



# **Deactivation and Decommissioning (D&D) Core Team Protocol for Review and Concurrence on Facility Decommissioning Evaluations and Decommissioning Project Final Reports**

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**LIST OF ABBREVIATIONS AND ACRONYMS**

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMIR/RACR	Corrective Measures Implementation Report/Remedial Action Completion Report
D&D	Deactivation and Decommissioning
DPFR	Decommissioning Project Final Report
FDE	Facility Decommissioning Evaluation
FFA	Federal Facility Agreement
PCR	Post Construction Report
RPM	Remedial Project Manager
SCDHEC	South Carolina Department of Health and Environmental Control
RAR	Removal Action Report
SRNS	Savannah River Nuclear Solutions, LLC
SRS	Savannah River Site
USDOE	United States Department of Energy
USEPA	United States Environmental Protection Agency

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## **1.0 INTRODUCTION**

For facilities undergoing Deactivation and Decommissioning (D&D), the United States Environmental Protection Agency (USEPA) and South Carolina Department of Health and Environmental Control (SCDHEC) will participate in the D&D process as described in the Administrative Flow Path for Decommissioning Excess Facilities (Attachment 2 to the *Memorandum of Agreement for Achieving an Accelerated Cleanup Vision Savannah River Site*, July 2003). This protocol describes elements of the process for obtaining concurrence on the Facility Decommissioning Evaluation (FDE) and the Decommissioning Project Final Report (DPFR).

The FDE documents the rigorous and systematic review of all available information about a facility or group of facilities and is used to determine which decommissioning model (Simple Model, Integrated Sampling Model, or Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] Model) is to be used for decommissioning.

The DPFR is a document prepared for facilities that are decommissioned using the Simple Model or Integrated Sampling Model after the decommissioning activities been performed and verified. The DPFR describes the decommissioning project activities and accomplishments, final facility status, cost, and performance information. For CERCLA models, Removal Action Reports (RARs) or the appropriate post-remedial action documents are completed.

The Core Team are representatives from the United States Department of Energy (USDOE), USEPA, and SCDHEC with the responsibility to decide the need for and type of response to a known or potential threat to human health and the environment.

## **2.0 FACILITY WALKDOWNS**

Facility walkdowns are an integral part of a D&D project and are scheduled at the request of the Core Team. If needed, Savannah River Site (SRS) will prepare a schedule for the Core Team to highlight those facilities that will be subject to a walkdown. A close-out meeting will be conducted upon completion of the walkdown.

If a walkdown is requested, the walkdown will be scheduled no sooner than ten (10) business days after submittal of the FDE to provide adequate review time by the Core Team.

The following guidelines will be utilized for facility walkdowns associated with D&D projects.

- SRS will provide briefing packages to the Core Team a minimum of five (5) working days prior to the walkdown. The briefing package will include the following:
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- Type of decommissioning model SRS intends to employ.
- History of operations, process information, permits, environmental and waste management history, and/or suggested sampling locations (if any).
- Copy of the floor plan will be available to aid in the discussion and selection of sampling locations (if any).
- Additional supporting information (figures, spills reports, etc.) as appropriate.
- Close-out meetings will be held following the walkdowns to document discussions, resolve minor comments, verify selected sampling locations (as appropriate), and resolve any remaining issues.
- Meeting notes will be used, as appropriate, to document any agreements, comment resolutions, and other items. The meeting notes are prepared by SRS and will be provided to the Core Team and meeting attendees. Core Team concurrence and non-concurrence will be documented in the meeting notes.
- USEPA and SCDHEC will provide a formal concurrence or non-concurrence letter at a later date. The USDOE will provide responses to any comments received.
- See Sections 4.0, 5.0, and 6.0 for information on additional walkdowns that may be required.

### **3.0 FACILITY DECOMMISSIONING EVALUATIONS**

The FDE assessment is used to determine which decommissioning model (Simple Model, Integrated Sampling Model, or CERCLA Model) is to be used for the facility based on the facility history, process knowledge, visual inspections, and identification of potential or presumed conditions that could pose a potential for release of a hazardous substance. A description of each decommissioning model is provided below.

