BUILDING 123 DECOMMISSIONING

PROJECT EXECUTION PLAN

(PEP)

REV. 4
SEPTEMBER 11, 1997
Document Control Number RF-RMRS-97-082
PERFORMING ORGANIZATION CONCURRENCE SHEET

The undersigned have reviewed the cost, schedule, and scope commitments established by this Project Execution Plan and agree to meet these commitments by the assignment of resources and applying an appropriate level of management attention to project execution.

Concurrence by [Signature] Dated 9/12/97  
RMRS Project Manager

Concurrence by [Signature] Dated 9/12/97  
K-H Project Manager
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BUILDING 123 DECOMMISSIONING PROJECT EXECUTION PLAN

1.0 Project History/ Background

1.1 Introduction

The purpose of this project is to decommission buildings 123, 113, 114, and 123S, stabilize in place or remove the buried sections of the process waste line, and remediate contaminated soil either below or adjacent to the building. The planning, design, regulatory approvals and asbestos containing material (ACM) abatement activities are to be completed in FY97. Also, a decommissioning contract is to be awarded such that the buildings are ready to move to the second phase.

Decommissioning these buildings is being carried out as part of the strategy in the RFETS Ten Year Plan to close the site. Building 123 is scheduled for decommissioning at this time, because the building occupants are scheduled to be relocated and the building represents a low level of risk. The building is nor heavily contaminated and it is a simple structure from a demolition perspective. This structure offers an opportunity to strengthen our decommissioning expertise on a moderately-sized, low risk building. The other buildings or structures are small structures immediately adjacent to Building 123. They can be conveniently and economically removed when Building 123 is demolished.

1.2 Building Descriptions

Building 123 is located in the Rocky Flats Environmental Technology Site (RFETS) industrial area. The building lot is enclosed by the intersections of Central and Cottonwood Avenues with Third and Fourth Streets. The building location is shown in Figure 1-1.

The building is a U-shaped structure with the front facing north along Central Avenue. The east wing runs north and south along Fourth Street, while the west wing parallels the east wing along Third Street. It is a single story, masonry structure with a steel structural frame. The building encloses approximately 19,000 square feet. The approximate outer dimensions are 150 by 40 feet for the north section, 145 by 40 feet for the west wing, and 200 by 50 feet for the east wing. The average building height above ground level is 20 feet. There are four scrubber systems and two are located above roof vents for hoods. The process waste line from the building feeds Valve Vault 18.

Building 113 is located immediately north of Building 123 on the north side of Central Avenue. The facility is about 15 by 20 feet and is built of pre-cast concrete with a flat roof.

Building 114 is a shelter located at the northeast corner of Building 123. It is of masonry construction with a flat roof. It encloses approximately 25 square feet.

Building 123S is located to the southwest of Building 123. It is a metal shed on a concrete slab. It is approximately 8 by 8 feet.

1.3 Building Histories

Building 123 originally consisted of the east and central wings, which were constructed in 1952. The west wing was added in 1968. There are approximately 15 laboratories and 30
Figure 1-1 Building 123 Site Location
offices in the building. The building has always been used as a bioassay laboratory and dosimetry counting and distribution facility. It also provides office space for radiation health specialists, storage of all radiation health records, a laboratory for calibration and repair of criticality alarms, and other miscellaneous repair and calibration shops.

Building 113 was constructed in the 1980’s as a security post. The building currently serves as office space and active records storage for RFETS medical records.

Building 114 has always served as a weather shelter for people waiting for their rides. There are no utilities associated with the building.

Building 123S served as a RCRA 90 day storage area for Building 123 laboratory wastes. There are no utilities associated with the building. Organic wastes were stored in the building. The facility has been closed and wastes are no longer stored there.

2.0 Estimated Project Budget

The project budget is based on engineering estimates for each work activity. The individual work activity estimates were then rolled up to create the overall budget for the project. The work activity budgets are summarized in Table 2-1. Table 2-2 provides a month-by-month spread of anticipated project expenditures. This spread represents the budget baseline for the project. These budget values are engineering estimates based on conceptual-level information. They are fully burdened and include 25% contingency.

