CLOSURE PROJECTS INTEGRATION

PM/CM STANDARDS

FOR

D&D PROJECTS AND ASSIGNED CONSTRUCTION PROJECTS

Revision 1
7/15/98

1/100

CLOSURE PROJECTS INTEGRATION PM/CM STANDARDS

APPENDICES

REFERENCES

DOE "Life Cycle Asset Management Good Practices Guide"
Project Management Institute "Project Management Body of Knowledge"

CLOSURE PROJECTS INTEGRATION PM/CM STANDARDS FOR D&D AND ASSIGNED CONSTRUCTION PROJECTS - rev 7/15/98

1.0 INTRODUCTION

Closure of the Site encompasses several hundred facilities, associated ancillary equipment, and five Operable Unites with numerous Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites. Most of the plant's operational buildings are considered to be Under Building Contamination (UBC) sites with Potential Areas of Concern (PAC) and Individual Hazardous Substance Sites (IHSSs). It includes risk reduction, deactivation, decontamination, decommissioning, demolition, and the environmental restoration of numerous facilities, process/production equipment, ventilation systems, filter houses, effluent stacks, and physical security items such as fencing and guard posts. The facilities include laboratories, production facilities, hazardous and mixed waste storage facilities, fabrication shops, and numerous support and administrative facilities. It is the intention of Kaiser Hill (K-H) management to close the Site as safety and efficiently as possible by the rigorous identification and control of project hazards and through the implementation of a structured, disciplined, and standards-driven project management process. In addition to Site closure activities, there are ongoing construction projects planned and executed to maintain the Site physical infrastructure, to comply with regulatory agreements, or to facilitate closure.

2.0 PROJECT STANDARDS/REQUIREMENTS

All Rocky Flats Environmental Technology Site (RFETS) Decommissioning and Demolition (D&D) projects and related construction projects that are assigned to Closure Projects Integration (CPI) **shall** comply with all applicable Federal and State Regulations, Agreements, DOE Orders, and consistently apply consensus commercial and private sector project management practices using a graded approach. All subcontractors and organizations, both internal and external (off site), engaged in the planning, execution, and management of D&D projects and construction projects assigned to CPI **shall** work to a disciplined, structured, and standards driven Project Management/Construction Management (PM/CM) process. Organizations covered under these CPI Standards would include, but not be limited to K-H, Safe Sites of Colorado (SSOC), Rocky Mountain Remediation Services (RMRS), Architect/Engineering/Construction/Construction Management (AECCM) firms, DynCorp of Colorado (DCI),and, as appropriate, both service subcontractors, and third/lower tier Subcontractors. Subcontractors performing D&D projects and CPI assigned construction projects may, if they choose, develop their own PM/CM infrastructure, e.g. procedures, desk instructions, manuals, or use the existing K-H infrastructure that already meets Site PM/CM requirements and standards. If a Subcontractor chooses to develop their own PM/CM process for the planning, execution, and management of D&D projects and/or assigned CPI construction projects, it **shall** conform to the requirements of the K-H PM/CM standards and **shall** be approved by the K-H VP of CPI or his designee in writing. Only the VP of CPI, or his designee, can waive, in writing, any of the CPI PM/CM Standards contained in this document, e.g. reporting standards indicated in Section 6.0.

In all cases, any internal or external organization or subcontractor planning and executing D&D projects or construction projects assigned to CPI is subject to D&D Projects oversight of their compliance to these CPI Standards.

2.1 EXTERNAL PM/CM REQUIREMENTS

The applicable primary Federal Regulations, Tri Party Agreements (RFCA), DOE Orders, Colorado State Regulations, and consensus commercial and private sector standard industry practices that drive the PM/CM process for D&D projects and construction projects assigned to CPI would include, but not be limited to, National Historic Preservation Act (NHPA), Clean Water Act, Clean Air Act, Project Management Institute Standards, Rocky Flats Cleanup Agreement (RFCA), Price Anderson Amendment Act, and the National Environmental Policy Act. It **shall** be the responsibility of all internal and external organizations and subcontractors performing D&D projects or CPI assigned construction projects to define, for their specific project, all applicable external requirements, irrespective of the preceding list, and act accordingly.

If conflicting guidance or direction arise in the meaning, application, etc. of the regulations, orders, or standards industry practices related to the non-engineering issues, resolution **shall** be obtained from the K-H VP of CPI, or his designee, in writing. Resolution of engineering issues resides with the Site's chief engineer.

2.2 INTERNAL PM/CM REQUIREMENTS

Existing K-H internal PM/CM requirements, e.g. procedures, desk instructions, manuals, for performing PM/CM activities for all D&D projects and CPI assigned construction projects would include, but not be limited to environmental compliance, construction management, occupational safety, fire protection, industrial hygiene, health physics, process and facility safety, nuclear safety, emergency preparedness, QA/QC requirements, radioactive and hazardous waste management, site labor agreements, Authorization Basis, and building/facility specific requirements. It **shall** be the responsibility of all Site organizations and subcontractors performing D&D projects or CPI assigned construction projects to define, for their specific task, all the applicable K-H PM/CM internal requirements, irrespective of the preceding list, and act accordingly.

As applicable, all internal and external organizations and Subcontractors performing D&D projects and CPI assigned construction projects **shall** select and incorporate the applicable internal PM/CM requirements into their project planning and execution unless waived, in writing, by the K-H VP of CPI, or his designee. If conflicting guidance and direction arise in the meaning, application, etc. of the internal PM/CM requirements, resolution **shall** be obtained from the K-H VP of CPI, or his designee, in writing.

2.3 CONSTRUCTION SUBCONTRACTOR QUALIFICATION

Construction Subcontractors and their lower tier subcontractors **shall** be required to be pre-qualified before being awarded a construction subcontract at the Site. The pre-qualification review process verifies the Subcontractors financial ability to perform the work, corroborates satisfactory performance on similar jobs, and determines if the subcontractor has the safety knowledge and a safety program sufficient for work at the Site. Construction subcontractors **shall** be required to provide submittals of information stipulated in the Subcontractor Qualification Questionnaire. Subcontractors passing this review will be entered into the Pre-qualified Subcontractor Pool and will be eligible to receive construction subcontracts. An annual safety update is required. Performance reports **shall** be completed periodically. If safety statistics or project performance declines, the subcontractor is subject to removal from the pre-qualified status. Instructions for initial application for pre-qualification are attached as Appendix 1. Written process description for administration of the pre-qualification pool are attached in Appendix 2.

3.0 PROJECT PLANNING STANDARDS

All RFETS D&D projects and construction projects assigned to CPI **shall** be planned in compliance with applicable and relevant internal and external requirements, in recognition of end state, and at a commensurate level of detail using a graded approach. A graded approach to planning recognizes such factors as the item's relative importance to safety, environmental/ regulatory compliance, current level of knowledge, safeguards and security, programmatic importance, magnitude of the hazard, financial impact, and other facility or specific requirements.

There are typically four phases in the life cycle of all D&D projects and related construction projects that can be described as follows: feasibility or pre-conceptual phase; planning or conceptual phase; implementation or execution phase (including detailed design) and; the close-out phase. The level of planning effort and detail for D&D projects and CPI assigned construction projects **shall** recognize the unique attributes, characteristics, performance expectations and required deliverables, or hold points, associated with each of the four project phases.

During the life cycle D&D projects and construction projects assigned to CPI, there are potentially several hold points or critical decision milestones which must be approved by the Regulatory Agencies, e.g. Colorado Department of Public Health and Environment (CDPHE), Environmental Protection Agency (EPA), the DOE/RFFO, and/or K-H before proceeding to the next phase - see Appendix 3 which lists typical key D&D project and CPI assigned construction project critical decision deliverables/hold points. Other project specific hold points or milestones may be added when it is in the mutual best interests of the affected parties, e.g. K-H and RFFO, to do so. This might include milestones associated with Master Activity List (MAL) authorization, Authorization Basis (AB) modifications, etc. In any event, the level of planning detail for each project phase **shall** incorporate the appropriate milestones, performance expectations and the requirements for documentation and approval of the project specific "hold points," or critical decisions, so that there are no delays in proceeding to the next phase of the project due to poor or incomplete planning.

Throughout their implementation/execution phase, all new CPI assigned construction projects with a Total Estimated Cost (TEC) of $1.0 million or more and all active D&D projects **shall** at all times, have a current and K-H approved project specific Project Execution Plan (PEP). Using a graded approach, all other active CPI assigned construction projects, including those projects currently under construction, should have an up to date and K-H approved PEP. The requirement for a PEP compliant to these standards will always be balanced against what is cost effective and make good business sense. As noted in Section 2.0, this requirement for a PEP can be waived by the K-H VP of CPI, or his designee, in writing. PEPs for both D&D projects and CPI assigned construction projects **shall** be approved by K-H VP of CPI, or his designee. At a minimum, and using a graded approach, all D&D projects and CPI assigned construction project PEPs **shall** incorporate, as applicable, those items as shown in the K-H standard PEP template - see Appendix 4. To aid in the preparation of a CPI specific PEP, Table 1 in Appendix 4 contains a PEP checklist. The collection of costs is an important aspect of all D&D projects and this requirement **shall**, as appropriate, be reflected in the project specific PEP. Table 2 in Appendix 4 is a prescriptive description of the cost elements which **shall** be used for all D&D project cost collection efforts unless waived, in writing, by the K-H VP of CPI or his designee. Any revisions, additions, or deletions to Table 2 will likewise require the written approval of the K-H VP of CPI or his designee.

4.0 PROJECT IMPLEMENTATION/EXECUTION STANDARDS

Project management is a process to integrate five basic project life cycle processes - initiating, planning, executing, controlling, and close out through the four project phases. Interactions between these processes may be straight forward and well understood or they may be subtle and uncertain. These interactions often require trade-offs among project goals/objectives e.g. enhance performance in one area by sacrificing performance in another. Successful project management of D&D projects and CPI assigned construction projects require proactive management of these interactions.

To ensure success, all D&D projects and construction projects assigned to CPI **shall** be executed in conformance to all applicable and relevant RFETS external and internal PM/CM requirements/standards identified as required by Section 2.1 and 2.2, consensus industry standard PM/CM practices, and, as appropriate, a K-H approved PEP. This would include, but not be limited to, carrying out the PEP by performing the activities included therein; developing the individual and group skills of the project team to enhance project performance through feedback of lessons learned and continuous improvement; making needed project information available to project stakeholders in a timely manner, e.g. subcontractor performance evaluations; procurement of appropriate goods and services from subcontractors; and, establishing cost effective subcontract administration, oversight, and management practices.

