United States Department of Energy

Savannah River Site

Statement of Basis/Proposed Plan for the West of Savannah River Ecology Laboratory (SREL) Georgia Fields Site (631 -19G) Operable Unit (U)

WSRC-RP-99-4163

Revision 1

February 2000

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Prepared for the U. S. Department of Energy under Contract No. DE-AC09-96-SR18500

CERTIFICATION

West of SREL Georgia Fields Site Operable Unit (631 -19G)

Statement of Basis/Proposed Plan
for the West of SREL Georgia Fields Site Operable Unit (631 -19G) (U)
WSRC-RP-99-4163, Revision 1, February 2000

"I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

Date: 9 FEB 2000 Signature: _____

Richard R. Harbert
Vice President and General Manager
Environmental Restoration Division
Westinghouse Savannah River Company
Co-operator for the U.S. Department of Energy
Savannah River Operations Office

Date: 2/11/00 Signature: _____

~~for Cynthia V. Anderson~~
T.F. HEENAN
ASSISTANT MANAGER FO
ENVIRONMENTAL PROGRA
Director
Environmental Restoration Division
U.S. Department of Energy
Savannah River Operations Office
Owner and Co-operator

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LIST OF ACRONYMS AND ABBREVIATIONS

ARAR	applicable or relevant and appropriate requirement
bls	below land surface
BRA	baseline risk assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act, 1980
cm	centimeter
CMCOC	contaminant migration constituent of concern
COC	constituent of concern
CSM	conceptual site model
DCE	trans -1, 2-dichloroethene
DQO	data quality objective
FFA	Federal Facility Agreement
ft	feet
GFS	West of Savannah River Ecological Laboratory Georgia Fields Site Operable Unit
ha	hectare
HSWA	Hazardous and Solid Waste Amendments
in	inch
km	kilometer
m	meter
MCL	Maximum Contaminant Level
mg/kg	milligram/kilogram
mi	mile
NPL	National Priorities List
OU	operable unit
PCB	polychlorinated biphenyl
RBC	risk-based concentrations
RCRA	Resource Conservation and Recovery Act, 1976
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RME	reasonable maximum exposure
ROD	Record of Decision
SB/PP	Statement of Basis/Proposed Plan
SCDHEC	South Carolina Department of Health and Environmental Control

SCHWMR	South Carolina Hazardous Waste Management Regulation
SREL	Savannah River Ecology Laboratory
SRS	Savannah River Site
SVOC	semi-volatile organic constituent
SWMU	solid waste management unit
TNX	a research and development designated area supporting SRS Operations; now called the Multipurpose Pilot Plant Campus
US DOE	United States Department of Energy
US EPA	United States Environmental Protection Agency
VOC	volatile organic constituent
WSRC	Westinghouse Savannah River Company LLC

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SECTION I. INTRODUCTION AND BACKGROUND