2.1 Work Authorization Process

Work is authorized through the framework of the Master Activity List (MAL). The MAL provides a mechanism to identify the authorization basis for the project and the process to ensure that the authorization basis is adequate and that the requirements have been fulfilled. The Building 123 decommissioning project has been approved for planning. The project has been broken into the following phases for MAL approval to execute: 1) asbestos abatement, 2) building deactivation, 3) building demolition, 4) under building contamination remediation.

2.2 Contingency Controls

Contingency has been included in the authorized budget for the project. The contingency level was set at 25% due to the level of design and characterization information available at the time. A specific contingency pool has not been set aside for the project. Specific task budgets are authorized in advance and expenditures against those budgets are made only with the concurrence of the project manager.

3.0 Project Summary

The project scope of work includes the completion of all activities to prepare buildings 123, 113, 114, and 123S for decommissioning, decommissioning the buildings, stabilization or removal of process waste line sections P1, P2, and P3 (part of RCRA Unit 40) and cleanup of contaminated soil beneath and adjacent to the building (IHSS 148). This includes planning and engineering, facility assessments, regulatory activities, characterization of building contaminants, decontamination and site preparation. The scope also includes the procurement activities to identify and put subcontracts in place to perform asbestos.
<table>
<thead>
<tr>
<th>Scope Items</th>
<th>Scope Item Budget</th>
<th>Project Item Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exterior Removals</td>
<td>$6,373</td>
<td>$6,373</td>
</tr>
<tr>
<td>2 Relocate LAN Communications</td>
<td>$20,000</td>
<td>$26,373</td>
</tr>
<tr>
<td>3 Remove/ Cap Utilities</td>
<td>$25,000</td>
<td>$51,373</td>
</tr>
<tr>
<td>4 Remove fume hoods</td>
<td>$29,500</td>
<td>$80,873</td>
</tr>
<tr>
<td>5 Remove/Dismantle Vault</td>
<td>$12,745</td>
<td>$93,618</td>
</tr>
<tr>
<td>6 Building Demolition</td>
<td>$591,377</td>
<td>$684,995</td>
</tr>
<tr>
<td>7 Stripout Activities</td>
<td>$440,679</td>
<td>$1,125,674</td>
</tr>
<tr>
<td>8 IHSS Characterization</td>
<td>$260,866</td>
<td>$1,386,540</td>
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<tr>
<td>9 IHSS Remediation</td>
<td>$289,133</td>
<td>$1,675,673</td>
</tr>
<tr>
<td>10 Asbestos Cost Estimate</td>
<td>$508,000</td>
<td>$2,183,673</td>
</tr>
<tr>
<td>11 RMRS Support Services</td>
<td>$860,070</td>
<td>$3,043,743</td>
</tr>
<tr>
<td>12 Building Decontamination</td>
<td>$163,139</td>
<td>$3,206,882</td>
</tr>
<tr>
<td>13 Waste Packaging</td>
<td>$45,118</td>
<td>$3,252,000</td>
</tr>
<tr>
<td>14 B112 Move/ Alterations</td>
<td>$150,000</td>
<td>$3,402,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,402,000</strong></td>
<td><strong>$3,402,000</strong></td>
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</tbody>
</table>

Table 2-1 Building 123 Decommissioning Project Budget Estimate
Table 2-2 Building 123 Anticipated Expenditures

<table>
<thead>
<tr>
<th></th>
<th>Apr-97</th>
<th>May-97</th>
<th>Jun-97</th>
<th>Jul-97</th>
<th>Aug-97</th>
<th>Sep-97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon Tot Dlr</td>
<td>34,585</td>
<td>85,265</td>
<td>115,595</td>
<td>237,021</td>
<td>274,361</td>
<td>204,865</td>
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<tr>
<td>Cum Tot Dlr</td>
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<td>119,850</td>
<td>235,445</td>
<td>472,466</td>
<td>746,827</td>
<td>951,691</td>
</tr>
<tr>
<td>Oct-97</td>
<td>Nov-97</td>
<td>Dec-97</td>
<td>Jan-98</td>
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<tr>
<td>Mon Tot Dlr</td>
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<td>552,660</td>
<td>921,924</td>
<td>338,495</td>
<td></td>
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</tr>
<tr>
<td>Cum Tot Dlr</td>
<td>1,139,841</td>
<td>1,692,501</td>
<td>2,614,415</td>
<td>2,952,920</td>
<td></td>
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</tbody>
</table>

abatement, the dismantlement and decommissioning of the buildings, and the remediation of site soil. The scope of the demolition includes the complete removal of all internal piping, ventilation, and above-slab process waste systems. The buildings are to be decommissioned and materials removed down to the base slab.