As required in Section 2.0, all organizations and subcontractors performing D&D projects and CPI assigned construction projects **shall** work to a structured and disciplined PM/CM infrastructure to execute their projects safely, technically complete, on time, and within budget. Subcontractors may choose to develop their own project execution infrastructure, e.g. procedures, desk instructions, or use the approved K-H infrastructure. If a subcontractor chooses to develop their own project execution infrastructure for D&D projects or CPI assigned construction projects, it **shall** conform to the requirements of the K-H PM/CM Standards and **shall** be approved by the K-H VP of CPI, or his designee, in writing.

5.0 PROJECT ACCEPTANCE AND CLOSE-OUT STANDARDS

All D&D projects and construction projects assigned to CPI **shall** be accepted and closed out in conformance with applicable internal and external PM/CM and K-H requirements. For each project, specific acceptance and close-out activities and documentation **shall** be defined and executed to ensure acceptable completion of the work scope, complete and auditable documentation, and complete subcontract and financial closure.

5.1 PROJECT ACCEPTANCE AND CLOSE-OUT PLANNING

Preparation for the acceptance and close-out of all projects begins in the planning phase with definition of project specific acceptance and close-out criteria included in the PEP. The acceptance and close-out criteria **shall** define project specific tasks, tests, inspections, approvals, and other documentation necessary for project completion, acceptance, and transfer.

5.2 PROJECT ACCEPTANCE AND CLOSE-OUT TASKS

Acceptance and close-out tasks include as appropriate, but are not limited to: Acceptance Testing, Vendor Training, Property Management Transfer and Dispositioning, As-Built Drawings, Subcontract Close-out, Project File Consolidation and Storage, Project Acceptance and Transfer, Project Completion Report, and Final Project Close-out. Project close-out tasks will be completed as applicable for projects that are canceled prior to completion of the full scope or work.

Execution of project close-out, including acceptance testing and final documentation **shall** be budgeted, scheduled, and managed as a specific project activity.

At completion of all D&D projects and construction projects assigned to CPI, the Project Manager **shall** prepare and submit for record a Project/Lessons Learned Summary Report. Using a graded approach, this report **shall** address the criteria for project completion, provide lessons learned for use in future projects, and, where appropriate, include a subcontractor/vendor performance evaluation. (It is recommended that the Suggested Subcontractor Performance Evaluation model shown in Appendix 5 be used to evaluate CPI subcontractor/vendor performance.) The report **shall** be distributed to the project file, K-H Procurement, K-H Procurement Quality Assurance, and to other interested Site organizations upon request.

5.3 PROJECT ACCEPTANCE AND CLOSE-OUT DOCUMENTATION

Applicable project acceptance and close-out documentation for all D&D projects and CPI assigned construction projects shall be prepared, approved, and retained in the permanent project file by the Project Manager. Acceptance and Close-out documentation shall include the following as appropriate: Partial/Complete Subcontract Close-outs, Beneficial Occupancy, Project Acceptance and Transfer, and Final Project Close-out. See Appendix 7 for sample project close-out documents.

6.0 PROJECT DOCUMENTATION AND REPORTING STANDARDS

D&D projects and CPI assigned construction projects **shall** be documented, tracked, and reported in compliance with all applicable internal and external PM/CM and K-H requirements. Specific documentation and reporting requirements shall be initially defined for each project in the PEP, then executed to ensure compliance with applicable requirements and to ensure an auditable record of the project performance and activities from inception to close-out. Terms used in all D&D projects and CPI assigned construction projects **shall** conform to definitions provided in DOE's Life cycle Asset Management (LCAM) Good Practices Guide Glossary (GPG-FM-006), the Project Management Institute's "Project Management Body of Knowledge" (PMI PMBROK), DOE Orders and standards, and K-H procedures.

6.1 PROJECT DOCUMENTATION CONTROL

D&D Project Standards are established to ensure documentation continuity, integration, and consistency. Individual documentation requirements and control criteria **shall** be established and defined within the PEP on a graded approach by each project. Specific documents required by K-H for all D&D projects and CPI assigned construction projects are noted in Appendix 6.

6.1.1 PROJECT FILES

For all D&D projects and CPI assigned construction projects, an official and permanent project file **shall** be established and maintained by the Project Manager at project initiation. The Project File **shall** be properly identified, protected, transmitted, distributed, retained, retrieved, maintained, and dispositioned per internal PM/CM and K-H requirements for the type of project initiated. Subcontractors may choose to develop their own project documentation infrastructure, e.g. procedures or desk instructions, or they may use the approved K-H documentation infrastructure. If a subcontractor chooses to develop their own project documentation infrastructure for D&D projects or assigned construction projects, it **shall** conform to the requirements of the PM/CM Standards and **shall** be approved by the responsible K-H VP of CPI or his designee, in writing. The project file **shall** be organized and maintained in accordance with the Project File Checklist

(Appendix 6) to ensure compliance and continuity. A current Project File Checklist **shall** be maintained with the project file. The Project Manager **shall** ensure that all project records are complete, current, and retained in a manner that meets internal and external PM/CM requirements. Project files are subject to review and assessment by K-H and DOE/RFFO at any time.

6.1.2 ENGINEERING DOCUMENTATION, DRAWINGS, & CALCULATIONS

All engineering documentation, drawings and calculations developed for D&D projects and CPI assigned construction projects shall be prepared, and controlled in accordance with all applicable internal K-H PM/CM requirements. Documents, drawings, and calculations prepared by subcontractors **shall** be identified as contract deliverables and handled accordingly. A project engineering file **shall** be maintained as a subset of the final project file, as appropriate. The Project File Checklist address the engineering elements of the project file to be established and maintained.

6.1.3 CONSTRUCTION DOCUMENTATION

All CPI assigned construction documentation, drawings and calculations developed for D&D projects and construction projects assigned to CPI **shall** be prepared, and controlled in accordance with all the applicable internal K-H PM/CM requirements. Documents, drawings, and calculations prepared by subcontractors **shall** be identified as contract deliverables and handled accordingly. A project construction file **shall** be maintained as a subset of the final project file, as appropriate. The Project File Checklist addresses the construction elements of the project file to be established and maintained.

6.1.4 PROPERTY MANAGEMENT AND DISPOSITIONING DOCUMENTAITON

As appropriate, the task of purchase, installation, and/or removal of all real or personal property in support of specific D&D projects and CPI assigned construction projects **shall** be included in the PEP and **shall** be in conformance with all applicable internal and external PM/CM and Property Management requirements. The property management and disposition portion of the PEP **shall** be maintained and updated, as required, by the Project Manager.

6.2 REPORTING STANDARDS

K-H CPI standards for reporting ensures continuity, integration, and consistency in communicating and documenting the current status and progress of projects. Individual reporting requirements and control criteria **shall** be established and defined within the PEP on a graded approach by each project. As defined in LCAM's Good Practice Guide "Performance Analysis and Reporting Guideline" (GPG-FM-006), project reports are intended to facilitate the following:

- Early identification of potentially damaging trends and occurrences
- Minimization of management time necessary for detailed review by providing
    - Clear uncomplicated presentation of relevant information.
    - Clear representation of problem significance and required actions.
    - Focus on relevant issues.
- Reasonable cost of data acquisition and reporting through the utilization of available project information supported by common commercial PC hardware and software.

Reports for all D&D projects and CPI assigned construction projects **shall** include the following basic information: Official project title as it appears on the authorizing document; Project WBS identification number; Report date that report information is based on; and, the date the report was

printed. In addition to the above base information and using a graded approach, D&D project schedules and CPI assigned construction schedules **shall** clearly indicate all scheduled activities, forecasted completion of the scheduled activities, a "Time Now" line, and the Critical path activities. As applicable, all project Internal, Performance Measure, RFFO, and RFCA milestones that fall within the span of the schedule **shall** also be clearly indicated.

6.3 PROJECT REPORTS

As determined by the responsible Project Manager, and approved by management, following are the minimum periodic reports required by all D&D projects and CPI assigned construction projects. Additional reports may be required as determined by authorization, funding, project specific requirements, management needs, and good business practice. This would include, but not be limited to, Variance Reports, Milestone Status Reports, safety statistics, corrective actions, subcontractor performance evaluations, etc. All regular and project specific reports **shall** be identified in PEP indicating, at a minimum, the report title, reporting frequency, and report primary distribution. The format for all D&D projects and CPI assigned construction projects reports **shall** conform to the requirements indicated in 6.2 above.

6.3.1 CONSTRUCTION WORK IN PROGRESS REPORT

A Construction Work in Progress (CWIP) Report listing all active D&D projects and CPI assigned construction projects **shall** be prepared monthly and provided to K-H Accounting. The CWIP Report provides tracking information on planned and actual construction and project completion dates.

6.3.2 PROCUREMENT REPORT

The D&D Project Procurement Report **shall** provide a listing of all planned, in-progress, and completed procurement activities for active D&D projects and CPI assigned construction projects. This report identifies pending procurement activities and includes data to track those activities to completion. This report is used by Procurement to plan and track work load. This report is also used by the Construction Management Group within the D&D Projects Division to plan and oversee the administration of construction contracts and subtasks and, plan project craft and support personnel requirements.

6.3.3 DAILY CONSTRUCTION REPORTS

During active construction, starting with the Notice to Proceed and ending with the Final Project Close-out, a daily construction report **shall** be prepared and distributed. The general form and content of this report is shown in Appendix 8. The Daily construction report **shall** be prepared by the construction manager and delivered to project team members at the close of each business day.

6.3.4 MONTHLY MANPOWER REPORT

The construction manager **shall** prepare a monthly manpower report as shown in Appendix 9. This report will be provided to the CPI Construction Office by the fifth working day of the Month. Construction tasks being performed by an AECCM subcontractor are not included in this report. The AECCM subcontracts contain similar reporting requirements.

6.3.5 CONSTRUCTION PROGRESS PHOTOS

During active construction the Project Manager **shall** document job progress by photographing significant changes in job. On minor projects photographs **shall** be taken at least once during a job. On significant job photos **shall** be taken at start of each project and at least monthly thereafter. The copies of the photos **shall** be printed with one copy going into the project file and two copies being provided to the CPI Construction Office. All photos **shall** be captioned as shown in Appendix 10.