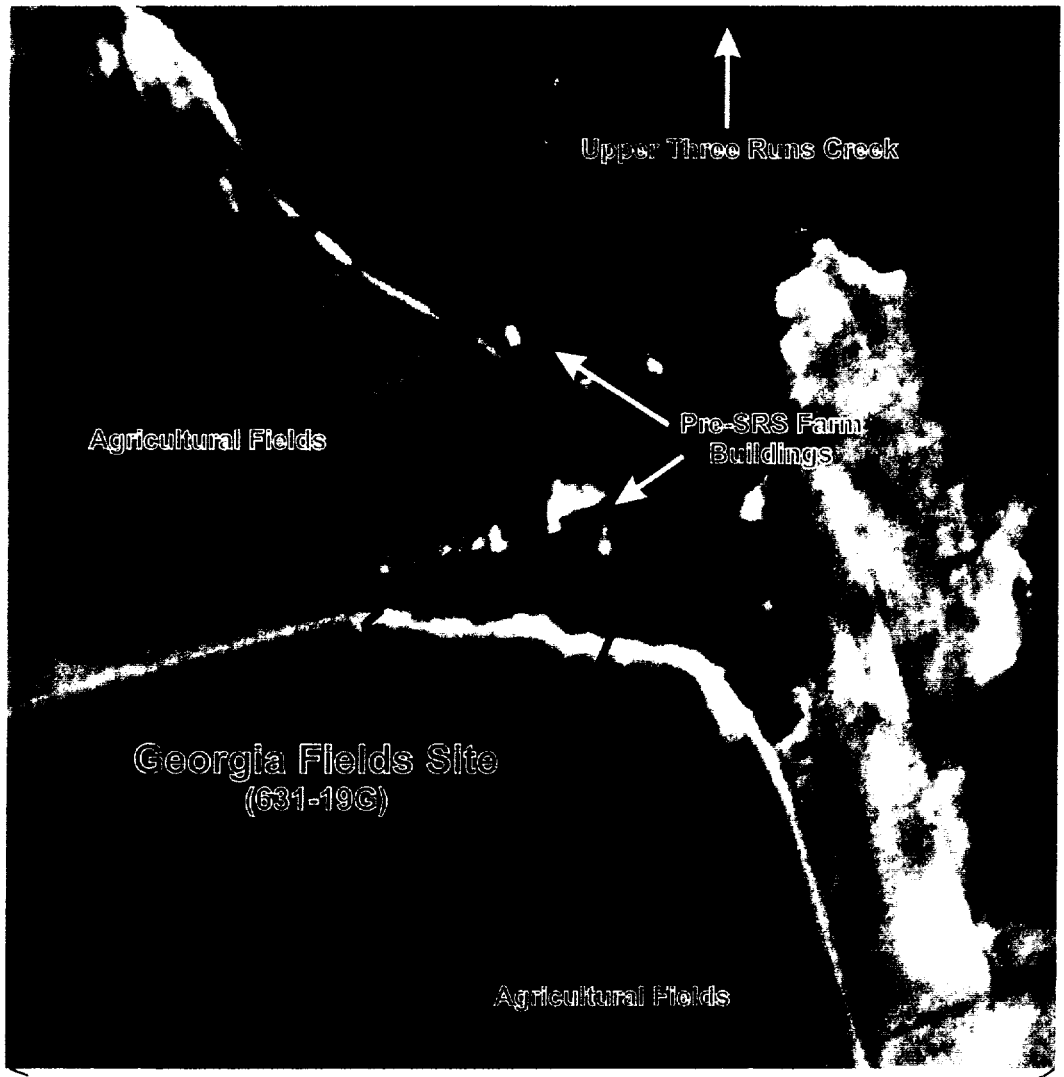
Introduction

This Statement of Basis/Proposed Plan (SB/PP) is being issued by the United States Department of Energy (US DOE), which functions as the lead agency for Savannah River Site (SRS) remedial activities, with concurrence by the United States Environmental Protection Agency (US EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC). The purpose of this SB/PP is to describe the preferred remedial alternative(s) for the West of Savannah River Ecology Laboratory (SREL) Georgia Fields Site (631-19G) Operable Unit (GFS) and to provide for public involvement in the decision-making process. The GFS is located at the SRS in Aiken County, South Carolina (Figure 1).

SRS manages certain waste materials that are regulated under the Resource Conservation and Recovery Act (RCRA), a comprehensive law requiring responsible management of hazardous waste. The GFS is a solid waste management unit (SWMU) under RCRA Section 3004(u). SRS received a RCRA hazardous waste permit from the SCDHEC, which was most recently renewed on September 5, 1995. Module IV of the Hazardous and Solid Waste Amendments (HSWA) portion of the RCRA permit mandates corrective action for non-regulated solid waste management units subject to RCRA 3004(u).

On December 21, 1989, SRS was included on the National Priorities List (NPL). This inclusion created a need to integrate the established RCRA Facility Investigation (RFI) Program with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requirements to provide for a focused environmental program. In accordance with Section 120 of CERCLA, US DOE has negotiated a Federal Facility Agreement (FFA 1993) with US EPA and SCDHEC to coordinate remedial activities at SRS into one comprehensive strategy that fulfills these dual regulatory requirements. The FFA lists the GFS as a RCRA/CERCLA unit requiring further evaluation using an investigation/assessment process that integrates the RFI process with the CERCLA Remedial Investigation (RI) process to determine the actual or potential impact to human health and the environment of releases of hazardous substances to the environment.

Both RCRA and CERCLA require that the public be given an opportunity to review and comment on a draft permit modification and proposed remedial alternatives. Public participation requirements are listed in South Carolina Hazardous Waste Management Regulation (SCHWMR) R.61-79.124 and Sections 113 and 117 of CERCLA. These requirements include establishment of an Administrative Record File that documents the selection of remedial alternatives and allows for review and comment by the public regarding those alternatives (see Section II). The Administrative Record File must be established at or near the facility at issue. The SRS Public Involvement Plan (US DOE 1994) is designed to facilitate public involvement in the decision-making process for permitting, closure, and selection of remedial



West of SREL Georgia Fields Site and Vicinity (1951)

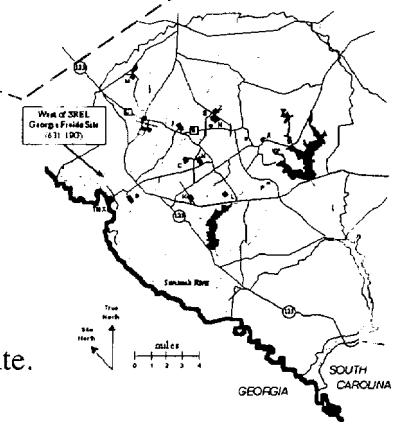


Figure 1. Location of the West of SREL Georgia Fields Site (631-19G) Operable Unit at the Savannah River Site.

alternatives. SCHWMR R.61-79.124 and Section 117(a) of CERCLA, as amended, require advertisement of the draft permit modification and any proposed remedial action and provide the public an opportunity to participate in the selection of a remedial action. A final permit modification will (1) include the final selection of remedial alternatives under RCRA, (2) be sought for the entire GFS, and (3) include the necessary public involvement and regulatory approvals.

SCH WMR R.61-79. 124 requires that a brief description and response to all significant comments be made available to the public as part of the RCRA Administrative Record. Community involvement in consideration of this evaluation of alternatives for the GFS is strongly encouraged. All submitted comments will be reviewed and considered. Following the public comment period, a Responsiveness Summary will be prepared to address issues raised during the public comment period. The Responsiveness Summary will be made available with the final RCRA permit and the Record of Decision (ROD).