- Simple Model – Designed for clean facilities where there have been no hazardous releases within the facility or to the environment. The only potential risk is safety risks for workers who perform decommissioning activities. Following decommissioning, the administrative disposition for Simple Model facilities is Federal Facility Agreement (FFA) Appendix K.2, D&D Facilities (or remnants) that Require No Further Action, as documented in the DPFRR.
  - Integrated Sampling Model – Designed for low hazard chemical facilities and other industrial facilities that may contain small amounts of contamination from former operation activities. Following decommissioning, the administrative disposition for Integrated Sampling Model facilities is FFA Appendix C.4, D&D Facilities (or
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- remnants) that May Warrant Response Action or FFA Appendix K.2, D&D Facilities (or remnants) that Require No Further Action, as documented in the DPFR.
- CERCLA Model – Designed for nuclear facilities (Hazard Category 2 or 3), radiological facilities, and high hazard chemical facilities. The DPFR administrative pathway is not implemented for CERCLA Model facilities. Rather, the USDOE, USEPA, and SCDHEC reach concurrence on the optimum CERCLA administrative path and CERCLA documentation. The CERCLA Model was formerly titled the Engineering Evaluation/Cost Analysis Model in earlier D&D documentation but was renamed to allow for the ability to select from multiple CERCLA administrative pathways (i.e., Removal Action, Early Remedial Action, standard Remedial Action, etc.).

The transmittal memo for each FDE will recommend the administrative disposition for the facility/remnants, specifically referring the facility/remnants to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action, or Appendix K.2, D&D Facilities (or remnants) that Require No Further Action.

The transmittal memo will identify that upon receipt of the FDE, USEPA and SCDHEC will either approve and/or comment on the FDE with the goal of responding within thirty (30) days. The USDOE will respond in writing to USEPA and SCDHEC comments on FDEs, regardless of the decommissioning model.

The process for each decommissioning model is discussed in Sections 4.0 through 6.0.

The document distribution process is discussed in Section 8.0.

#### **4.0 SIMPLE MODEL**

For facilities undergoing D&D using the Simple Model, USDOE will seek concurrence on the FDE from USEPA and SCDHEC.

If comments are received, USDOE will prepare comment responses and e-mail responses to USEPA and SCDHEC with the goal of responding within two (2) calendar weeks.

USDOE will call (if necessary) and discuss the responses to comments with the goal of obtaining e-mail concurrence within seven (7) calendar days of sending the responses.

After verbal discussion and agreement (if necessary), the USDOE will submit the revised responses (as applicable) in a formal transmittal letter to SCDHEC and USEPA to obtain formal concurrence on the Simple Model or agreed upon administrative path forward.

Concurrence on the Simple Model FDE establishes that upon completion of decommissioning and the approval of the facility DPFR, the facility/remnants can be transferred to Appendix K.2, D&D Facilities (or remnants) that Require No Further Action.

If during decommissioning of a Simple Model facility, some condition is identified that may contradict the Simple Model assumption, SCDHEC and USEPA will be notified in writing. SRS will evaluate the new condition with the FDE Evaluation Checklist and provide justification on whether the facility should remain as a Simple Model. If requested, SCDHEC and USEPA will be provided an opportunity to inspect the facility if safe to do so. Any facility walkdowns/inspections must be scheduled and conducted expeditiously.

If the facility warrants further evaluation for response action, the DPFR will reflect the findings and will recommend that the facility be added to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action.

If, for some reason, a Simple Model facility slated for decommissioning is not decommissioned, it will remain in Appendix K.1, D&D Facilities to be Decommissioned.

## **5.0 INTEGRATED SAMPLING MODEL**

The transmittal memo for FDEs proposing the Integrated Sampling Model will recommend that the remaining facility/remnants be transferred to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action or Appendix K.2, D&D Facilities (or remnants) that Require No Further Action with concurrence from USEPA and SCDHEC.

Typically, sampling and analysis is used to support a final verification survey for a facility/remnants decommissioned using the Integrated Sampling Model. With agreement from the USEPA and SCDHEC, observation of the potential or presumed condition and/or field screening may be used to disposition a facility/remnants if the potential or presumed condition is not evident and/or conditions are not appropriate for verification sampling.

If a final verification survey is performed, identification of sampling points is determined as follows:

- If USEPA and SCDHEC are unable to provide input on sampling locations during the initial facility walkdown (if held) as described in Section 2.0, a follow-up walkdown will be scheduled if requested by either USEPA or SCDHEC. The walkdowns will be scheduled during the thirty (30) day FDE review period.
  - The USEPA and SCDHEC may provide written input on sampling locations with the goal of responding during the thirty (30) day FDE review period. If USEPA or SCDHEC specifies any additional sampling points, the sampling locations will be identified and submitted to USDOE along with comments and/or concurrence on the FDE.
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If comments are received on the Integrated Sampling Model FDE, USDOE will prepare comment responses and e-mail responses to USEPA and SCDHEC with the goal of responding within two (2) calendar weeks.

USDOE will call (if necessary) and discuss the responses to comments, as required, with the goal of obtaining e-mail concurrence within seven (7) calendar days of sending the responses.

After verbal discussion and agreement (if necessary), the USDOE will submit the revised responses (as applicable) in a formal transmittal letter to SCDHEC and USEPA to obtain formal concurrence on the Integrated Sampling Model or agreed upon path forward.