6.3.6 DIVISION 1 SPECIFICATIONS

Divison 1 specification masters **shall** be kept by the CPI Construction Office. Anyone wanting to make changes to the Division 1 specifications **shall** coordinate the changes through the CPI Construction Office. Requests for a Division 1 package **shall** be given a hard copy and either an electronic copy or a copy on disk. This copy may be changed for a specific job and a new request **shall** be made for each new change.

APPENDICES

1. Application for Pre-qualification
2. Process Description for Administration of the Pre-qualification Pool
3. Typical D&D and Construction Project Milestones/Holdpoints
4. Project Execution Plan Template
5. Suggested Subcontractor Performance Evaluation
6. Project File Index/Records Checklist
7. Close-out Documentation
8. Daily Construction Report
9. Monthly Manpower Report
10. Construction Progress Photo Caption

APPENDIX 1

APPLICATION FOR PRE-QUALIFICATION

INSTRUCTIONS FOR CONSTRUCTION SUBCONTRACTOR POOL APPLICATION

NOTE: All construction work at Rocky Flats Environmental Technology Site (RFETS) will be prequalified Subcontractors in the Kaiser-Hill, LLC (K-H) Subcontractor Pool. Prior to being extended an invitation to bid in any Subcontractor Pool work, certain Subcontractor compliance and completion requirements will be verified by K-H; other requirements must be certified by the Subcontractor.

1. Submit your main (one) Standard Industrial Classification (SIC) number which reflects the type of business performed.

2. Submit Workers Compensation Experience Modification Rates on provider's letterhead for the past three years (including the current year), or for as many years as the company has been in existence.

3. Submit Occupational Safety and Health Administration (OSHA) 200 Log Year-End Summaries (signed and dated by a company representative) for the past three years, or for as many years as the company has been in existence.

4. Submit the average number of employees for each of the past three years, or as many years as the company has been in existence.

5. Submit the total number of employee hours worked by company employees for each of the past three years, or as many years as the company has been in existence.

6. Submit copies of transmittal letters describing the outcome and number of citations for each Occupational Safety and Health Administration/Colorado Department of Public Health and Environment (OSHA/CDPHE) inspection in the past three years, or for as many years as the company has been in existence. List any citations received, indicating the type of citation, fines levied by OSHA, and negotiated settlements or fines paid to OSHA.

7. If the company has not had a contract with Rocky Flats Environmental Technology Site in the past two years, submit five (5) references, including the names of projects completed, dollar values of those projects, phone numbers of the clients Project Manager or Contracting Officer, and a description of the project .

8. Submit Subcontractors Pool Representations and Certifications.

   Note: Reading material required by the representations and certifications is available at:

   Rocky Flats Reading Room
   Front Range Community College Library
   3645 West 112th Avenue
   Westminster, Colorado 80030
   (303) 469-4435
   Hours: Monday-Thursday 8:00 a.m. - 4:30 p.m.

9. Submit Area of Specialization form identifying categories.

10. Submit written copies of existing Safety and Health Programs for evaluation.

AREA OF SPECIALIZATION

1. O General SubcontractorOR O Subcontractor Only

2. Identify the Subcontractor's areas of construction specialization from the list below.

O	Miscellaneous General Construction		
O	Design/Build	O	Earthwork
O	Paving	O	Environmental Restoration
O	Roofing	O	Asbestos Abatement
O	Painting		
O	Special Protective Coatings		
O	Mechanical, Plumbing, Piping		
O	Fire Protection (Sprinkler)		
O	HVAC		
O	Electrical, Fire Alarm, Instrumentation		
O	Telecommunications		
O	Other _____		

COMPANY: _____

ADDRESS: _____

TELEPHONE NO: _____ FAX NO: _____

By: _____ Title: _____

Please mail this form, and completed participation requirements data to: Kaiser-Hill, LLC Construction, Attention: Subcontractor Qualification, Building 130, P.O. Box 464, Golden, Colorado 80401

KAISER-HILL, LLC

REPRESENTATIONS AND CERTIFICATIONS

SUBCONTRACTORS POOL FOR CONSTRUCTION WORK

I, _____, as _____,
Name of Person Title

of _____ (Bidder), represent and certify:
Name of Company

1. ___ The Bidder is a large business concern, as defined by the Small Business Administration.

   ___ The Bidder is a small business concern, as defined by the Small Business Administration.

   ___ The Bidder is a small disadvantaged business concern, as defined by the Small Business Administration.

   ___ The Bidder is a woman owned business concern as defined by the Small Business Administration.

2. The Bidder has read and agrees to abide by the applicable OSHA regulations defined in the Rocky Flats Plant Health and Safety Practices Manual.

3. The Bidder has adequate financial resources to perform Contract work and can bond work valued up to $_____.

4. The Bidder has the necessary organization, experience, accounting, operations controls, and technical skills, or the ability to obtain them. This may include such elements as Production Control procedures, Property Control systems, and Quality Assurance measures of services to be performed.

5. The Bidder will be available to participation a site tour with as little as three days notice. The Bidder will accept notice issued by U.S. mail, telephone, or telefax. The Bidder will attend the site tours for all projects on which Bidder submits a bid.

6. The Bidder will be able to provide a sealed bid for the work within seven calendar days of the site tour.

7. The Bidder will agree to participate in the wrap-up insurance plan.

8. The Bidder will be able to mobilize within fourteen calendar days of Notice of Award.

9. The Bidder has the necessary production, construction, and technical equipment and facilities, or the ability to obtain them.

10. The Bidder is otherwise qualified and eligible to receive an award under applicable laws and regulations.

11. The Bidder will submit a Quality Assurance plan for approval for Design/Build contracts, if required.

12. The Bidder will submit a Safety and Health Program for approval.

Dated this _____ day of _____, 199__.

_____
Signature

_____
Print Name of Signor

_____
Company Name

_____
Title

_____
Address

_____

_____
Phone Number

_____
Facsimile Number

APPENDIX 2

PROCESS DESCRIPTION FOR ADMINISTRATION OF PRE-QUALIFICATION POOL

SUBCONTRACTOR EVALUATION

1.0 PURPOSE

To establish the requirements and the process for performing an objective evaluation of site Subcontractor work performance on construction subcontracts.

2.0 GENERAL REQUIREMENTS

For the purpose of this evaluation process, general Subcontractors are considered responsible for lower tier Subcontractor performance. The lower tier performance shall be reflected in the general Subcontractor's evaluation. If requested by the general Subcontractor, or deemed appropriate by the Contracting Officer, an independent evaluation of the lower tier Subcontractor may be performed in accordance with this procedure. All final evaluations performed shall be used to determine the suitability of the general Subcontractor or lower tier Subcontractor for future contracts.

2.1 FREQUENCY OF EVALUATION

All prime Construction Subcontractors performing work awarded at Rocky Flats Environmental Technology Site shall be evaluated at least once, as determined by the Contracting Officer, on an informal basis, during the performance of their Subcontract work. A formal documented evaluation, in accordance with this procedure, shall be completed when all Subcontract work is complete.

2.2 EVALUATION BASIS

The Subcontractor evaluation shall be based on objective measures of actual work performance in areas of:

- Schedule
- Quality of Work
- Environmental Safety and Health Compliance
- Effectiveness of Management
- Submittals

3.0 PROCESS

3.1 INITIATE EVALUATION

The Contractor Technical Representative (CTR) shall initiate the evaluation and coordinate input from responsible representatives as required to record object measurable data. The evaluation shall be documented on the Subcontractor Performance Evaluation" form - see Attachment 1. (The instructions and process for performing a subcontract performance evaluation are descrived in Appendix 5.)

3.2 COLLECT MEASURABLE DATA

3.2.1 Environmental Safety and Health Compliance

The assigned Safety Representative shall indicate on the Subcontractor Performance Evaluation form the Subcontractor's safety and health compliance record in performance of the work. The collection and calculation of the occupation injury and illness rates shall be in accordance with Kaiser-Hill, LLC's Safety and Health policy and procedures. The indicators used to establish health and safety compliance shall include:

- The number of violations
- The Subcontractor's OSHA recordable rate compared to the National average
- The Subcontractor's lost work day (case) rate compared to the National average
- The Subcontractor's lost work day (days) rate compared to the National average.

3.2.2 Schedule

The CTR shall obtain and record the Subcontractor's actual schedule performance. The schedule items recorded shall include:

- Original Subcontract completion date
- Final Subcontract completion date
- Beneficial occupancy date
- Actual days ahead or behind schedule

3.2.3 Quality of Work

The Field Engineer shall obtain and record data on the Subcontractor Performance Evaluation form that indicates the quality of work performance. The indicators used to establish the quality of the work shall include:

- The number of Sitewide Commitments Management Process (SCMP) reports (Nonconformance Report)
- The number of missed inspection points
- The number of major items reworked

3.2.4 Cost Performance

The CTR shall obtain and record the subcontractor's active cost performance. The cost items to be recorded shall include:

- Actual cost obligated at task completion
- Baseline paid or estimated cost
- Cost of approved changes

3.2.5 Submittals

The CTR shall obtain and record the Subcontractor's actual submittal performance. The submittal performance recorded shall include the following:

- The total number of submittals required
- The percentage of late submittals
- The percentage of rejected submittals
- The percentage of resubmitted submittals

3.2.6 Effectiveness of Management

The CTR shall review the actual work performance along with any available written documentation to determine the effectiveness of management. The review shall document the following:

- Labor assignments were proper
- Grievances were settled in a timely fashion
- Fringe benefits were paid on a timely basis
- Subcontractor/supplier management
- Management of direct-hire force
- Timely notification and correspondence
- Reasonableness of change order pricing

3.3 FUTURE CONTRACT AWARDS

The CTR will consolidate the evaluation information and evaluate the Subcontractor's performance and make the appropriate recommendation regarding the Subcontractor performing future work at the Rocky Flats Environmental Technology Site (RFETS).

3.3.1 If the CTR recommends the Subcontractor for future subcontract awards skip to paragraph 3.4., REVIEW AND DISTRIBUTION."

3.3.2 If the CTR does not recommend the Subcontractor for future subcontract awards at the RFETS the following procedures apply.

The recommendation of the CTR will be reviewed and concurred in by the Subcontract Administrator, Field Engineer, Safety Representative and Project Manager.

The Subcontract Administrator will then provide written notification of the recommendation to the Manager of Mission Support and the Program Manager for whom the work was performed. The notice will include a copy of the evaluation and request senior management concurrence in the decision. If either the Mission Support Manager or Program manager does not concur in the recommendation, the Subcontract Administrator shall change the recommendation from NO" to Yes." Skip to paragraph 3.4.2

If the Mission Support Manager and Program Manager concur with the recommendation, the Subcontract Administrator shall give the Subcontractor an opportunity to provide any information it wants considered prior tot he issuance of a Letter of Ineligibility to the Subcontractor. Any information provided by the Subcontractor shall be made a part of the evaluation file.