The final remedial decision will be made only after the public comment period has ended and all the comments have been reviewed and considered. The final remedial decision under RCRA will be in the form of a final permit modification decision, which is made by SCDHEC. Selection of a remedial alternative that will satisfy the FFA requirements will be made by US DOE, in consultation with US EPA and SCDHEC. It is important to note that the final action(s) may be different from the preferred alternative discussed in this plan, depending on new information or public comments. The alternative chosen will be protective of human health and the environment and comply with all federal and state laws.

Background

SRS occupies approximately 310 square miles of land adjacent to the Savannah River, principally in Aiken and Barnwell Counties of South Carolina. SRS is a secured U.S. Government facility with no permanent residents. SRS is located approximately 25 miles southeast of Augusta, Georgia, and 20 miles south of Aiken, South Carolina.

SRS is owned by the US DOE. Management and operating services are provided by Westinghouse Savannah River Company (WSRC). SRS has historically produced tritium, plutonium, and other special nuclear materials for national defense. Chemical and radioactive wastes are byproducts of nuclear material production processes. Hazardous substances, as defined by CERCLA, are currently present in the environment at SRS.

SECTION II. COMMUNITY PARTICIPATION

The FFA Administrative Record File, which contains the information pertaining to the selection of the response action, is available at the following locations:

U.S. Department of Energy
Public Reading Room
Gregg-Graniteville Library
University of South Carolina-Aiken
171 University Parkway
Aiken, South Carolina 29801
(803) 641-3465

Thomas Cooper Library
Government Documents Department
University of South Carolina
Columbia, South Carolina 29208
(803) 777-4866

Hard copies of the Statement of Basis/Proposed Plan are available at the following locations:

Reese Library
Augusta State University
2500 Walton Way
Augusta, Georgia 30910
(706) 737-1744

Asa H. Gordon Library
Savannah State University
Tompkins Road
Savannah, Georgia 31404
(912) 356-2183

The RCRA Administrative Record File for SCDHEC is available for review by the public at the following locations:

The South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
8901 Farrow Road
Columbia, South Carolina 29203
(803) 896-4000

Lower Savannah District Environmental Quality Control Office
218 Beaufort Street, Northeast
Aiken, South Carolina 29801
(803) 641-7670

The public will be notified of the public comment period through the mailings of *SRS Environmental Bulletin*, a newsletter sent to citizens in South Carolina and Georgia, and through notices in the *Aiken Standard*, the *Allendale Citizen Leader*, the *Augusta Chronicle*, the *Barnwell People-Sentinel*, and *The State* newspapers. The public comment period will also be announced on local radio stations.

US DOE will provide an opportunity for a public meeting during the public comment period if significant interest is expressed. The public will be notified of the date, time, and location. At the meeting, the proposed action will be discussed, and questions about the action will be answered.

To request a public meeting during the public comment period, to obtain more information concerning this document, or to submit written comments, contact one of the following:

Jim Moore
Westinghouse Savannah River Company
Public Involvement
Savannah River Site
Building 742-A
Aiken, South Carolina 29808
1-800-249-8155
jim02.moore@srs.gov

The South Carolina Department of Health and Environmental Control
Attn: J. T. Litton, P. E., Director
Division of Hazardous and Infectious Waste
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201
(803) 896-4000

Following the public comment period, a ROD will be signed, and a final decision for the SRS RCRA permit will be issued. The ROD and RCRA permit will detail the remedial alternative chosen for this OU and include responses to oral and written comments received during the public comment period in the Responsiveness Summary.

SECTION III. OPERABLE UNIT BACKGROUND

Site History

The GFS, located approximately 1.6 km (1 mi) north of the TNX Area (a research and

development designated area supporting SRS Operations) (see Figure 1), is approximately 0.25 ha (0.62 acre) in area. The GFS is located north of, and adjacent to, an area formerly used by the SREL for trapping, collecting, tagging, and tracking of animals. A sheet metal drift fence, approximately 76 cm (30 in) high, used by SREL to direct small animals to collection points, parallels the southern boundary of the site. Presently, orange ball markers denote the boundary of the GFS (Figure 2).

The site appears to have been used as a surface disposal area for abandoned debris. Less than 50 percent of the unit area contains debris. Debris located on the site includes one empty 55-gallon steel drum, one empty 20-gallon steel drum, six empty 5-gallon buckets, piles of burlap, wood waste, wire coils, rolls of wire, ladders, chain link fence parts, and miscellaneous kitchen pots and pans. There is no evidence of past intrusive activities at the site. In addition, the only known construction on the site is a drift fence for which some of the support posts remain in place. A potential former farmhouse (pre-SRS), located just north of the GFS, is characterized by numerous piles of household waste (cans, bottles, etc.).

The site is heavily wooded except for an unimproved dirt access road that crosses the northern quarter of the site. The access road runs east-west and then curves to the northwest; where the road curves, what appears to be an abandoned road splits off from the active road and continues to the west. Most of the debris at the site is present on either side of the abandoned road. Saplings up to 3 cm (1.5 in) in diameter now occupy the track of the abandoned road, suggesting that it has not been used for some time.

