AN INTEGRATION STRATEGY FOR THE NEPA AND RCRA/CERCLA PROGRAMS AT THE SAVANNAH RIVER SITE (U)

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An Integration Strategy for the NEPA and RCRA/CERCLA Programs at the Savannah River Site

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Abstract

A strategy for integrating requirements of the National Environmental Policy Act (NEPA) and combined RCRA/CERCLA programs for remedial actions at the Savannah River Site (SRS) has been developed. The strategy is based upon tiering RCRA/CERCLA activities to independent NEPA documentation while integrating elements of the NEPA and RCRA/CERCLA processes where applicable. Where possible, proposed RCRA/CERCLA remedial actions will be tiered to existing NEPA documentation, such as the Waste Management Activities for Groundwater Protection Environmental Impact Statement (DOE/EIS-0120; 1987) and Categorical Exclusions applicable to Environmental Restoration and Waste Management activities. NEPA review of additional identified and potential waste units not addressed within the Groundwater Protection EIS will be provided in a supplemental EIS (SEIS). The NEPA and RCRA/CERCLA processes will be integrated in the following ways during preparation of this SEIS: (a) by collecting waste unit characterization data in accordance with the SRS RFI/RI Program Plan and waste unit-specific RFI/RI Workplans, (b) by integrating public involvement programs where possible, (c) by identifying existing and potential natural resource damage issues, (d) by utilizing NEPA ecological, human health, and cumulative impact data to support RCRA/CERCLA baseline risk assessments, and (e) by using NEPA evaluations of alternative closure options as a basis for RCRA/CERCLA Feasibility Studies. The Record of Decision (ROD) for this SEIS is expected in early 1995. RCRA/CERCLA remediation activities not encompassed within the scopes of the EIS or proposed SEIS will require revision of existing NEPA RODs or the preparation of additional NEPA documentation, probably at the EA or EIS level.

Introduction

Savannah River Site (SRS) environmental remediation activities are conducted according to applicable environmental laws and regulations, including the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). Waste unit cleanups are accomplished by evaluating RCRA and CERCLA requirements at the sites, then selecting and implementing the appropriate cleanup measures. All State and Federal regulations, including the NEPA, are considered for applicability to each waste site.

RCRA and CERCLA Requirements
SRS received a RCRA hazardous waste permit in September 1987 for corrective action at the M-Area Hazardous Waste Management Facility and for storage of hazardous waste at the Hazardous Waste Storage Facilities. Per authority under Section 3004(u), the EPA issued the Federal portion of the permit that contained a list of Solid Waste Management Units (SWMUs) for which a RCRA Facility Investigation (RFI) was required. SRS is currently planning the investigation and assessment of these waste units which will be conducted according to EPA and SCDHEC approved workplans.

In December 1989, SRS was placed on the National Priority List (NPL). As a result, inactive waste sites were required to undergo a CERCLA Remedial Investigation (RI). The RI phase includes characterizing the waste sites and collecting data to support a feasibility study of remediation options. Since many of the sites requiring the RI are the same as those undergoing the RFI process, SRS began an effort to integrate requirements of the RCRA RFI and the CERCLA RI processes at these waste sites. This effort resulted in the RCRA/CERCLA Waste Units, also commonly called the RFI/RI Waste Units. Site investigation activities at these SWMUs were designed to fulfill the requirements of both RCRA and CERCLA regulations, and required regulatory documents were integrated to minimize duplication of efforts.

The RCRA/CERCLA integration process is detailed in the Federal Facility Agreement (FFA), which is an interagency agreement between EPA, SCDHEC and DOE. RCRA/CERCLA waste units in the ER program are listed in Appendix C of the FFA. In accordance with the FFA, planned characterization efforts are outlined in a waste site-specific RFI/RI Workplan. After both the EPA and SCDHEC approve the Workplan, field investigation work, including risk assessment activities, is conducted. Field investigation activities and remedial actions must be performed in accordance with NEPA requirements.