The Subcontract Administrator shall consider any information provided by the Subcontractor and issue a Letter of ineligibility or inform the Subcontractor in writing that one will not be issued. if a letter is issued it must contain, at a minimum, the following information:

The length of time for which the Subcontractor will be considered ineligible. for future subcontract awards at the RFETS.

The types of subcontracts for which the Subcontractor is considered ineligible.

What the Subcontractor must do to make it eligible for subcontracts at the RFETS.

3.3.3 The Legal Department must review all Letters of ineligibility prior to issuance.

3.4 REVIEW AND DISTRIBUTION

3.4.1 The following Kaiser-Hill Company, L.L.C. Representatives (Kaiser-Hill) shall review and concur with the CTR's recommendation:

Subcontractor Administrator
Field Engineer
Safety Representatives
Project Manager

3.4.2 The Kaiser-Hill Contracting Officer will then review the completed evaluation with the Subcontractor. Exceptions taken by the Subcontractor will be documented and attached to the evaluation.

3.4.3 After review with the Subcontractor, the evaluation and any exceptions shall be distributed as follows:

Subcontractor
Kaiser-Hill Construction Manager
Kaiser-Hill Contracting Officer

4.0 RECORDS

Completed Subcontractor evaluations shall be maintained in the Procurement Department for a period of three years.

SUBCONTRACTOR POOL ADMINISTRATION

1.0 SUBCONTRACTOR POOL DESCRIPTION AND PROCEDURES

1.1 GENERAL

The Kaiser-Hill, LLC Subcontractor Pool" is a listing of Subcontractors who have satisfied the minimum Kaiser-Hill, LLC requirements in the areas of safety, insurance, finance, training, bonding, compliance with Terms and conditions, and performance; that is, these Subcontractors have been determined responsible in these areas to do work up to their bonding capacity. The purpose of the Subcontractor Pool is to simplify, streamline, and expedite existing operations of the award process for subcontracts. This determination is made by Construction, Industrial Hygiene and Safety (IH&S), and Procurement representatives.

2.0 POOL QUALIFICATION

Subcontractors may be added to the Subcontractor Pool list in one of two ways" (1) By requesting entry and fulfilling the requirements prior to bidding for and being awarded a Subcontract. Registration is requested by completing and returning Attachment 1, Subcontractors Pool for Construction Work"; or (2) By bidding for and being determined acceptable in the course of a normal non-Subcontractor Pool contract award, then requesting registration in the Subcontractor Pool.

3.0 SMALL BUSINESS SET-ASIDE

Not all Subcontractors in the pool will be those classified as Small Business" under the rules of the U.S. Small Business Administration. Some may be large businesses, and some may be additionally designated Small Disadvantaged Business" (SBD) or Woman-Owned Business."

3.1 Under the current procedures, all Subcontracts with an estimated value of less than $3 Million are set aside for small business. There is a goal, expressed as a percentage of total dollars contracted, for SDB's and Small Women-Owned Business. The responsibility for determining which contracts will be set aside for SDB's or Women-Owned Business is made by the Procurement Department with the advice of the Contract Technical Representative (CTR). Lower-tier Subcontractors to a small business Subcontractor may be a large business.

4.0 PROCEDURES

4.1 REQUIREMENTS: A Subcontractor Pool Coordinator (SPC) will be designated and will remain cognizant of the current requirements for determination of responsibility. The SPC will also maintain the list of Subcontractors who have been approved (determined responsible) and the validity period of this determination. Subcontractors will be approved for finite period of time; e.g., one year, though they may be removed from the Subcontractor Pool (for cause at the SPC's discretion at any time) if they fail to maintain current the requirements for determination of responsibility. The SPC's determination of responsibility will take into account the Subcontractor's record of evaluations by the Performance Evaluation Teams. At an appropriate time prior to the expiration of the Subcontractor's term of approval, the SPC will advise the Subcontractor in writing that his documentation is due for update in our files. If the Subcontractor does not respond satisfactorily, the Subcontractor will be removed from the Subcontractor Pool list. In addition to these methods, a Subcontractor may also be added to or removed from the Subcontractor Pool bid list by written notice from the Construction Department manager through the Contracting Officer.

A Subcontractor removed from the pool for performance or safety will be removed until reinstated as set forth above. Generally, a Subcontractor removed for safety will be removed until his/her statistics improve to the acceptable level.

4.2 BID LISTS: The SPC will provide the Procurement Department current copies of the Subcontractor Pool list. When a Contractor Technical Representative (CTR) receives a requisition that is appropriate for bid by the Subcontractor Pool, he/she will identify the appropriate areas of specialization and submit this information to the Subcontract Administrator. The Subcontract Administrator will send an request for proposal to members of the pool. Generally, all members of the pool will be advised that a package will be available, though exceptions may be made to this general practice if the Subcontract Administrator deems it appropriate. A roster of all current Pool members will be included with the advertisement.

4.3 SUBCONTRACTORS: All Subcontractors must be qualified to perform work on the Rocky Flats Environmental Technology Site. They do not have to be prequalified, but if they are not already prequalified, the bidder must provide documentation that the Subcontractor he intends to use meets Kaiser-Hill, LLC's qualifying requirements for all tiers of Subcontractors.

Exception: Subcontractors on short-duration jobs (min. manhours) may be excluded from prequalification if deemed appropriate by the Subcontract Administrator and the CTR.

APPENDIX 3

TYPICAL D&D AND CONSTRUCTION PROJECT MILESTONES/ HOLD POINTS

APPENDIX -3

Table 1. TYPICAL D&D CLOSURE PROJECT MILESTONES/HOLD POINTS

Deliverables	Type	Produced by	Transmitted To	Action
Initial Project Scope	Report	K-H	RFFO	Approve
Reconnaissance Level Characterization Report	Report	K-H	RFFO	Transmit to LRA
Notification Letter	Letter	RFFO	CDPHE/EPA	Accept
Project Execution Plan (PEP)	Plan	K-H	RFFO	Review
Decision Document for T2 and T3 Buildings	Report	K-H	RFFO, EPA, CDPHE	Transmit to LRA
Disposition Readiness Demonstration	Report	K-H	RFFO	Review
Environmental Readiness Evaluation (ERE) Approval	Letter	RFFO	K-H	Concur
Additional Decontamination Required	Letter	RFFO	K-H	Concur
Independent Verification Survey	Report	K-H or Third Party	RFFO	Concur
Facility Release for Reuse or Demolition	Letter	RFFO	K-H	Concur
Demolition Closure Report	Report	K-H	RFFO	Review
Approval of Mission Need	Letter	RFFO	K-H	Accept
Approve Baseline	Letter/Estimate	K-H	RFFO	Approve
Project Execution Plan (PEP)	Plan	K-H	RFFO	Review
Start Construction	Letter	K-H	RFFO	Approve
Construction Substantially Complete (CSC)	Letter	K-H	RFFO	Concur
Project Completion	Letter	K-H	RFFP	Concur

CSC - Construction Substantially Complete
LRA- Lead Regulatory Agency

Note: other project specific milestones may be added and agreed upon by the appropriate parties. These might include such milestones as MAL authorization, AB modifications, approval of the project's Health and Safety Plan, etc.

APPENDIX 4

PROJECT EXECUTION PLAN TEMPLATE

Kaiser-Hill

ROCKY FLATS [Project Title] PROJECT

PROJECT EXECUTION PLAN

Template Rev. 7, 1/26/98

Project Manager

Date

Draft 1

25

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Tables

NOTES:

1. This template is for your project team to use as an aid to create an effective Project Execution Plan. We encourage you to apply common sense and the graded approach to include only what is necessary for the customer's of the plan: at least your project team and your project customer.
2. The primary purpose of the PEP is to provide guidance to the project team on HOW to work together to achieve project results that satisfy the customer.
3. Unless there is a reason to do otherwise, we recommend that you keep the level 1 section headings. This enables easy access for people who are familiar with other RFCP Project Execution plans. If an entire section does not apply to your project, just list the heading and put 'N/A' below the heading.
4. Please keep the PEP as short as possible. In no instance should it (exclusive of appendices or attachments) exceed 50 pages. Shorter is better.
5. Limit the approvals. In general, only the K-H and subcontractor project managers should approve the plan.
6. Information in italics illustrates the type of information to include in the section. Replace this with information appropriate for your project.

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1. PROJECT IDENTIFICATION

This section summarizes the project charter.

The [Project Title] Project supports the DOE Strategic Plan by providing [define support provided]. This project is a necessary component of the Focus 2006 plan. It provides [define support provided]. Planning for this project has been included in the Performance Measurement Baseline (PMB), which governs the interface of multiple projects and programs. This project is included as part of the [Program Title] and is part of the overall Rocky Flats Closure Project (RFCP)[1].

Figure 1 illustrates the present condition of the subject of this project.

1.1 Vision

This section lets everyone know the project end state.

[ONE SENTENCE STATEMENT OF THE STATE AT THE END OF THE PROJECT; E.G., 'BUILDING XXX HAS BEEN REMOVED AND ALL REMOVAL WASTES PROPERLY TREATED AND DISPOSED.']

The Vision of the building xyz closure project is to replace the entire xyz with level earth suitable for IHSS remediation and/or placement of the engineered cap.

1.2 Purpose

Purpose - A summary statement from the organization or sponsor outlining WHY the project is taking place. A purpose statement will typically include the phrases: to supplement; to overcome, to replace, or to change.

[SINGLE SENTENCE OR SHORT PARAGRAPH STATING WHY THIS PROJECT TEAM EXISTS...*WHY* DO WE HAVE TO ACHIEVE THE VISION.]

The purpose of the [Project Title] project is decontaminate, decommission, and demolish buildings xyz and xxz, etc.

1.3 Mission

Mission - a statement of the overall action that the team will take to accomplish its mandated purpose and vision. The mission statement will focus on the positive improvements implemented as a result of the successful completion of the project.

[EXPAND ON THE PURPOSE WITH A BROADLY MEASURABLE RESULT; SHOULD INCLUDE THE PROJECT COMPLETION DATE.]

The mission of the [Project Title] project is to implement a new process by [date] that will satisfy all requirements.