Disposition of the facility/remnants to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action or Appendix K.2, D&D Facilities (or remnants) that Require No Further Action will be based on the following criteria:

- When a final verification survey is performed, sampling and analysis of sampling points agreed to by USEPA and SCDHEC will be used to determine residual contaminant levels. If a comparison of sampling results to contaminant thresholds identify the potential for an unacceptable risk greater than  $1 \times 10^{-6}$  for unrestricted use, the facility/remnants will be transferred to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action.
- During or after decommissioning, if the potential or presumed condition is evident through observation or field screening, the facility/remnants may be dispositioned to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action with USEPA and SCDHEC approval for final risk characterization under the FFA Remedial Investigation/Feasibility Study program.
- During or after decommissioning, if the potential or presumed condition is not evident through observation, field screening, and/or residual contaminant levels, the facility/remnants may be dispositioned to Appendix K.2, D&D Facilities (or remnants) that Require No Further Action with USEPA and SCDHEC concurrence.

The technical basis and proposed disposition of the facility/remnants to FFA Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action or FFA Appendix K.2, D&D Facilities (or remnants) that Require No Further Action will be documented in the DPFR.

If, for some reason, an Integrated Sampling Model facility slated for decommissioning is not decommissioned, it will remain in Appendix K.1, D&D Facilities to be Decommissioned.

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## **6.0 COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) MODEL**

The transmittal memo for FDEs selecting the CERCLA model will refer the facility to Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action upon completion of decommissioning activities and issuance of the appropriate CERCLA completion report.

For facilities undergoing D&D by means of the CERCLA Model, USDOE will seek concurrence on the appropriate CERCLA documentation from USEPA and SCDHEC.

After the decommissioning is completed under CERCLA, the appropriate post-removal action documentation (i.e., RAR) or post-remedial action documentation (i.e., Post Construction Report (PCR), Corrective Measures Implementation Report/Remedial Action Completion Report (CMIR/RACR), or PCR/CMIR/RACR) will be submitted to the USEPA and SCDHEC for their review and comment or approval in accordance with the process specified in the FFA.

If, for some reason, a CERCLA Model facility slated for decommissioning is not decommissioned, it will remain in Appendix K.1, D&D Facilities to be Decommissioned.

## **7.0 DECOMMISSIONING PROJECT FINAL REPORT (SIMPLE MODEL AND INTEGRATED SAMPLING MODEL)**

The USDOE will submit Revision 0 of the DPFR to USEPA and SCDHEC for their review and comment and/or concurrence with the goal of responding within sixty (60) calendar days of receipt. A walkdown following decommissioning activities will be scheduled if requested by either USEPA or SCDHEC.

If comments are received on the Revision 0 DPFR, USDOE will provide written responses to comments and e-mail the responses to the USEPA and SCDHEC with the goal of responding within two (2) calendar weeks.

USDOE will call (if necessary) and discuss the responses to comments, as required, with the goal of obtaining e-mail concurrence within seven (7) calendar days of sending the responses.

After incorporation of the responses to USEPA and SCDHEC comments, USDOE will submit a Revision 1 DPFR and the final comment responses to USEPA and SCDHEC for their review and concurrence with the goal of responding within thirty (30) calendar days of receipt.

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Once the DPFRR has been approved, the facility/remnant will be placed on Appendix C.4, D&D Facilities (or remnants) that May Warrant Response Action, or Appendix K.2, D&D Facilities (or remnants) that Require No Further Action.

## **8.0 DOCUMENT DISTRIBUTION**

The USDOE will submit FDEs, DPFRRs, and comment responses to the USEPA and SCDHEC (see Table 1 below). As needed, the USDOE will e-mail draft comment responses to the USEPA and SCDHEC for their review prior to official submittal of the responses.

**Table 1. Distribution of FDEs, DPFRRs, and Comment Responses Submitted to USEPA and SCDHEC from USDOE**

<b>Office</b>	<b>Position</b>	<b>Distribution</b>
SCDHEC	Manager, Federal Remediation Section, SCDHEC Columbia Office	Letter, hard copy of documents and/or responses, CD
	SCDHEC Aiken Environmental Affairs Office	cc: Letter, hard copy of documents and/or responses, CD
USEPA	SRS Remedial Project Manager (RPM), Superfund Division	Letter, hard copy of documents and/or responses, CD

Note:

1. The project specific USEPA RPM should be cc: on all correspondence and sent hard copies of documents and/or responses and CDs.

The USEPA and SCDHEC will submit comments on FDEs and DPFRRs and subsequent approval letters to the USDOE (see Table 2 below).