If sampling underneath the slab shows that there is contamination present, the Building 123 slab and foundation will be removed as required to remediate the contamination. Existing records and documentation will be consulted to determine the specific location of possible contaminated areas. A sampling and analysis plan will be developed for the potentially-contaminated areas around the building, core samples to be taken from underneath the building slab and from areas around Sections P1, P2, and P3 of the process waste lines (RCRA Unit 40). Sampling locations will take into account the existing data from earlier sampling efforts. All demolition and remediation waste is to be disposed offsite.

The scope of work has been divided into six areas. They are, (1) Planning and Engineering tasks, (2) Characterization, (3) Procurement, (4) Site Preparation, (5) Building Demolition, and (6) IHSS Remediation. Prior to the asbestos abatement work, the building occupants and furnishings will be relocated.

3.1 Planning and Engineering Tasks

Decommissioning of the buildings will proceed under the guidance of the Rocky Flats Cleanup Agreement (RFCA), which provides a general outline for building disposition. Unless otherwise directed by the Colorado Department of Public Health and the Environment (CDPHE), the CERCLA regulatory path will be followed for this action. Regulatory activities are included with the Planning and Engineering Tasks. This phase also includes preparation of the cost and schedule, and the development of the Integrated Work Control Program (IWCP).

A project team has been assembled. A letter of notification has been sent to the CDPHE, informing them of how we intend to proceed with this work. This notification and the project was discussed in a meeting with DOE, CDPHE and EPA on April 2, 1997. A draft Proposed Action Memorandum (PAM), has been prepared and was forwarded to DOE and CDPHE on April 22, 1997, for informal comment. DOE and CDPHE comments have...
been incorporated The document was resubmitted to DOE on May 23, 1997 This revised document is to be submitted to CDPHE for comment by the agency and the public

The PAM describes the decommissioning of the buildings that will follow at the completion of the site preparation activities The PAM includes building decommissioning and remediation activities associated with the Building 123 process waste line and potentially-contaminated soil At this time, active remediation of soil is not anticipated, but sampling and characterization will be done to ensure that is the proper course of action Other regulatory activities include the development of a NEPA checklist, GSA and HUD notifications, National Historic Preservation Act notifications, establishment of the CERCLA administrative record, and notification of asbestos abatement

Specific planning documents to be prepared include, a Reconnaissance Characterization Report, a Health and Safety Plan, a Waste Management Plan, an IHSS Sampling and Analysis Plan and IWCPs (asbestos abatement, dismantlement, de-energize utilities, decommissioning and IHSS remediation) Building drawings will be located and reviewed A building walk down has been done to provide information for planning the demolition activities Design and work implementation instructions will then be developed

3.2 Characterization

Characterization tasks include the identification and documentation of the radioactive, chemical, and other hazards that exist in the buildings A reconnaissance walk down has been conducted and a report will be issued to provide guidance for the asbestos, radioactive, and chemical characterization reports that will be prepared Any prior documentation that can be located will be factored into the characterization activities When needed, sampling will be conducted, including samples of insulation and building materials for asbestos, sampling of process pipelines, and other materials such as paint, sludge, or other surface materials Hazardous chemicals or unattached materials should have been previously removed as part of the plant’s excess chemical program Waste management activities and minimization requirements will be developed and incorporated in the IWCP An approximate volume for each waste type will be developed and provided to the waste management organization

A Reconnaissance Characterization Survey Report will be prepared which summarizes and documents existing characterization data and which reports the results of characterization surveys conducted specifically for this project

3.3 Procurement

The Procurement activities include preparing a bid package for an asbestos abatement contractor, and another for a demolition subcontract Preparation of the procurement packages will include preparing the scope of work, issuing the Request for Proposal (RFP), a site tour and walk down of the building, evaluation of the bids, and the award of contracts