There is no documentation or record of any hazardous substance management or disposal at the unit. Neither chemicals nor preservatives are reported to have been used in activities performed at the adjacent trapping area.

History of Site Investigation

The RFI/RI Work Plan with Risk Assessment for the West of SREL Georgia Fields Site (WSRC 1999) contains the detailed information and analytical data for all the investigations conducted and samples taken in the media assessment of the GFS. This document is available in the Administrative Record File (see Section II of this document).

Soil Investigations

Existing characterization data pertaining to the GFS were collected during soil-gas investigations conducted in 1988 and 1991, radiation surveys conducted in 1990, and soil sampling investigations conducted in 1997 and 1999. The 1997 investigations consisted of (1) discrete soil samples collected from seven borings installed within (next to the existing debris) and adjacent to the GFS boundaries; and (2) four composite surface soil samples taken from within the GFS boundaries at random locations. Additionally, three unit-specific background soil borings were advanced in areas not impacted by historical activities associated with GFS. The soil samples were collected in surface (0 to 0.3 m [0 to 1 ft])

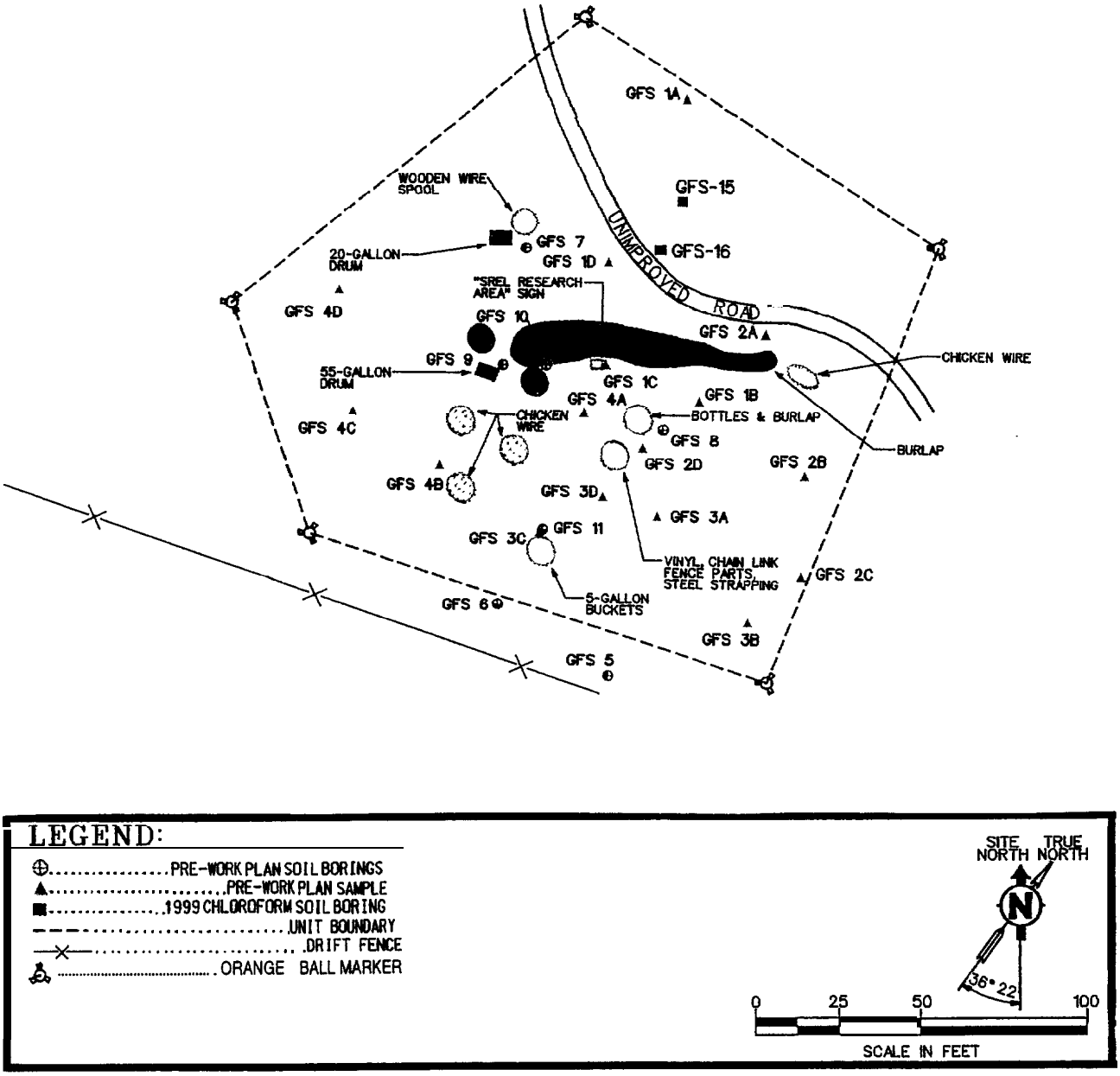


Figure 2. **Boundary of the West of SREL Georgia Fields Site (631 -19G) Operable Unit and Location of Surface Samples, Soil Borings and Debris**

below land surface (bls), subsurface (0.3 to 1.2 m [1 to 4 ft]) bls, and deep (>1.2 m [4 ft]) bls intervals. The soil samples were analyzed for a comprehensive suite of constituents including inorganics, semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), and pesticides/polychlorinated biphenyls (PCBs).