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1.4 Background/History

Background/History - Include data pertinent to the new project that summarizes events or predecessor projects that lead to the decision to proceed with this project. Provide information necessary to understand impact to other programs/projects, technical risks that may continue based on building descriptions and building history. Describe interfaces with other projects that affect decision on scope, schedule, budget, methods of performance, or any other project parameter.

[PROVIDE A SHORT SUMMARY OF EVENTS OR SUPPORTING PROJECTS THAT HAVE LEAD TO THIS PROJECTS; SHOULD INCLUDE THE PREVIOUS PROJECT COMPLETION DATES, DELIVERABLES, AND FUNDING.]

The xyz building was used for the production of nuclear weapons components for thirty-seven years. The building has experienced many unusual events which may have left contamination in unexpected locations.

1.5 Project Justification

Summarize the need for the project including major drivers, compliance agreements and schedules, projected cost savings, and relationship and supporting role to the RFETS Closure Plan.

1.6 Project Funding

Identify all necessary project funds, including fund source and type (expense and/or capital: GPP, BCE or Line Item), and reference numbers (PBS, WAD, WBS, and primary charge numbers). Include prior year project funding as appropriate for reference purposes.

[OUTLINE THE SOURCE AND RESTRICTIONS ON THE FUNDS PROPOSED FOR FUNDING THE PROJECT]

[INCLUDE APPROPRIATE ILLUSTRATION TO SHOW PROJECT SCOPE; IF NOT A BUILDING OR CLUSTER, SHOW TYPES OF MATERIAL PROCESSED, ETC.]

Figure 1: The [Project Title] project results in the removal of XXX.

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2. PROJECT SCOPE

Provide a detailed summary defining major elements of the project, with sufficient detail to bound project parameters. Update the project scope as necessary to accurately reflect the project Design Criteria.

2.1 Goals

Identify the primary goals for the project in terms of scope, schedule, cost, safety, and project technical performance. [GOALS MUST BE QUANTITATIVE AND TIME SPECIFIC.]

Project specific goals include:

1. ...
2. ...

2.2 Deliverables

List the deliverable outputs from Project team.

The primary project deliverables are:

1.
2.
3.

2.3 Boundaries

Define the limits of the team's work and formal authority: decisions it may/not take, resources it may/not expend, etc.

2.4 Project Documents

Identify all of the major project-specific documents that the project team must understand. Do not include generic site-wide policies or procedures.

This project's Work Authorization Documents (WADs) define the basis for DOE contractual authorization to perform work. They are based on the PBSs submitted to DOE by Kaiser-Hill. Project Baseline Summaries (PBSs) provide a summary of WADs. The PBSs comprising this project include x, y and z.

Other project documents include technical reports and assessments, other project plans (e.g., Health and Safety Plans, Quality Assurance Plans, etc.), specifications, and project control documents.

Figure 2 illustrates the document hierarchy for the project. The primary documents describing the technical scope include the project specifications...

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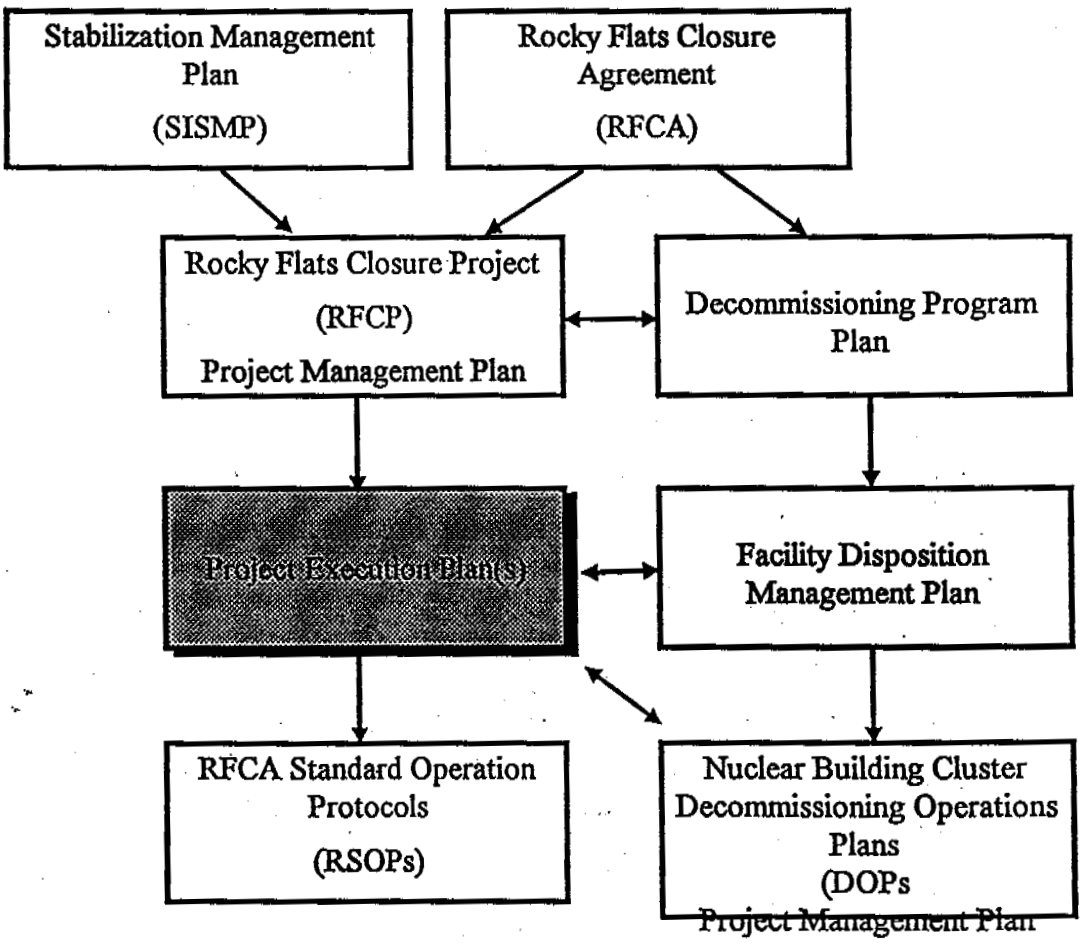

Figure 2: The document hierarchy shows relationship of project documents.

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3. TECHNICAL APPROACH

Describe the broad technical approach to accomplish the project; e.g., using dynamite or a wrecking ball to fell a building. Briefly describe and reference tradeoff or value engineering studies supporting the selected approach. If applicable, include discussion of the potential use of new technologies.

3.1 Technical Strategy

Strategy - A broad description of how the team will approach its work - e.g., either to complete a task internally or outsource it.

The overall project strategy is to:

- ...
- ...

The technical strategy for the [Project Title] project is to:

- *Remove highest hazards first.*
- *Focus on results that reduce 'mortgage costs' as soon as possible.*
- *Apply appropriate technology to keep exposure and contamination ALARA.*
- *Decontaminate progressively through a building.*

Refer to the documents that support the project technical and management approach, referring to figure 2, the document hierarchy.

3.2 Applicable Regulatory Requirements Documentation

Provide a reference to the project-specific regulatory requirements.

The Kaiser-Hill contract with DOE specifies the list of DOE directives applicable to work at Rocky Flats. The Kaiser-Hill level 1 control documents conform to these requirements. All work on the RFCP is performed to appropriate regulations and standards that help protect the environment and health and safety of the workers and surrounding populations. Section 8 provides more detail on this topic.

3.3 Guiding Principles

Identify the principles that the project team should consider when making decisions. This may include both site-wide and project-specific principles.

Guiding principles for the [Project Title] project include:

- *Safety of workers and the public is our primary concern.*
- *Protect the environment.*
- *Use the taxpayer's money wisely.*

3.4 Project Closure

Identify the general approach that the team should follow to close out the project.

Project closure ensures that the project team correctly dispositions all aspects of the project at closure. Similar to the readiness process, project closure addresses final disposition of facility and equipment, project records, and project personnel, and the connections between all three entities. Closure activities should be ongoing activities throughout the life of the project, as much of the data necessary for project closure can not be developed after the fact.

Effective project closure is a unique opportunity for the project team to disseminate the lessons learned during the project. Project Closure should include development and issue of a 'lessons learned' report on the project. You must assure that the team develops the input for this report before they are reassigned to other projects.

4. PERFORMANCE CRITERIA

Listing the major technical performance characteristics that will determine project success, including laws, orders, regulations, user deadlines, performance measurement deliverables, etc. This section identifies, for example :

- Acceptance and close-out criteria necessary to clearly define milestone completion and formal completion of the project,
- Waste disposal criteria, and
- Building cleanup criteria.

Project team success depends on several Critical Success Factors, and project performance to the work plan that completes the project mission. Performance criteria for the project include:

- *Technical performance requirements from specifications and applicable requirements,*
- *Safety,*
- *Quality,*
- *Schedule,*
- *Cost, and*
- *Administrative (e.g., subcontracting).*

This project commits to achieve annual and long term milestones and performance metrics. These include Site Performance Measurements, DNFSB milestones, RFCA milestones, and Super-stretch performance milestones. Appendix B lists the current year milestones. Kaiser-Hill updates the Performance Measurements annually. Milestone completion reports are submitted as the milestones are achieved.

4.1 Critical Success Factors

Critical success factors - The critical elements (usually 4 to 8) that must be achieved if the team is to experience success.

Critical success factors for the [Project Title] project are:

- *Safe operations,*
- *Complete and accurate project documentation,*
- *Coordination of all necessary site resources,*

4.2 Measures

Measurements - Specific indexes that will be used to assess whether the results meet the agreed upon criteria - in terms of quantity, quality, time, or costs. These measures determine management action to control the project.

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Project measures include:

- *Technical Quality: specification performance.*
- *Project Control: Quantities (kg, liters, ft^2), Critical path status (days), Schedule Variance ($), and cost variance ($).*
- *Safety: Radiological, industrial safety, and industrial hygiene indicators.*

4.3 Site Integrated Stabilization Management Plan (SISMP)

Only include this section if your project has SISMP milestones.

SISMP milestones supported by this plan include:

- ...
- ...
- ...

4.3.1 RFCA Milestones

Only include this section if your project has RFCA Milestones.

The Final Rocky Flats Cleanup Agreement[2] specifies a Vision, objectives, and enforceable milestones for the closure of Rocky Flats under CERCLA and RCRA. This agreement permits the CDPHE to select RFCP milestones as enforceable milestones for site closure. Kaiser-Hill is subject to fines for failing to meet these milestones. RFCA Milestones supported by this project include:

- ...
- ...
- ...

4.3.2 Performance Measures

Only include this section if your project has specific DOE Performance Measures.