3.4 Site Preparation

Site preparation consists of all of the activities required to prepare the building for safe entrance and demolition work This includes using the characterization data and reports to design a certified asbestos removal plan, and any recommended radiological or chemical
decontamination tasks  Kaiser-Hill will arrange for the relocation of the building tenants  Building furniture, and unattached, non-contaminated equipment that are not being taken by the tenants will be removed as part of this project  After completing the chemical and hazardous materials characterization, process equipment such as hoods will be detached, if necessary, and removed from the building  If non-contaminated and salvageable, the equipment will be made available for reuse

3.5 Building Demolition

The scope of building demolition includes removal of all piping, ventilation and above-slab waste systems  The building superstructure will be removed down to the slab using shears, excavators and loaders  Use of heavy equipment will minimize worker exposures to hazards associated with demolition  Fugitive airborne emissions will be minimized using water sprays

3.6 IHSS Remediation

There are two IHSSs that are related to Building 123  IHSS 148 consists of soil beneath and around the perimeter of the building that may have become contaminated through unspecified spills during the early days of building operation  Soil sampling will be conducted around the building to determine whether soil removal will be required  If not, the characterization results will be documented and “No Further Action” will be documented in the project closure report  It is not anticipated that IHSS 148 will require active remediation

IHSS 121 consists of the process waste lines at the RFETS  The original process waste lines beneath the building are part of IHSS 121  Soil borings will be taken adjacent to the process waste line to determine whether the soil has become contaminated through inadvertent leaks  Should contaminant concentrations in the soil be below acceptable cleanup criteria, the pipeline will be filled with foam and left in place  If subsurface soil removal along the pipeline is required, the pipeline and the soil will be removed and disposed off site

4.0 Project Justification

Decommissioning and demolition of Building 123 is within the scope of the Ten Year Plan for the Industrial Area of the RFETS  Removal of the structure to the slab will allow access to and remediation of the process waste pipeline and contaminated soil beneath the building  Removal of this building will also provide excellent data for the demolition of future buildings of this type

5.0 Assumptions and Basis of Estimate

1 Project planning and building preparation activities (including ACM removal) occur in FY97  Building decommissioning will begin in FY97 if funding is available
2 Building occupants will be relocated, and chemicals, furniture and equipment removed before decommissioning activities begin  Relocation of tenants, furniture, chemicals and equipment will be coordinated by the project
3 Very little radiological or chemical contamination will exist within the building once the mission equipment has been removed
4 Minimal hazardous, radiological or mixed waste will be generated by this action
Radioactive and hazardous demolition debris will be packaged and turned over to Waste Management for disposition.

The demolition subcontractor will be responsible for loading, transporting, and disposing of non-radioactive debris.

Remediation of RCRA Unit 40 (part of IHSS 121) includes only those portions associated with Building 123. This includes the lines running under the slab and lines in back of the building (sections P1, P2, and P3).

Remediation of IHSS 148 will consist primarily of taking samples and applying for "No further Action" (NFA) approval from the Colorado Department of Public Health and Environment.

Building rubble will be disposed in an offsite, commercial sanitary or demolition landfill.

6.0 Relationship to Other Projects

There are no currently-defined projects that would impact this project.

7.0 Key Personnel and Responsibilities

The project will be managed and conducted by the project personnel indicated in Table 7-1.

The organizational breakdown structure is shown in Figure 7-1.