The soil-sampling investigation of 1999 was conducted to verify soil-gas chloroform results from an early soil-gas survey investigation in 1991. The 1999 investigation consisted of two soil borings sampled for chloroform only. The sampling locations were selected to coincide with the most contaminated soils as determined by the 1991 results. The soil samples were collected from 0.8 m (2.5 ft), 1.7 m (5.5 ft), 2.6 m (8.5 ft), 3.5 m (11.5 ft), and 4.4 m (14.5 ft) bls. However, the observed concentrations of chloroform were very low (less than 0.005 mg/kg) and decreased to non-detect levels at 2.6 m (8.5 ft) bls.

Groundwater Investigation

No formal groundwater sampling has been conducted at the unit and none is planned. The rationale for this approach to groundwater at GFS is presented in the following section.

Assessment Investigation Results

Soils

Two separate soil-gas investigations were conducted at the GFS. The first was conducted in March 1988 and the second in July and August 1991. The analytical results of the 1988 investigation revealed only low concentrations of chloroform and trans- 1, 2-dichloroethene (DCE), indicative of natural microbial degradation of chloroform rather than a chemical release at the site. The results of 1991 investigations also confirmed the presence of low concentrations of chloroform. The other chlorinated hydrocarbon, DCE, was not detected, thereby confirming microbial degradation rather than any chemical spill at the site. The 1999 chloroform soil sampling investigation also validated low (less than 0.005 mg/kg) concentration levels of chloroform.

The radiation survey conducted in September 1990 did not detect any radioactive contamination at the GFS.

The constituents of concern (COCs) associated with the GFS soils were determined using standard SRS risk assessment protocols for the surface, subsurface, and deep soil exposure groups. Contaminant migration COCs (CMCOCs) were identified through contaminant fate and transport analyses using a conceptual site model (CSM) to assess the potential for adverse effects to humans and the environment. The CSM is depicted in Figure 3.

The results of the assessment investigations are summarized below:

- There have been no known releases of hazardous constituents at the GFS. Presently, there is debris on the land surface at the unit; however, no free liquids or mobile or highly toxic materials are associated with the debris.