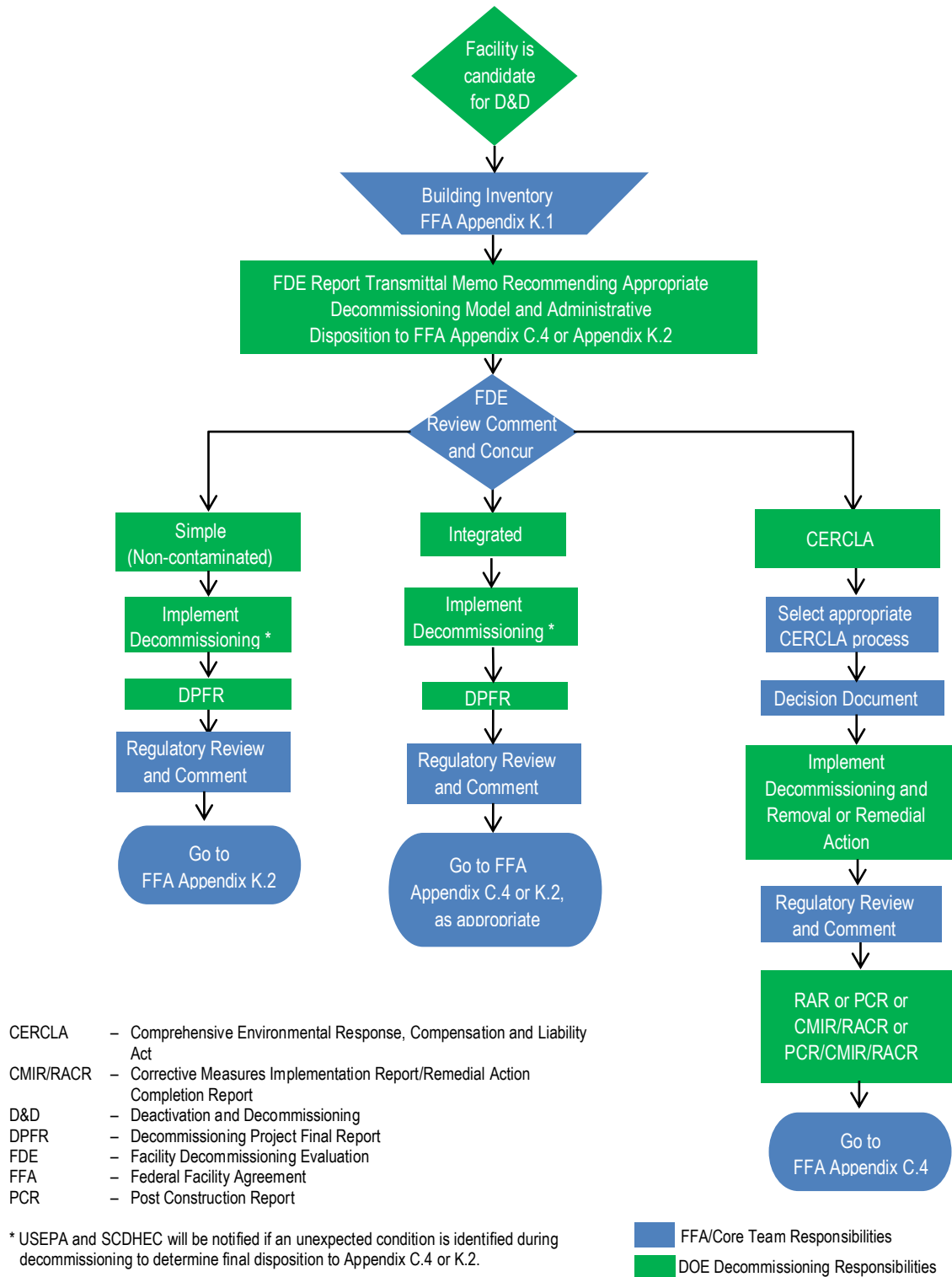
**Table 2. Distribution of Comments on FDEs, DPFRRs, and Approval Letters Submitted to USDOE from USEPA and SCDHEC**

<b>Office</b>	<b>Position</b>	<b>Distribution</b>
USDOE	SRS RPM, Infrastructure and Area Completion Division	Letter (e-mail advance copy)
SRNS	Director, Environmental Compliance & Area Completion Projects	cc: Letter (e-mail advance copy)

Notes:

1. USEPA will copy Manager, Federal Remediation Section (SCDHEC – Columbia) and SCDHEC Aiken Environmental Affairs Office on concurrence letters and comments sent to USDOE.
2. SCDHEC will copy USEPA SRS RPM, Superfund Division and if needed, project specific EPA RPM, on concurrence letters and comments sent to USDOE.
3. SRNS should receive the original hard copy for placement in the Administrative Record File.

Any changes to the distributions listed above shall be communicated in writing (email or letter) to the other Parties.



**Figure 1. Decommissioning Planning Process**