Table 7-1 Key Project Personnel Matrix

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Phone #</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-H User</td>
<td>Kent Dorr</td>
<td>6034</td>
<td>Project owner, sponsor and champion. Serves as primary point of contact with DOE and regulatory agencies. Serves as Project Manager for the project when has not been assigned.</td>
</tr>
<tr>
<td>DOE User</td>
<td>Bill Fitch</td>
<td>4013</td>
<td>DOE owner, sponsor and champion. Primary point of contact with K-H project team and focal point for project advocacy, justification, validation, etc. Owns need or requirement for the project.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>Doug Steffen</td>
<td>2164</td>
<td>Has overall, first-line responsibility for the successful execution of the project. Takes the lead in defining those activities necessary for the project, and coordinates and facilitates their successful execution by others. Serves as the project interface and integrator with the K-H and DOE Users, Program Management and project team. Is totally knowledgeable and up-to-date on the project scope, schedule and budget. Controls the approved project funds and charge numbers, and provides authorization concerning who can charge and when to charge. Anticipates and identifies problems early-on and ensures that corrective measures are initiated to address the situation.</td>
</tr>
<tr>
<td>Project Engineer</td>
<td>Bob Campbell</td>
<td>9616</td>
<td>Has lead responsibility for the technical scope and engineering support activities associated with the project. Reviews user needs for the project, translates them into appropriate engineering criteria and technical.</td>
</tr>
<tr>
<td>Role</td>
<td>Contact Person</td>
<td>Phone Number</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Demolition Manager</td>
<td>Mike Nelson</td>
<td>7647</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subcontract Administrator</td>
<td>Pat Timbes</td>
<td>8592</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP&amp;B Representative/Scheduler</td>
<td>Wayne Pietkiewicz</td>
<td>5616</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Estimator</td>
<td>Linda Wolfe</td>
<td>4553</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiation Protection Officer</td>
<td>John Miller</td>
<td>8076</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health &amp; Safety Officer</td>
<td>Tonya Sangaline</td>
<td>5392</td>
<td></td>
</tr>
</tbody>
</table>

Demolition Manager:
- Has lead responsibility for demolition-related activities associated with the project.
- Involvement begins early in the project and continues through completion of demolition and demobilization.
- Actively participates in the Title I and II Engineering reviews for potential field demolition concerns.
- During demolition activities, acts as the primary interface between the field and engineering.
- Reports demolition progress, anticipates demolition problem areas, and initiates corrective actions.
- Reports to the Project Manager.

Subcontract Administrator:
- Confirms that the project schedule reflects Procurement's published time lines and that it includes appropriate procurement milestones.
- Acts as single point of contact for all subcontractor procurement actions related to the subcontract.
- Ensures that procurement procedures are followed and that adequate competition exists for procurements.

IP&B Representative/Scheduler:
- Reports to the Project Manager on funding and budget-related matters.
- Coordinates and verifies project controls data, information, reports, performance analysis, and coordinates the change control process for the project.
- Develops and maintains the project baseline schedule with critical path from WBS activities and resource data.
- Prepares reports such as logic diagrams, bar charts, precedence diagrams, etc.
- As requested by the Project Manager, maintains all schedule development documentation.

Cost Estimator:
- Prepares project cost estimates from the WBS, resources information, project schedules, historical and commercial information, etc.
- Develops increasingly precise and accurate estimates as the project becomes better defined.
- Provides project contingency fund levels from statistical probabilities or historical data.
- Assists with data and justification information during the project Validation Review.

Radiation Protection Officer:
- Ensures that an effective radiation protection program is implemented as required by the RFETS Radiological Control Manual.
- Coordinates activities of the Radiological Engineers and Technicians, ensuring adequate preparation and review of radiation work permits.
- Coordinates the completion of building surveys and characterizations.
- Maintains and verifies the quality of all radiological data, and coordinates the project completion surveys.

Health & Safety Officer:
- Prepares Project Health and Safety Plan and reviews all subcontractor H&S Plans.
- Monitors and reviews all...
### Characteristics

<table>
<thead>
<tr>
<th>Lead</th>
<th>Mary Aycock</th>
<th>5309</th>
</tr>
</thead>
</table>

- Leads effort to identify and characterize all potential material hazards in the building.
- Prepares Reconnaissance Walkdown report and final Characterization Report.
- Interfaces with Compliance Officer to ensure that all regulatory drivers are met, and that waste management activities comply with all regulations.

### Environmental Compliance Officer

<table>
<thead>
<tr>
<th>Officer</th>
<th>Gary Guinn</th>
<th>8043</th>
</tr>
</thead>
</table>

- Prepares the Proposed Action Memorandum (PAM), and coordinates all interchange with federal and state regulators.
- Ensures that the project activities are conducted in compliance with applicable environmental and regulatory requirements as identified in RFCA.
- Reviews IWCPs and other project documents as necessary to ensure the work is completed within existing permit requirements.
- Tracks regulatory commitments and coordinates their completion.