**NEPA/RCRA/CERCLA Integration Plan**

DOE Order 5400.4 states that “where DOE remedial actions under CERCLA trigger the procedures set forth in NEPA, it is the policy of DOE to integrate the procedural and documentation requirements of CERCLA and NEPA, wherever practical”. In October 1990, a NEPA/RCRA/CERCLA integration strategy was developed based primarily on the tiering of RCRA/CERCLA activities to the existing Waste Management Activities for Groundwater Protection EIS (DOE/EIS-0120; 1987). The broad range of waste management strategies and closure options considered within this EIS ensured NEPA coverage for the majority of remedial options envisioned for 77 waste units at the SRS. This integration strategy also recommended the preparation of a Supplement to DOE/EIS-0120 (SEIS) to review the impacts of closing 35 additional waste units identified by the RCRA/CERCLA process after placement of SRS on the National Priority List in 1989. Fifty-two additional units on the FFA site evaluation list have now been identified as requiring review in the SEIS. Because these 52 units have not yet entered the RCRA/CERCLA program, characterization and risk data are unavailable; and RFI/RI workplans for these units have not yet been prepared.

The NEPA/RCRA/CERCLA integration strategy is based upon the tiering of RCRA/CERCLA activities to independent NEPA documentation and the limited integration of NEPA and RCRA/CERCLA processes in the preparation of future documents.
Presently, there are two major sources of existing NEPA documentation available for tiering: the Waste Management Activities for Groundwater Protection EIS and selected EM-related CXs found within the NEPA Implementing Procedures and Guidelines. As previously discussed, the Groundwater Protection EIS reviewed alternative waste management strategies and closure options for 77 waste units located at SRS. The broad range of closure alternatives and technologies evaluated within this document ensures NEPA coverage for the majority of RCRA/CERCLA remedial options being considered for these waste units. If a subsequent RCRA/CERCLA ROD for a covered waste unit requires a remedial action outside the scope of the EIS, then a NEPA evaluation of that particular action will be required. This evaluation could result in a revised ROD for the EIS or the preparation of additional NEPA documentation (i.e., Supplemental EIS or EA). Other NEPA documentation presently available for tiering includes CXs within the recently issued NEPA Implementing Procedures and Guidelines, 10 CFR Part 1021 (57 FR 15122; April 24, 1992). These CXs are applicable to environmental restoration and waste management activities. It is estimated that NEPA coverage for approximately 75% of the RCRA/CERCLA pre-ROD activities performed at SRS can be obtained by tiering to these CXs.

A Supplement to the Groundwater Protection EIS (SEIS) will be prepared for current and potential waste units not addressed within existing NEPA documentation. Limited integration of the NEPA and RCRA/CERCLA processes during preparation of this SEIS and other future documentation will be achieved primarily in the following areas:

- **Collection of environmental data in accordance with the RFI/RI Program Plan and waste unit workplans.** The utilization of a common environmental database will avoid the costly duplication of investigation and assessment activities. A number of sitewide environmental databases already exist and are currently being integrated. This information will be collected in accordance with the SRS RFI/RI Program Plan and waste unit-specific workplans (if available), thereby ensuring that these data can also be used by the RCRA/CERCLA process. Depending upon the time interval between NEPA and RCRA/CERCLA for any given waste unit, supplemental information may be required.

- **Integration of public involvement programs.** An SRS Citizen's Advisory Board (CAB) on environmental restoration activities is currently being formed. When established, the CAB will be encouraged to participate in public hearings/meetings for the draft and final SEIS documents. Additionally, efforts will be made through the NEPA process to ensure public awareness of the availability of the CERCLA Administrative Record File (ARF) in the public reading rooms.

- **Identification of existing and potential natural resource damage issues.** NEPA characterization of the affected environment will facilitate RCRA/CERCLA assessment of prior natural resource damage. NEPA cumulative impact analyses and evaluations of alternative closure options will help to identify potential natural resource damage issues associated with remedial actions.

- **Integration of environmental impact and technical analyses.** NEPA ecological, human health, and cumulative impact data will be used to support RCRA/CERCLA baseline risk assessments. NEPA evaluations of alternative closure options will serve as input for RCRA/CERCLA feasibility studies.
The ROD for the proposed SEIS is projected for early 1995. Waste units and remediation activities not encompassed within the scopes of either DOE/EIS-0120 or the SEIS will require the revision of NEPA RODs or the preparation of additional NEPA documentation, most likely at the EA or EIS level.