Kaiser-Hill and DOE have a performance based contract. The total fee that DOE pays Kaiser-Hill (and its subcontractors) is subject to the government weighted fee guidelines. This means that our project team earns more by higher performance. DOE requires unambiguous measures of performance in order to pay on this basis. Performance measure milestones supported by this project include:

- ...
- ...
- ...

[NOTE: PROJECT PLAN SHOULD SHOW TIES THAT MAY IMPACT IMPORTANT MILESTONES OUTSIDE THE SCOPE OF THIS PROJECT.]

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5. PROJECT RISK MANAGEMENT

5.1 Assumptions

Summarize the key assumptions that affect the scope, schedule, and cost estimates for the project. Order the assumptions from most significant to least. Specific assumptions that affect task budget and schedule shall be included in the Basis of Estimate.

Key assumptions pertinent to planning and implementing the [Project Title] project are:

- ...
- ...
- ...

5.2 Risks

Identify the project risks that your team intends to monitor, prevent, and or prepare to mitigate.

Project risk factors that might impact project completion to full scope, schedule, or cost were assessed and, where justified, preventive measures taken or mitigation measures planned. The most basic approach to project risk management uses the potential problem analysis format, presented by Table 1.

The P column characterizes the risk probability as high, medium, or low. Evaluate P over the life of the project. Risk events with over a 50% chance of occurrence over the life of the project are rated as High probability. Judge the probability of risk events with less than a 5% chance of happening over the life of the project as Low. The S column categorizes the seriousness of the consequence of the risk event as High, Medium, or Low. Judge seriousness in terms of the Site critical path and total PMB cost; events that may have a significant effect (e.g., 20% or more) impact on overall RFCP schedule or cost should show High seriousness.

Generally, project risk events with a 'H-H' profile demand both prevention and mitigation. The project team should generally delete 'L-L' profiles from the table. The project plan should apply prevention and mitigation measures to M-M, L-H, and H-L cases based on cost effectiveness.

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Table 1: Potential Problem Analysis identifies the major project risks. ***Note that these are risks to technical performance, project schedule, or project scope.***

Potential Problem	P	S	Prevention	Mitigation
WIPP opening delayed by up to one year	H	L	Activities on this project can not prevent the event.	Contingency plan for temporary storage of processed materials.
WIPP never opens	L	H	Activities on this project can not prevent the event.	Extend temporary storage until final resolution achieved.
Significant scope requirement overlooked	L	M	Independent validation of scope, cost, and schedule Early initiation of Readiness Review	Identify alternative ways to accommodate scope with little or no cost or schedule impact.
High consequence natural event (e.g. earthquake)	L	H	Safety analysis and implement any required Safety Systems, Structures, and Components	Emergency plan

[NOTE: THE TABLE 3 ENTRIES ARE EXAMPLES ONLY. REPLACE WITH ENTRIES APPROPRIATE FOR YOUR PROJECT. ASSURE THAT THE PREVENTION AND MITIGATION MEASURES ARE COVERED IN YOUR PLAN!]

6. METHOD OF ACCOMPLISHMENT

Describe how you intend to perform the work. Identify the separation of work between that work to be conducted utilizing the Site's Integrated Work Control Program (IWCP) and the work to be conducted through other detail design processes (subcontract, maintenance support, etc.). This section shall identify the type of agencies or subcontractors that will perform work for all elements of the project. Explain rationale for methods selected. For contracts, indicate the contract format, e.g., fixed-price competitive, fixed-rate, CPFF, etc. Indicate preliminary or final Davis-Bacon determinations.

Project planning, contract monitoring, and closure reporting will be performed by the RMRS project team. Design will be performed by a joint team led by RMRS project engineering. The design will produce construction drawings and specifications. Project construction activities will be subcontracted to a construction contractor using a fixed price construction contract.

7. ENVIRONMENTAL, HEALTH, AND SAFETY

Identify the specific Environmental, Health, and Safety requirements and considerations for the project. Describe how the team identifies, analyzes, and controls potential hazards in accordance with Integrated Safety Management principles to reduce the risk to human health and the environment. You may include or reference a project specific Health and Safety Plan.

7.1 Environmental compliance

Describe HOW the project team will ensure environmental compliance with project-specific requirements.

RFETS is fully committed to regulatory compliance and environmental cleanup and stewardship at RFETS. Activities on this project comply with the requirements of the following (non-inclusive) list:

- *RFCA*
- *Price Anderson*
- *Site Treatment Plan (STP)*
- *Federal Facility Compliance Agreement (FFCA)*
- *Residue Consent Agreement*
- *Toxic Substances Control Act (TSCA)*
- *Clean Air Act (CAA)*
- *Clean Water Act (CWA)*
- *Resource Conservation and Recovery Act (RCRA)*
- *National Pollutant Discharge Elimination System (NPDES)*
- *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*
- *McKinney Act*
- *Price-Anderson Amendments Act (PAAA)*
- *National Historic Preservation Act (NHPA)*
- *Occupational Safety and Health Act (OSHA)*
- *National Environmental Policy Act (NEPA)*

The project team evaluates each project activity for its NEPA compliance. Compliance with other generic environmental law requirements has been assured by Subject Matter Expert review of the project plan, and incorporated into the detail project work plan.

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7.2 Integrated Safety Management

Identify how the project team will implement the site Integrated Safety Management System[3] (ISMS). This is where the project team identifies the level of safety management appropriate for the project.

Kaiser-Hill's intends to close the Site as safely as possible by rigorous identification and control of project work hazards. supports this objective. The ISM manual addresses five functions:

1. *Define the Scope of Work*
2. *Identify and Analyze the Hazards*
3. *Identify and Implement Controls*
4. *Perform the Work*
5. *Provide Feedback*

[Project title] working plans address all of these functions.

Work scope detail definition and hazard identification requires worker, safety professional, etc. team walk downs to characterize and identify worker hazards associated with specific project activities. (Activities include modifications, maintenance, material moves, environmental restorations, construction, decontamination, dismantlement, etc.).

Kaiser-Hill implements the ISMS through K-H Requirements Manuals and subcontractor lower-level implementing procedures. The project team establishes requirements for individual activity hazards, providing necessary and sufficient controls. They should identify project requirements using the Kaiser-Hill and/or subcontractor manuals and procedures. It is not necessary to re-address the source documents; i.e., DOE Orders, regulations, etc. The Integrated Work Control Process (IWCP) establishes controls to prevent and/or mitigate identified work hazards.

Work execution shall include appropriate graded readiness demonstration. It may range from pre-job briefings (for routine low hazard work) to Operational Readiness Reviews. K-H Safety Systems and Engineering have been consulted to establish the initial activity safety assessment and readiness demonstration scope.

Table 2 identifies the application of ISMS processes for the [Project Title] project based on current information. The project management team developed Table 2. The project baseline plan assumes these processes. We will update this table, or make activity exceptions, if presented with new information during work performance.

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Table 2: [Project title] activity based work planning requirements define safety process.

Activity type (Scope of work)	Work Definition Process	Hazard Analysis Process	Control Process (Includes Readiness Demonstration)	Work Performance Process	Feedback Process
Routine maintenance	MAL	per MAL	Pre-job briefing POD	1-G32-IWCP-5	1-MAN-013-SIOM
Contamination zone characterization	IWCP	SME review	Team hazard assessment POD Pre-job briefing	COOP	1-MAN-013-SIOM
Glove box work (previously performed process)		SME review	Team hazard assessment Readiness demonstration	COOP	1-P45-MA-001 1-MAN-013-SIOM
Contaminated equipment dismantlement		*Activity Control Envelope*	SAR/BIO/BFO review	COOP	1-MAN-017-LL/GI-RM 1-MAN-013-SIOM
Category 2 building demolition activities	DOP	*Activity Control Envelope*	ORR	DOP	1-MAN-017-LL/GI-RM 1-MAN-013-SIOM

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8. WASTE MANAGEMENT AND MINIMIZATION

Identify the Waste Management requirements and considerations, including known waste categories and types. Include or reference a project specific Waste Management Plan as necessary.

9. STAKEHOLDERS

This section should describe how the project ties into the overall stakeholder and public involvement plans for the Site, and any unique factors for this project. This section should **not** repeat site-wide stakeholder communication activities; but rather show how this project ensures that it is covered by these activities.

Stakeholder involvement in this project is mandated by several laws, and is the policy of the DOE. Stakeholders include regulators, the public, project workers (including subcontractors), and anyone affected by the project. The Rocky Flats Plant Community Relations Plan[4] specifies the approach to overall community involvement. Some activities, such as National Environmental Policy Act (NEPA) compliance have other specific requirements.

9.1 Collaboration and Endorsement

Project plan endorsement results in projects where staff, management, clients and essential third parties all focus toward the same project objectives, support the team effort to accomplish the objectives, and commit to offer whatever assistance they must to successfully complete the project. Endorsement is not the same as approval. Endorsement means proactive commitment, not passive lack of objection.

9.1.1 Project team

Project team endorsement begins with joint development of the project charter and workplan. It occurs when those expected to do the work described in the plan carefully review what is expected of them, and commit to completing the project as planned.

9.1.2 Management

Management endorsement occurs when those controlling the corporate resources formally have the opportunity to improve the plan, and officially commit to supplying the resources necessary for success.

9.1.3 Internal support organizations

Internal support organizations are an extension of the project team, and achieve endorsement through having the opportunity to apply their expertise to the working plan, and formally commit to what is expected of them.

9.1.4 DOE

Client endorsement gives the client the opportunity to review, understand, and agree to the details of the scope and methods to accomplish the project. This most is the most important project endorsement, assuring that the workplan is properly focused.

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9.1.5 External parties (Public and regulators)

Third party endorsement for Rocky Flats projects includes the public, including special interest groups, CDH, and DNFSB.

9.2 *Ongoing collaboration*

Describe how the project team ensures ongoing collaboration to ensure endorsers participate throughout project performance.

Project reporting is a primary means for communication to the stakeholders on how the project is performing to plan. Review meetings allow the stakeholders the opportunity to interact with the project team for two-way communication. The project plan includes specific check points to ensure continuing endorsement.

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10. ORGANIZATION AND RESPONSIBILITIES

This section describes the [Project Title] project organization structure, functions, and interfaces.