### Quality Assurance Officer

<table>
<thead>
<tr>
<th>Officer</th>
<th>David Warfield</th>
<th>4187</th>
</tr>
</thead>
</table>

- Performs assessments and surveillance of project activities.
- Ensures that quality assurance requirements for all procurement, operations, and environmental tasks are completed within the applicable governing QA documents.
- Initiates discrepancy reports, non-conformance reports, corrective action requests, and reviews worker training records to ensure workers are appropriately trained.
Figure 7-1 Building 123 D&D Organizational Breakdown Structure
8.0 Project Execution Summary

8.1 Method of Performance

The project will be managed and conducted by the project personnel shown in the organizational breakdown structure given in Section 7 of this document. Characterization personnel are employees of SEG, Inc., providing planning and characterization activities for the project. Project activities are initiated by gathering all physical data pertaining to historical operations, possible contamination, and building features such as utilities and ventilation systems. A walk down of the building is conducted to visually inspect the premises and to gather information from knowledgeable building occupants. Further characterization activities will be based on the analysis of the walk down information.

RMRS Engineering will perform the design activities necessary to support asbestos abatement and demolition, including preparation of the Request for Proposal documents. The asbestos abatement subcontract will be administered through RMRS procurement. Building occupants and their necessary furniture, equipment, files, and analytical chemicals will be relocated in time for scheduled building decontamination and asbestos abatement. Furniture and equipment that is not moving with the building occupants will be removed as part of the project.

Building demolition will be a subcontracted activity. The demolition subcontract will be administered through K-H Procurement. K-H will matrix RMRS project management personnel to manage the field demolition activities.

Regulatory compliance activities will consist primarily of 1) preparation of a NEPA checklist, 2) project scoping with CDPHE to define regulatory compliance requirements, 3) preparation of a PAM to cover decommissioning activities, including building decontamination and demolition, and remediation of buried waste lines and underlying soils, and 4) preparation of a RCRA Interim Status Closure Plan for Unit 40. An Air Pollution Emissions Notice will not be required for the project. Per State of Colorado requirements, the asbestos abatement subcontractor will provide notice of asbestos abatement to the Division of Air Quality at least 10 days prior to the start of abatement.

8.2 Work Breakdown Structure

See Figure 8.2 for the Work Breakdown Structure (WBS) for this project.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning &amp; Engineering</td>
</tr>
<tr>
<td>11</td>
<td>Characterization</td>
</tr>
<tr>
<td>5</td>
<td>Site Preparation (Asbestos Abatement)</td>
</tr>
<tr>
<td>02</td>
<td>Decontamination</td>
</tr>
<tr>
<td>03</td>
<td>Dismantlement</td>
</tr>
<tr>
<td>04</td>
<td>Demolition</td>
</tr>
<tr>
<td>07</td>
<td>Project Operation Management</td>
</tr>
<tr>
<td>08</td>
<td>Support Services</td>
</tr>
</tbody>
</table>
Figure 8-2  Building 123 Decommissioning Work Breakdown Structure
8.3 Risk Management

Building 123 is not a nuclear facility and does not have a separate Safety Analysis Report (SAR). It is covered under the draft Site SAR.

8.4 Quality Assurance

8.4.1 Introduction

The RMRS Quality Assurance Program Description (QAPD), RMRS-QAPD-001 contains the controls and procedures that determine the levels of quality which must be maintained. Those levels will be determined and implemented to monitor quality aspects of the project activities. The QAPD describes roles, responsibilities, and methodologies for ensuring compliance with DOE Order 5700.6C (the Order), and 10 CFR 830.120 (Price-Anderson Amendments Act, also known as the Rule). Since the Order and the Rule include the same criteria, RMRS incorporates the requirements into a single QAPD. The QAPD is a controlled document.

8.4.2 Purpose and Scope

The RMRS QAPD defines the strategy and controls currently used, or to be developed and implemented by RMRS, to consistently deliver products and services that meet the requirements of customers and stakeholders. Currently, RMRS is implementing the established Site controls, procedures, and documents approved by the Integrating Management Contractor, Kaiser-Hill.