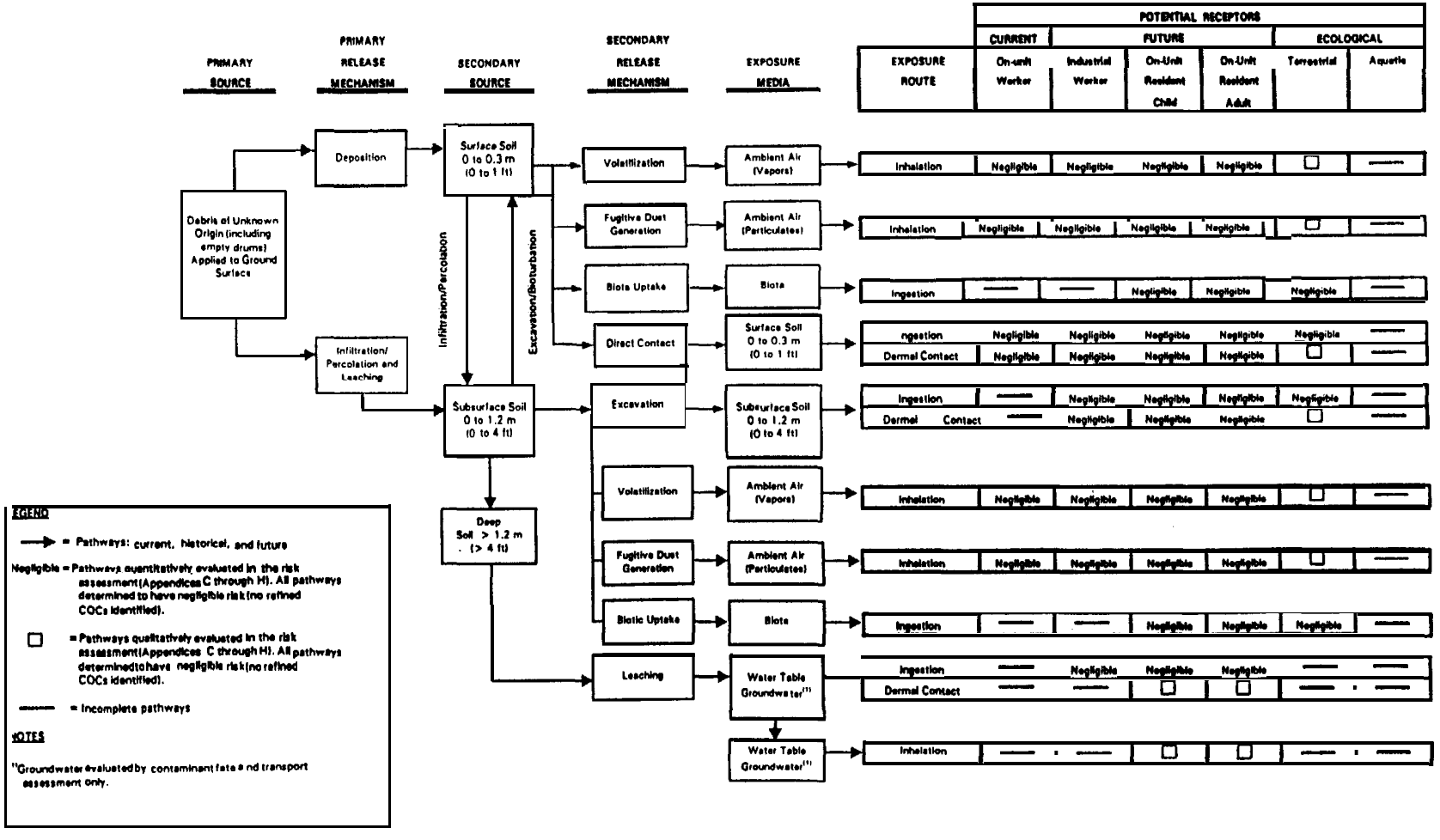


Figure 3. Conceptual Site Model for the West of SREL Georgia Fields Site (631-19G) Operable Unit

- The nature and extent analysis indicates that nearly all COCs are at natural soil concentrations and their distributions are typical of SRS soils unimpacted by SRS activities at the GFS.
- No soil constituents exceed any applicable or relevant and appropriate requirements (ARARs).
- No refined CMCOCs are identified; therefore, constituents in the unit soils do not pose a migration threat to groundwater. The refined CMCOCs are those constituents that are retained to be further evaluated for remedial action.
- No refined human health COCs are identified; there is negligible risk associated with the GFS.
- No ecological COCs are identified.

In summary, the results of the GFS waste characterization analyses show that no refined COCs are associated with the GFS.

Ground water

Groundwater investigations, including collection of groundwater samples, were not conducted at GFS. This approach to groundwater was based on both the operational history of the unit and the field investigations for soil contamination. No hazardous substances are known to have been disposed of at the GFS, and no chemicals or preservatives are reported to have been used in activities performed at the adjacent SREL trapping area. This knowledge is supported by the results of field investigations and soil sampling conducted in 1997 and 1999, which showed no sign of hazardous waste disposal at this unit. In addition, contaminant fate and transport analysis did not predict future migration of GFS soil constituents to the groundwater. Therefore, there is no indication that groundwater impacts from past activities at the GFS have ever occurred or are likely to occur in the future.

Removal Action

No hazardous substances are known to have been disposed of at the GFS and no chemicals or preservatives are reported to have been used in activities performed at the adjacent trapping area. The original contents of the empty drums and buckets that form a part of the debris located on the unit cannot be identified and the exact disposal dates are unknown. No removal action of any kind has taken place at the unit.

Site Characteristics

Physical Features

The GFS is a heavily wooded site except for an unimproved dirt access road (shown in Figure 2). The vegetation is dominated by second growth mixed hardwoods including sweet gum, live oak, scrub oaks, American elm, and hickories. A few pine trees are also present at the GFS, forming a dense canopy over a relatively open understory. The underbrush includes Carolina Creeper and poison ivy. The ground cover consists of fallen deciduous tree leaves and pine needles.

The ground surface is generally flat, sloping gently (2-to-3-percent slope) to the north-northwest. North of the unit, the grade increases to 8 to 10 percent and then flattens out into the floodplain of

Upper Three Runs Creek. There are no distinct surface depressions or surface water drainage features.

A manmade gully, approximately 6 m (20 ft) across and 1.8 m (6 ft) deep, is located 50 m (160 ft) north of the unit. The gully feeds into the Upper Three Runs Creek floodplain, which is approximately 300 m (1400 ft) north of the unit.

There exists no wetland and no water well that can be used as a drinking water source.

No threatened or endangered and sensitive species exist in the vicinity of the GFS.

Waste Characteristics

Field investigations and soil-gas surveys conducted at the GFS found no evidence of any surface or buried hazardous material at the unit. Most of the debris located on the site is on the land surface, and no free liquids or mobile or highly toxic materials are associated with the debris. Therefore, no principal threat source material is present at the unit.

Public Participation

There has been no public participation associated with the GFS prior to the issuance of this SB/PP.

SECTION IV. SCOPE AND ROLE OF OPERABLE UNIT OR RESPONSE ACTION

The overall strategy for addressing the GFS was to (1) characterize the waste unit, delineating the nature and extent of contamination and identifying the media of concern (perform the RFI/RI); (2) perform a baseline risk assessment (BRA) to evaluate media of concern, COCs, exposure pathways, and characterize potential risks; and (3) evaluate and perform a final action to remediate, as needed, the identified media of concern.

The GFS is an OU located within the Upper Three Runs Creek Watershed that is not a "source control" unit (i.e., the unit does not contain contaminated soil that may act as a source of future contamination to the groundwater through leaching). In addition to the GFS unit, there are many OUs within the watershed. All the source control and groundwater OUs located within the watershed will be evaluated to determine their impacts, if any, to the associated streams and wetlands.

SRS will manage all source control units to prevent impact to the watershed. Upon disposition of all source control and groundwater OUs within the watershed, a final comprehensive ROD for the Upper Three Runs Watershed will be pursued.