List the Key Personnel assigned to the project, including: applicable Vice President(s), project manager, project engineer, lead designers, subcontract administrator, construction coordinator, and other key support personnel; include a description of duties and an organization chart; Identify any significant work that will be subcontracted and the relationship to the project team. If necessary, include or reference an Organizational Breakdown Structure (OBS), and a Responsibility Assignment Matrix (RAM). If the responsibility for project performance is to shift from one Vice President to another during the course of the project, include or reference a Transition Plan defining the deliverables and correspondence required to clearly mark the completion of commitments to the releasing Vice President and defining changes to project team membership, procedures, and deliverables.

10.1 Team Organization Structure

Describe the structural configuration of the team membership - on a simple project, such as a brief study, one or two team members may work independently most of the time. On larger, more complex projects, additional structure and organization may be necessary to manage multiple levels of authority, e.g., a sponsor team that deals with policy issues; leadership team that sets strategy and makes decisions; and task teams that deal with the actual definition and implementation of specific aspects of the work.

Describe how the team is connected to the larger organization of which it is a part

Figure 3 illustrates the structure of the [Project Title] team.

10.2 Team Processes

This section identifies project specific processes that the project team members must understand and follow. Refer to the procedures for the processes.

The process used by the project team follow the CH2MHILL Project Delivery Syste (PDS) methodology. These processes include:

- *Develop the work plan.*
- *Obtain project endorsement.*
- *Authorize work performance.*
- *Implement work.*
- *Measure and report work performance.*
- *Control work to the plan.*
- *Change the plan if necessary.*
- *Document work performance and results.*

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- *Communicate.*
- *Close the project.*

10.3 Responsibilities

The Contract Work Breakdown Structure (CWBS) assigns responsibility to a person for each element on the WBS. The responsibility depends on the level of the WBS. Managers at the lowest level of the WBS have the responsibility to plan and perform the work in the work package, and to report progress. They can authorize changes in the details of the work package that do not affect the PMB or Performance Measures. Changes that meet the Baseline Change Process thresholds must follow the BCP process, as described in P&I Work Instruction INST-002.

The WBS dictionary, Appendix A, contains the responsibility assignments for the project team members. The project team and all individuals with assigned responsibility have reviewed and agreed to the assignments. (Consider the following categories.)

10.4 Team Interfaces

Describe how the project team controls interfaces.

Interfaces with other projects include:

- ...
- ...
- ...

Interfaces with other site organizations include:

- ...
- ...
- ...

Special considerations for interfaces between buildings include:

- ...
- ...
- ...

Interfaces outside of the Rocky Flats organizations include:

- ...
- ...
- ...

Interfaces with DOE include:

- ...

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- ...
- ...

The project team controls interfaces by...

10.5 Subcontractor's Interfaces

This section defines the interface between the Kaiser-Hill [Project Title] project management team and subcontractors.

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Figure 3: The organization structure and functions of the [PROJECT TITLE] project team supports achieving the project vision.

11. PROJECT WORK BREAKDOWN STRUCTURE

All work at Rocky Flats is organized in accordance with the integrated site Work Breakdown Structure (WBS). The WBS covers the entire project through project closure.

Figure 4 illustrates the WBS for the [Project Title] project. The WBS design derives from the logical structure of the work. WBS responsibility is assigned using the CWBS.

The WBS Dictionary extends the work scope definition to several levels, and provides more detailed scope definition.

Appendix A provides the portion of the WBS applicable to the [Project Title] project.

Figure 4: The [Project Title] Work Breakdown Structure (WBS) provides a logical basis to organize work.

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12. BUDGET

The project team creates the overall life-cycle Budgeted Cost of Work Scheduled (BCWS) for the [Project Title] project. The BCWS derives from the BEST data-base. The data base represents the official cost estimate for the project. Table 3 illustrates the life cycle cost for the [Project Title] project.

Table 3: Life Cycle Estimate for the [Project Title] project.

Fiscal Year	Labor $	Non-labor $	Total FY $
Prior Fiscal Years			
FY 1998			
FY 1999			
....			
Total Baseline			
Contingency			
Escalation			
Project EAC			

Note: If necessary, identify BCWS by type of funds, e.g., GPP.

12.1 Basis and Validation

Identify the source of information for the project cost and schedule estimates, and the degree of reliability in those estimates.

Project cost estimates are included in the BEST database. All cost estimates within BEST have been validated by individual teams that do not contain the same people that do the work, led by the Kaiser-Hill P&I organizations. In addition, the project cost estimate was bench-marked against...

12.2 Financial Work Authorization

Assure that the project team understands the process for financial authorization of work.

The Kaiser-Hill project control system uses three levels of authorization:

1) *Authorization from DOE, RFFO to Kaiser-Hill,*

2) *Authorization from Kaiser-Hill to the prime subcontractors, and*

3) *Authorization from Kaiser-Hill and the prime subcontractors to lower-tier subcontractors.*

Authorization from DOE, RFFO to Kaiser-Hill -- Work authorization from DOE, RFFO to Kaiser-Hill is performed at least once annually, just prior to the beginning of the new fiscal year (execution year). This authorization takes two forms: issue and approval of a PBS, and modification to the Kaiser-Hill contract to establish funding authority and

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allow Kaiser-Hill to incur costs The PBS is issued at the project level, while funding authorization is made according to Budget & Reporting (B&R) code structure. (However, in FY98 essentially all funding may be one B&R code.) During the course of the execution year funding authorization is updated based either on release of incremental funding or as the result of a Site Change Control Board (SCCB) action.

Authorization from Kaiser-Hill to the Prime Subcontractors – Subsequent to receiving authorization from DOE, RFFO, Kaiser-Hill issues work authorization to the prime subcontractors. This authorization takes the form of a contract modification referred to as a "Procurement Authorization Document," or PAD. The subcontractors ability to incur costs is limited to the amount of the PAD. Thus, the PAD is modified periodically throughout the execution year. The PAD is issued at the lowest work breakdown structure level by which the prime subcontractor(s) will collect and accrue cost. However, due to late authorization from Congress, continuing resolution may be issued to continue work until formal budget authorization.

Authorization from Kaiser-Hill and the Prime Subcontractors to Lower-tier Subcontractors – These authorizations to so-called 3rd tier subcontractors take the form of purchase orders. Each purchase order establishes work scope, terms and conditions, and authorized cost.

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13. PROJECT SCHEDULE

Identify the various levels and purposes of project schedules.

Project schedules are created, maintained and statused with Primavera Project Planner (P3). This integrated project plan and management tool aids the project team in defining and controlling to the critical path schedule. The lowest level of the WBS has clearly defined inputs and outputs. The activities that comprise the lowest WBS element process the inputs to create the deliverable result.

(Note: The Project Execution Plan schedule should be the PMB schedule for the project; not a working schedule.)

13.1 Performance Measurement Baseline Schedule

Identify the project baseline schedule.

Figure 5 illustrates the [Project Title] project summary schedule. It aligns with the Closure Project Baseline (CPB) schedule. The CPB includes the life-cycle schedule of all the work scope included in the Focus on 2006 Plan. Schedule detail reflects the "Rolling Wave" method of scheduling, which produces a decreasing level of detail as time is extended from the current Fiscal Year (FY).

Kaiser-Hill updates the CPB periodically as a major update revision. It is published on CD-ROM, and therefore not subject to inadvertent modification. The CPB includes the BEST cost estimate detail. The cost estimate detail also contains the basis for the cost estimates. The current year CPB at the start of the fiscal year, designated the Performance Measurement Baseline (PMB) is the initial baseline plan for performance measurement. It is modified through the year by approved BCPs, and designated the Current Working Baseline (CWB) schedule.

13.2 Working plans

Assure the team understands that day-to-work uses the working schedule, not the baseline schedule.

The Project team develops detailed working plans to guide day-to-day project work. The working plans will achieve stretch performance goals. The working plans should also improve management of uncertainty. They should reduce activity duration to the 50% probability times (normally, approximately one half of the high probability activity times). They should insert a time 'buffer,' representing the collective schedule margin, prior to performance milestones. P&I modifies the CWB schedule to conform to these challenge working schedules.

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[THIS SHOULD BE A HIGH LEVEL SUMMARY SCHEDULE FOR THE LIFE CYCLE OF THE PROJECT, SHOWING THE CRITICAL PATH FOR THE PROJECT. NOTE THAT THE PROJECT CRITICAL PATH NEED NOT BE ON THE RFCP CRITICAL PATH.]

Figure 5: The [Project Title] project Critical Path schedule supports the overall Rocky Flats Closure Project plan. *The plan includes all internal and external interfaces.*

14. PROJECT CONTROLS, REPORTING, AND DOCUMENTATION

List essential documentation such as a Security Plan, Environmental Documentation, Safety Screens, Safety Plan, Acquisition Strategy Plan, Configuration Management Plan, Quality Assurance Plan, or any other planning documents necessary to define and execute the work. Identify special reporting requirements, periodic meetings and reviews, and other control processes that are planned during project execution. A reporting and meeting matrix may be included. Refer back to figure 2.

The following topics are areas of special interest for the [Project Title] project.

[CHANGE THE CONTENTS OF THIS SECTION TO FIT YOUR PROJECT. THE MATERIAL BELOW IS ONLY FOR YOUR INFORMATION TO DRAW FROM...DELETE AS APPROPRIATE, AND ADD MATERIAL FOR YOUR PROJECT AS NEEDED.]

14.1 Quality Management

Identify the project-specific quality requirements and how the project team will implement them.

The Site Quality Assurance Manual[5] defines the Quality Management System for the RFCP. The system includes assignment of responsibility for quality, the governing quality documents, and the different roles--management, performance, and assessment--to obtain and ensure quality performance and product. The Quality Assurance Manual is consistent with DOE G-830.120-Rev. 0, Implementation Guide for use with 10CFR 830.120 Quality Assurance. In addition to the Site Quality Assurance Manual, each Principal Subcontractor has a company specific Quality Assurance Program Plan (QAPP.)

Specific quality requirements for this project are....

[INCLUDE DISCUSSION HERE OR REFERENCE TO A PROJECT SPECIFIC QAPP OR QAPJP, AS APPROPRIATE.]

Codes and Standards

Applicable codes and standards for this project include:

[DO NOT LIST ALL THE WORLDS CODES AND STANDARDS, NOR ALL OF THE ONES COVERED THROUGH SITE PROGRAMS. ONLY LIST THOSE OF SPECIAL IMPORTANCE TO YOUR PROJECT, WHICH YOU NEED TO DRAW ATTENTION TO FOR YOUR PROJECT TEAM.]