The QAPD is relevant and applicable to the specific operations of RMRS and its subcontractors. As such, it will control the D&D activities. The document also applies to activities between RMRS and Kaiser-Hill, and between Kaiser-Hill other Kaiser-Hill subcontractors, and may have some applicability to this project. Subcontractors to RMRS are required to submit a quality program which meets equivalent standards to the RMRS QAPD. RMRS will ensure that the decommissioning subcontractor has appropriate QA/QC and safety programs in place before field work is initiated.

8.4.3 Program Requirements

The QAPD identifies the QA requirements of the RMRS QA Program and defines them in the context of implementing programs and controls. Specific programs and controls are also identified in the QAPD, such as floor level procedures, plans, and documents used to control all activities involved in the Building 123 Decommissioning Project. The QAPD applies to all RMRS personnel.

8.5 Davis-Bacon Evaluation

A Davis-Bacon evaluation has been completed for the project. There are no prerequisites and the project has been assigned to Construction. Maintenance work may be assigned to the manager of the cognizant maintenance department for further action.

8.6 Safeguards and Security Plans

There are no safeguards and security issues associated with this project.
8.7 Safety Documentation

There are no unreviewed safety matters or questions associated with this project at this date. Ongoing safety analysis for hazard identification and elimination will be conducted throughout the duration of the project.

8.8 Project Controls

Tracking of project schedule and cost variances will be done using the Site standard project control and data management system. Also, the Primavera schedule, which will be regularly updated to reflect the most current information, will be used to manage the project on a daily basis. A logic diagram will be prepared to help identify the project critical path and to ensure that activities are properly tied.

8.9 Final Survey

After the asbestos abatement is complete and before the building is demolished, a final radiation survey of the building structure will be conducted. The purpose of this survey will be to provide adequate date to demonstrate that the building rubble can be released offsite to a commercial landfill. DOE will be notified prior to commencement of demolition and will be given the opportunity to conduct an independent survey.

9.0 Schedule and Milestones

9.1 Project Schedule

The level 1 project schedule is shown in Figure 9-1. The Level 4 working schedule is provided in Figure 9-2.

9.2 Project Milestones

Major project milestones are:

- Deliver draft PAM to DOE: April 22, 1997
- Complete asbestos abatement: November 24, 1997
- Award demolition contract: October 10, 1997
- Complete building demolition: February 10, 1998
- Complete IHSS remediation: April 29, 1998
- Project close out: May 20, 1998
APPENDIX A

Building 123 Decommissioning
Budget Change Proposals
(BCPs)
1. **BCP Title:**
   - **K&H Ops VP / Mgr:**
   - **K&H Plan Analyst:**
   - **KH C&G Coord:**
   - **K&H Plan Director:**

2. **Contract Modification Required:**
   - Yes: [ ]
   - No: [x]

3. **Baseline Documents Changed:**

4. **Baseline Cost Plan Change(s): ($=000)**

5. **Areas of Change**
   - [x] Cost Baseline
   - [x] Scope
   - [x] Schedule
   - [ ] Regulatory/RFQ Milestone Affected?

6. **Justification for Change:**
   - Characterization, Planning, Engineering, and Asbestos Abatement must all be performed prior to issuance of a Bid Package for D&D of Building 123.

7. **Impact of Change:**
   - (a) State impacts on site mission (work scope), schedule, cost effectiveness, or performance measure(s)
   - (b) State problems if not approved

8. **IMC C&G Chair Signature:**
   - [Signature]
   - Date: 3/11/97

   **Site C&G Chairperson Signature:**
   - [Signature]
   - Date: 3/21/97

**CCB Comments:**
Process as Routine

Baseline Change Proposal (BCP)

BCP Title

K-H OPS V P / Mgr
K-H P&I Analyst
K-H CCC Coord
K-H P&I Director/CFO

Contract Modification Required

Baseline Documents Changed

Baseline Cost Plan Change(s)

Areas of Change

Description of Change

Cost Increases

Justification for Change

Impact of Change

Site CCB Chairperson Signature
Date

CCB Comments
APPENDIX B

Building 123 D&D Level 1 Project Schedule
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**Planning & Engineering**

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### Document Storm Water Impacts (IHSS)

- Verify Ground Water Impacts (IHSS)

### Soil Disturbance Permit (IHSS)

- Prepare IHSS Sampling/Analysis Plan
  - K-H Approval of IHSS Sampling/Analysis Plan
  - DOE Approval of IHSS Sampling/Analysis Plan