Concurrent with the preparation of the Groundwater Protection SEIS is the development of the Environmental Restoration and Waste Management Programmatic EIS (EM PEIS). This PEIS will address major DOE complex-wide policy issues such as regional vs. decentralized treatment, storage, and disposal; cleanup priorities; and alternative technology development. Finalization of the Groundwater Protection SEIS will not be contingent upon completion of the EM PEIS. However, once the EM PEIS is completed, DOE/EIS-0120 and the SEIS will be reviewed to determine if a new Supplemental EIS or revised ROD is required to conform with decisions made in the EM PEIS.

**Alternative Integration Strategy**

An alternative integration strategy for SRS is to supplement RCRA/CERCLA documentation to fulfill NEPA requirements. The level of analysis required in both RI/FS and EIS documents is comparable. When an EIS-level document is required, it is feasible to prepare RCRA/CERCLA documentation which is functionally equivalent to NEPA documentation. (A graded approach of this integration strategy would be used for EA-level NEPA documents.) This can be accomplished by expanding the RCRA/CERCLA documentation to include the broader issues typically addressed in NEPA documentation (i.e., NEPA’s broader interpretation of the human environment, cumulative impacts assessment, and the NEPA “no action” alternative, which includes existing institutional controls). To be functionally equivalent to NEPA, RCRA/CERCLA documentation should consider the following:

- environmental impacts to the larger area (e.g., the potential impacts associated with the transportation of waste materials, the short-term impacts of cleanup activities, and any long-term cumulative impacts associated with alternative actions)
- utilization of irreversible and irretrievable resources
- potential socioeconomic impacts associated with alternative actions
- potential impacts to environmentally sensitive areas/species and archaeological/historical resources
- consideration of the NEPA “no action” alternative in the Baseline Risk Assessment

Because different parties must sign RODs under CERCLA and NEPA, it is best that these remain separate documents. The RCRA/CERCLA ROD, however, could probably serve as the NEPA ROD with only minimal revision. If DOE makes a policy change to recognize that CERCLA is functionally equivalent to NEPA, then only one ROD document would be required and it would be approved by the EPA.

This alternative integration strategy is not currently considered appropriate for SRS due to the large number of waste units, scheduling requirements mandated by the FFA, and different approval authorities for ROD documents. These reasons are discussed below.

- **The large number of waste units at SRS.** The level of analysis required in an RFI/RI and an EA- or EIS-type document is comparable, and for individual waste units, the preparation of an integrated NEPA/RCRA/CERCLA document may be practical. However, the SRS
has over 400 waste units which could potentially undergo the RCRA/CERCLA process. From the NEPA perspective, the preparation of a sitewide EA or EIS encompassing multiple waste units is more cost-effective. A sitewide EA or EIS would facilitate the analysis of cumulative impacts, which would not be accomplished in a unit-specific NEPA/RCRA/CERCLA document.

- **The RCRA/CERCLA scheduling requirements mandated by the FFA.** The FFA contains milestones and deadlines for the current fiscal year, and milestone goals for future years. Delays to the RCRA/CERCLA process caused by implementation of the NEPA process will not constitute good cause for modification of RCRA/CERCLA schedules. The potential for NEPA to delay completion of a joint NEPA/RCRA/CERCLA document because of public intervention, litigation, or both is significant.

- **Different approval authorities for ROD documents.** The NEPA and RCRA/CERCLA processes result in decision documents that are signed by different approval authorities (DOE and EPA, respectively). Because of the potential for conflict between these two authorities, it is best that the decision documents remain independent.

**Conclusion**

The strategy for integrating requirements of the NEPA and combined RCRA/CERCLA programs for remedial actions at the SRS is based upon tiering RCRA/CERCLA activities to independent NEPA documentation while integrating elements of the NEPA and RCRA/CERCLA processes where applicable. Where possible, proposed RCRA/CERCLA remedial actions will be tiered to existing NEPA documentation, such as the Groundwater Protection EIS and CXs applicable to Environmental Restoration and Waste Management activities. NEPA review of additional identified and potential waste units not addressed within the Groundwater Protection EIS will be provided in a supplement to the EIS. The NEPA and RCRA/CERCLA processes will be integrated in several ways during preparation of this supplemental EIS.
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