The previous field investigations and soil sampling conducted in 1997 and 1999 during the development of the RFI/RI Work Plan for the GFS (WSRC 1999) have indicated that the groundwater has not been impacted by the GFS. The results of the contaminant fate and transport analysis also did not reveal any potential for impact to the groundwater. The groundwater does not outcrop in the vicinity of the GFS.

The risk assessments have also revealed that there is negligible risk to human health and the environment associated with the GFS. There is no principal threat source material present at the unit and, therefore, the GFS requires no cleanup activities. Hence, a No Action alternative is recommended for the unit. This means no further

action will be taken and the GFS will remain in its present condition. Therefore, the GFS will have no impact on the response actions of other OUs at SRS.

SECTION V. SUMMARY OF SITE RISKS

As a component of the RFI/RI process, a BRA was performed for the GFS. The BRA included human health risk and ecological risk assessments. The results of the risk assessments are summarized in the following paragraphs.

Summary of the Human Health Risk Assessment

A review of the analytical data contained in the RFI/RI Work Plan for the GFS (WSRC 1999) indicates that the data are of sufficient quality for use in the risk assessment evaluation.

Based on the existing analytical data, an evaluation was conducted to estimate the human health and environmental problems that could result from the current physical and waste characteristics of the GFS. The results of the assessment indicated that the concentrations of all the constituents analyzed (except for arsenic and antimony) were below US EPA risk-based concentrations (RBCs) and the calculated risks were below the US EPA target risk range of 1.0×10^{-4} to 1.0×10^{-6}. The concentrations of arsenic and antimony were above RBCs and carried forward as COCs. Antimony and arsenic were identified as COCs for the residential receptors but were not carried forward as refined COCs because the unit concentrations were within the range of concentrations expected in SRS background soil conditions. Hence, there are no refined human health COCs, and no health risks are posed by the GFS soils and groundwater to current or future workers and future residents at the unit that warrant remedial action.

Summary of Ecological Risk Assessment

The purpose of the ecological risk assessment component of the BRA is to evaluate the likelihood that adverse ecological effects may occur or are occurring as a result of exposure to unit-related constituents based on a line-of-evidence approach. Based on the analytical data pertaining to the GFS, there is no compelling evidence that hazardous materials were managed or disposed of at this unit. The ecological risk assessment has also concluded that no refined COCs are associated with the GFS, and therefore the unit poses a negligible risk to the ecological receptors.

Summary of Contaminant Fate and Transport Analysis

The CSM used for the analysis of contaminant fate and transport is presented in Figure 3. The analysis was based on the data collected from 1997 and 1999 soil sampling investigations. The results of the CSM reveal that the concentrations of constituents detected in the GFS soils will not exceed their Maximum Contaminant Levels (MCLs) within the 1,000-year modeling period. MCL is the maximum concentration of a substance allowed in water that is delivered to any user of a public water supply as required by the Safe Drinking Water Act. The CSM identified no refined CMCOCs. Therefore, the GFS soils do not pose a migration threat to groundwater.

Risk Assessment Summary

The risk assessments and contaminant fate and transport analysis establish that the risk associated with the GFS is negligible, and the field investigations do not establish any known release of hazardous constituents at the GFS. From this, it can reasonably be concluded that no principal threat source material exists at the unit. There is only debris on the land surface at the unit and no mobile or highly toxic materials are associated with the debris. Therefore, no remedial action is necessary at the GFS to ensure protection of human health and the environment.

SECTION VI. REMEDIATION OBJECTIVES

Based on the characterization and risk assessment, the GFS poses negligible risk to human health and the environment. No refined COCs are identified as human health COCs, ecological COCs, or CMCOCs. No soil constituent exceeds ARARs. Therefore, a No Action alternative is identified as the preferred remedial alternative. Since no refined COCs are identified for the GFS, no remedial action objectives were developed and no remediation goals were established.

SECTION VII. SUMMARY OF ALTERNATIVES

Based on the unit characterization data and risk assessment results, there is negligible risk associated with the GFS. For this reason, a No Action alternative is identified as the preferred remedial alternative. No other alternatives were developed for consideration and evaluation.

SECTION VIII. EVALUATION OF ALTERNATIVES

According to US EPA guidance, if there is no current or potential threat to human health and the environment and no action is warranted, the CERCLA 121 requirements are not triggered. This means that there is no need to evaluate other cleanup alternatives or to evaluate the No Action alternative against the nine remedy selection criteria under CERCLA. These nine criteria are used as a basis for selecting cleanup remedies that are protective of human health and the environment, implementable, cost-effective, and acceptable to the State regulatory agency.

The No Action alternative will be the final action for the GFS. This alternative will provide protection to human health and the environment at the GFS.

This SB/PP provides for community involvement through a document review process and a public comment period. Public input will be documented in the Responsiveness Summary section of the ROD.

SECTION IX. PREFERRED ALTERNATIVE

The No Action alternative is the preferred alternative for the GFS. This means that no remedial action will be performed at the GFS. There is no waste to treat, no institutional or engineering controls are required, and there are no ARARs. Because no further action will be taken, the GFS will remain in its present condition. No capital and/or operation and maintenance costs will be involved for this action.

The preferred alternative can change in response to public comment or new information.

SECTION X. POST-ROD SCHEDULE

No remedial action will be performed at the GFS; therefore, a schedule for post-ROD cleanup activities is not provided.