### IHSS Remediation Decision

- Perform IHSS Remediation
  - IHSS Remediation Complete

### Spill Contamination Characterization (IHSS)

- Prepare IHSS Soil Contamination Report

### RAD Work Permit (IHSS)

- Review IHSS Soil Contamination Report

### Incorporate PAM Comments

- Submit PAM to CDPHE
  - CDPHE PAM Review / Comment
    - Respond to CDPHE Comments
      - Finalize PAM
        - PAM Signed
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Perform Asbestos Characterization
- Prepare Asbestos SOW
  - Prepare Asbestos Report
    - Asbestos SOW to Procurement
  - Review Asbestos SOW
  - Finalize Asbestos SOW
  - Prepare Asbestos Abate Procure Package
    - Issue Asbestos Abate RFQ
    - Asbestos S/C Bid Prep
  - Prepare Asbestos IWCP
  - Review and Finalize Asbestos IWCP
  - Prepare Govmt Bid Estimate - Asbestos
  - Asbestos S/C Walkthrough
    - Review Asbestos S/C Bids
      - Asbestos Report Review by Health & Safety
      - Estimate Review & Approval - Govmt Asbestos
        - Asbestos Abate S/C Award & request submittals
        - S/C Submittal Prep
        - Review Asbestos S/C Submittals
        - Asbestos Comment Resolution
  - Prepare Asbestos Abatement Plan

Sheet 4 of 8
1997
## Strip-out / Demolition Activities

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### Asbestos Notice to Proceed
- Job Walkdown by Engrs

- Prepare Strip-out Design Package
- Prepare Demo Design Package
- Review Strip-out Design Package
- Prepare Strip-out IWCP
- Finalize Deactivation Design Package
- Review Strip-out Demo S/C Design Package
- Finalize Strip-out Demo S/C Design Package
- Review Strip-out IWCP
- Issue Strip-out Demo RFP
- Finalize Strip-out IWCP
- Strip-out Demo Design Package to Procurement
- Prepare Govt Bid Estimate - Strip-out Demo
- Strip-out Demo S/C Walkthrough
- Strip-out Demo S/C Bid Prep
- Revise Strip-out Design Package
- Finalize Approve Strip-out IWCP
- ECR to Split Strip-out Demo Package
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### Strip-out Activities

- Notice of Occupant Relocation to K-H
- Sealed Chemical Inventory Removal - K-H
  - Remove Office Equipment/Furniture
  - Develop PRE's for equip/furn
  - Relocate Building Occupants
  - Comb Chemicals Removal - K-H
  - Finalize PRE's
  - Sweep/ Clean RMMA's
  - ACM Final Rad Surveys

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**Prep Report**
- Prepare Recon Report
- Prepare Rad/BE Characterization Plan
  - Prepare Draft Health & Safety Plan
  - Health & Safety Plan Review
  - Rad/BE Lead Characterization
  - Draft Waste Management Plan
  - Health/Safety Plan Comment Incorporation
- Prepare Lead Abatement Plan (Rms 105&106)
- Prepare Rad/BE/Lead Characterization Report
- BE/Lead Report Review by Health & Safety
- Review Lead Compliance Plan from S/C
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**SUPPORT SERVICES**

**Operations**
- FB04100670 | 10 | 01OCT97 | 12JAN98 |
- FB04100520 | 10 | 20OCT97 | 26FEB98 |
- FB04100530 | 10 | 20OCT97 | 26FEB98 |

**CLOSEOUT AND VERIFICATION**

**Project Activities**
- FB04100610 | 10 | 13APR98 | 24APR98 |
- FB04100440 | 10 | 24APR98 | 13MAY98 |

**Strip-out Activities**
- Remove Ext HVAC Equip / Ductwork
- Dismantle/ Relocate UPS
- Relocate Building Utilities
- Relocate LAN Comm
- Room 105/106 Strip-out
- Rad Release/Surveys of remaining equip/furn
- Remove Liquid Nitrogen Tanks
- Final Rad. Release Surveys
- DOE Rad Survey Verification

**Tests and Inspections**
- Project IH Oversight Activities
- Project Safety Oversight Activities

**Project Closeout Activities**

**Project Completion Report**