash Basin, 188-K 	Current	FY 2034 (9/30/2034)	FY 2040 (10/31/2039)	FY 2040 (1/31/2040)
	Proposed	FY 2024 (9/30/2024)	FY 2027 (9/30/2027)	FY 2029 (12/31/2028)

* Currently listed in Appendix K. 1. The proposal will include D&D of this facility under a remedial action.

** The Current Dates remain applicable to the respective Area Operable Units. The Proposed Dates are applicable to the units that are separated from their respective Area Operable Units. The actions for the separated units are proposed as final actions.

SRS Area Completion Plan



Legend



¹ The schedule for submittal of the D-Area Ash Basin (489-1D), D-Area Ash Basin (489-2D), and D-Area Ash Landfill (489-4D) RSE/EE/CAs and Action Memorandums are listed in the RSE/EE/CA and Action Memorandums are shown below.

² The end dates for these site missions are based on the Liquid Waste System Plan (SRR-LWP-2009-00001, Rev. 17, February 28, 2012), which has been approved by DOE.

³ The Central Scrap Lumber Pile, ECODS N-1, Sandblast Area CMN-001, and Building 690-N, Process Heat Exchanger Repair Facility (Ford Building) will be separated from the NAOU with separate milestones (i.e., Field Start in FY2026, Issue ROD in FY2025, and RA Start in FY2025).

⁴ Sandblast Area CMH-002 and Spill on 02/01/87 of Unknown Seepage Basin Pipe Leak from 904-440 will be separated from the NAOU with separate milestones (i.e., Field Start in FY2024, Issue ROD in FY2027, and RA Start in FY2029).

⁵ The K-Area Ash Basin will be separated from the KAOU with separate milestones (i.e., Field Start in FY2024, Issue ROD in FY2027, and RA Start in FY2028).

⁶ The ECODS L-3, L-Area Ash Basin, L-Area Rubble Pit (1L) and L-Area Rubble Pit (4L) will be separated from the LAOU with separate milestones (i.e., Field Start in FY2022, Issue ROD in FY2025, and RA Start in FY2027).

⁷ The remnants from Building 719-A, Automotive Repair Facility and Building 728-A, Paint Shop will be separated from the AAOU with separate milestones (i.e., Field Start in FY2024, Issue ROD in FY2027, and RA Start in FY2028).

FY	RSE/EE/CA and Action Memorandums	Action Memorandum
2014	RSE/EE/CA 1 (403-4C)	1 (403-4C)
2015	0	0
2016	0	0

RSE/EE/CA = Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis

The regulatory approved FY 2013 FFA 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