The ROD for the GFS will be drafted after receipt of, and response to, public and regulatory comments on this Statement of Basis/Proposed Plan. The Revision 0 ROD is scheduled for submittal to US EPA and SCDHEC for review in June 2000. The final ROD, which responds to regulatory agency comments, is scheduled for submittal in September 2000.

REFERENCES

DOE (US Department of Energy), 1994. *Public Involvement, A Plan for the Savannah River Site,* Savannah River Operations Office, Aiken, SC.

Federal Facility Agreement, 1993. *Federal Facility Agreement for the Savannah River Site,* Administrative Docket No. 89-05-FF (Effective Date: August 16, 1993).

WSRC, 1999. *RCRA Investigation/Remedial Investigation Work Plan with Risk Assessment for the West of SREL Georgia Fields Site (631-19G),* WSRC-RP-98-4054, Rev. 1.1, Westinghouse Savannah River Company, Aiken, SC.

GLOSSARY

Administrative Record File: A file that is maintained and contains all information used to make a decision on the selection of a response action under the Comprehensive Environmental Response, Compensation, and Liability Act. This file is to be available for public review, and a copy is to be established at or near the Site, usually at one of the information repositories. Also a duplicate file is held in a central location, such as a regional or state office.

ARARs: Applicable, or Relevant and Appropriate Requirements. Refers to the federal and state requirements that a selected remedy will attain. These requirements may vary from site to site.

Baseline Risk Assessment: Analysis of the potential adverse health effects (current or future) caused by hazardous substance release from a site in the absence of any actions to control or mitigate these releases.

Characterization: The compilation of all available data about the waste units to determine the rate and extent of contaminant migration resulting from the waste site, and the concentration of any contaminants that may be present.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 1980: A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act. The act created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites.

Corrective Action: A US EPA requirement to conduct remedial procedures under RCRA 3998(h) at a facility when there has been a release of hazardous waste or constituents into the environment. Corrective action may be required beyond the facility boundary and can be required

regardless of when the waste was placed at the facility.

Exposure: Contact of an organism with a chemical or physical agent. Exposure is quantified as the amount of the agent available at the exchange boundaries of the organism (e.g., skin, lungs, digestive tract, etc.) and available for absorption.

Federal Facility Agreement (FFA): The legally binding agreement between regulatory agencies (US EPA and SCDHEC) and regulated entities (US DOE) that sets the standards and schedules for the comprehensive remediation of the SRS.

Media: A pathway through which contaminants are transferred. Five media by which contaminants may be transferred are groundwater, soil, surface water, sediments, and air.

National Priorities List (NPL): US EPA's formal list of the nation's most serious uncontrolled or abandoned waste sites, identified for possible long-term remedial response, as established by CERCLA.

Operable Unit (OU): A discrete action taken as one part of an overall site cleanup. The term is also used in US EPA guidance documents to refer to distinct geographic areas or media-specific units within a site. A number of operable units can be used in the course of a cleanup.

Operation and Maintenance (O&M): Activities conducted at a site after a response action occurs to ensure that the cleanup and/or systems are functioning properly.

Overall Protection of Human Health and the Environment: The assessment against this criterion describes how the alternative, as a whole, achieves and maintains protection of human health and the environment.

Principal Threat Source Material (PTSM): Generally, those source materials considered to be highly toxic or highly mobile which generally cannot be contained in a reliable manner or would present a significant risk to human health or the environment should exposure occur.

Proposed Plan (PP): A legal document that provides a brief analysis of remedial alternatives under consideration for the site/operable unit and proposes the preferred alternative. It actively solicits public review and comment on all alternatives under consideration.

Reasonable Maximum Exposure (RME): This is the value below which the average concentration will fall 95 percent of the time.

Record of Decision (ROD): A legal document that explains to the public which alternative will be used at a site/operable unit. .The record of decision is based on information and technical analysis generated during the remedial investigation/ feasibility study and consideration of public comments and community concerns.

Resource Conservation and Recovery Act (RCRA), 1976: A federal law that established a regulatory system to track hazardous substances from their generation to disposal. The law requires safe and secure procedures to be used in treating, transporting, storing, and disposing of hazardous

substances. RCRA is designed to prevent the creation of new, uncontrolled hazardous waste sites.

Responsiveness Summary: A summary of oral and/or written comments received during the proposed plan comment period, including responses to those comments. The Responsiveness Summary is a key part of the ROD, highlighting community concerns.

Statement of Basis (SB): A report describing the corrective measures/remedial actions being conducted pursuant to South Carolina Hazardous Waste Management Regulations, as amended.

Super fund: The common name used for CERCLA; also referred to as the Trust Fund. The Superfund program was established to help fund cleanup of hazardous waste sites. It also allows for legal action to force those responsible for the sites to clean them up.

Target Risk Range: US EPA guidance for carcinogenic risk due to exposure to a known or suspected carcinogen between one excess cancer in an exposed population of ten thousand (1.0×10^{-4}) and one excess cancer in an exposed population of one million (1.0×10^{-6}). Risks within this range require risk management evaluation of remedial action alternatives to determine if risks can be reduced below one excess cancer in a million (1.0×10^{-6}). Risks greater than 1.0×10^{-4} indicate that remedial action is generally warranted.

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