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Projects may invoke portions of one more QAPPs through their PMPs, as required by the scope of the work. This is usually best accomplished using a matrix in the Project Management Plan, or with a project specific QAPP. Either method must include the following, either by description or reference:

1. Invoke the Quality Assurance infrastructure documents and other quality requirements documents as applicable to the Program/Project.
2. Invoke the requirements of applicable codes, standards, and other regulatory requirements.
3. Invoke additional quality assurance requirements as required by contractual commitments and/or Company management to assure efficient, timely, and cost-effective attainment of Program/Project objectives.
4. Identify the specific groups directed to perform tasks on the Program/Project, defines their respective quality assurance responsibilities, and delegates the authority to accomplish these tasks.
5. Define the method and process by which participating organizations interface for quality affecting functions.
6. Identify the structures, systems, components, and related activities that are within the scope of the quality assurance program.
7. Establish the effective date and document the changes in the QAPP.
8. Identify the procedures that implement compliance with the applicable sections of the QAPP, and any special quality assurance requirements.
9. Assure that the QAPP is distributed to and maintained by organizations having assigned Program/Project responsibilities.

14.2 Work Instructions

Refer the project team to applicable work instructions; both site-wide and project specific. Use this section to clarify applicability or grade the application of any site-wide instructions.

Kaiser-Hill uses a comprehensive set of written policies and procedures to guide work performance. The Quality Assurance Program Infrastructure Document List[6] relates these policies and procedures to specific quality requirements. It also designates the organization responsible to generate and maintain the document.

A set of P&I Standards and Work Instructions describe the project planning and control system. The Work Instructions provide detail on how to use the systems. Tables 3 and 4 of the RFCP Project Management Plan[7] list the P&I Standards and Work Instructions. They are also available on the P&I Intranet Home Page, and through document control.

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14.2.1 Project Meetings

The [Project Title] project uses weekly and monthly meetings to enhance project communication.

The standard agenda for weekly meetings is:

- ...
- ...
- ...

The standard agenda for monthly meetings is:

- ...
- ...
- ...

In addition, we hold ad-hoc meetings as necessary to communicate or problem solve. All ad-hoc meeting must have a prior agenda and issue meeting minutes, including actions and commitments as applicable. Meeting minutes are logged and maintained in the project file.

14.2.2 Records Management Procedures

Describe any project-specific records management procedures.

DCI provides the Site's Document Control and Records Management programs and services, with oversight by Kaiser-Hill. Kaiser-Hill provides Engineering Document Control. Principal subcontractors are responsible to assure adherence to the Site Document Control and records Management Programs through their company specific Quality Assurance Program Plans (QAPPs). Individual projects can identify project specific requirements through their project management plans.

The Correspondence Manual and procedure 1-11000-ADM-003, Correspondence Control Program, describe how to control documents.

Procedure 1-77000-RM-001, Records Management Guidance for Records Sources, describes how the Kaiser-Hill Team controls records. This procedure establishes the requirements and responsibilities of Site record sources for the identification, generation, correction, authentication, protection, and turnover of records for all media.

14.2.3 Financial Procedures

Describe any project-specific cost control procedures.

PMB budgets are automatically authorized through the CWBS. The project team monitors cost to plan to ensure that project budget is managed

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14.3 Control

The project team shall status the project schedule at least once a month. Projects on the Site critical path, or projects linked to critical milestones may require more frequent status. The project team performs a complete analysis of the project performance and plan at least once a month.

14.3.1 Status Measurement

Describe how the project team will collect and report project status information.

Project status includes development and collection of status data, and ensuring that the schedule reflects the current operating logic, such as pertinent performance measures and milestones. P&I Work Instructions INST-122 and 123 describe status activities.

Activity performers input two pieces of information to define schedule status. They input this information on the working schedule. P&I rolls the status data up to the CWB-Statused schedule. Percent complete quantifies the amount of the work that is complete, as a fraction of the total work. Performers should derive percent complete from objective measures of activity output. The analysis uses percent complete to calculate the Budgeted Cost of Work Performed (BCWP). In addition, performers must input the remaining duration estimated for each task, which updates the future schedule.

Remaining activity duration may change the CWB-S schedule activity duration. The schedule process adds the remaining duration to time now. The schedule then recalculates successor activities. This may extend the project critical path, or change the critical path if activities on previous non-critical paths are delayed.

The financial system collects actual cost in accordance with the Work Breakdown Structure. In addition, project managers must ensure that costs incurred but not yet paid, such as subcontracts, are accrued. The enables effective collection and reporting of the Actual Cost of Work Performed (ACWP).

14.3.2 Analysis

Monthly analysis of project performance determines the management actions necessary to meet the project scope, schedule and cost requirements, and to look for ways to accelerate the project. Triggers for project analysis include:

- *Status (comparison of SWB-S to PMB) shows critical path behind schedule any amount.*
- *Status (comparison of CWB-S to PMB) changes the critical path.*
- *Statused schedule non-critical paths show very little, zero, or negative float. (Comparison of CWB-S to PMB. We do not use PMB float data alone, as it may mislead performers)*
- *Statused schedule moves milestones (including Performance Measures) beyond target dates.*

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- *Objective performance measures below plan (e.g, liters of liquid processed vs. time.)*
- *Negative project cost variance. (Note that earned value baseline does not include contingency or escalation.)*
- *Project EAC exceeds estimated EAC (including contingency and escalation.)*
- *New scope information.*
- *New project interface information.*
- *New resource availability information.*
- *Project risk factor trigger.*

This analysis leads to planned actions to eliminate variances. If appropriate (due to potential magnitude of impact or lack of clarity on the actual cause), the project team performs a root cause analysis to support response action decisions.

14.3.3 Reports

Kaiser-Hill uses a consistent format to report monthly progress against the baseline plan. Project reports include schedule comparison, milestone, and earned value information necessary to control the projects. Standard reporting extrapolates project Estimates At Completion (EAC) based on the earned value to date, in accordance with Work Instruction INST-127. Variance reports describe the cause of technical, cost, or schedule variances above thresholds determined by the appropriate Kaiser-Hill PBS/WAD Manager. When necessary, the PBS/WAD Manager plans and executes actions to resolve variances. Standards S-05, 08, 09 and 13 and Work Instructions INST-006, 122, and 123 describe the status reporting process and formats.

Due to the fiscal year funding provision for the RFCP, the performance plan is 'zeroed out' at the beginning of each fiscal year. P&I statuses performance on a cumulative basis throughout the fiscal year.

Work Instruction INST-006 describes the Progress Tracking System used to provide reports in the format desired by DOE.

Safety performance information is published monthly. It includes trends of the key safety performance measures.

Table 4 presents the list of Project documents and the approval, transmittal, and customer distribution requirements for the major project documents.

Table 4: Project document origination, approval, and distribution matrix specifies minimums.

Document	Frequency	Creator	Approver	Distribution
Project Plan	One time	Project Team (P&I support)	Project Manager Responsible 10-speed Director, P&I	Project Team Kaiser-Hill managers DOE-RFFO
WBS Dictionary	As needed	Project Team (P&I support)	P&I Manager SCCB or ICCB	Intranet
Project Schedule (Primavera)	Baseline-one time	Project Team (P&I support)	Project Manager Responsible 10-speed	Intranet
Project Cost Estimate [BEST]	Life cycle-one time Annual work plan	Project Team (P&I support)	Project Manager Responsible 10-speed	Intranet CD-ROM
PBS	Annual	Project Team	Project Managers Responsible 10-speed	DOE Project, PBS, and WAD managers
BCPs	As needed	Project Team	P&I SCCB or ICCB	SCCB
Monthly Reports	Monthly	Project Team P&I (support)	Project Manager	Project Team DOE-RFFO Contractor managers
Project Deliverable Reports	As scheduled	As assigned	Project Manager	As appropriate
Performance Measure Completion Reports	As required	PBS/WAD Manager	Responsible 10-speed DOE-RFFO	K-H contracts K-H P&I DOE

14.4 Change Management

Describe the site-wide and project-specific change management processes.

Kaiser-Hill P&I Standard S-01 and Work Instruction INST-002 define the RFCP change control process. The process applies to changes to the baseline plan. All baseline changes require documented approval by either the ICCB or SCCB prior to implementation. All baseline change documents submitted to DOE/RFFO are processed and approved through the K-H Contractor Change Control Coordinator.

As a control mechanism to define the Types of administrative processing and management approvals required for BCPs, Control Types are categorized as Type I, II, and Administrative.

Type I or External BCP: These changes require the SCCB Chairperson approval prior to implementation.

- *A DOE directed change.*
- *A change involving an cost reduction proposal (CRP).*
- *An individual cost change proposal that exceeds $500K.*
- *A cost change proposal where the cumulative change to the baseline established at the beginning of the current fiscal year, in a WAD, exceeds $1,000K. (Exceptions: Individual changes with a baseline impact under $50K that would otherwise be a Type II or where RFFO has set a higher threshold for a specific WAD).*
- *A cost change proposal that breaches an ECOR (usually a 4-digit B&R) level.*
- *A scope change proposal that negatively impacts completion of:*
  - ⇒ *an RFFO WAD milestone*
  - ⇒ *a Performance Measure*
  - ⇒ *Federal or State regulatory requirements or commitments*
  - ⇒ *a Defense Nuclear Facilities Safety Board commitment*
  - ⇒ *a Construction Project*
- *Additional work scope and the associated cost change request is to be placed on the integrated priority unfunded list.*

Type II or Internal BCP: These are changes at the WAD level such as internal milestones or WAD and work plan/WBS element changes that do not breach Type I thresholds of the overall WAD scope, schedule (milestone) or cost baseline.

Administrative: These are internal changes within/between WBS elements which do not alter the approved Baseline of the WAD scope, cost, or schedule, and are below the WBS control level of the WAD. Example: adding a level six WBS element to a level five-controlled WAD and changes such as resource or cost center re-allocations within WBS elements, that do not alter WAD level scope, cost, or schedule. An administrative change form is used as a control for upload.

15. Reference Information

15.1 Acronyms

[ADD OR DELETE AS NEEDED]

ACE	Activity Control Envelope
ACWP	Actual Cost of Work Performed (Actuals)
BCP	Baseline Change Proposal
BCWP	Budgeted Cost of Work Performed (Earned Value)
BCWS	Budgeted Cost of Work Scheduled (Budget)
BFO	Basis for Operation
BIO	Basis for Interim Operation
CAB	Citizens Advisory Board
CDPHE	Colorado Department of Public Health and Environment
CPB	Closure Project Baseline
CPM	Critical Path Method (schedule)
CERCLA	The 'Superfund' Law
COOP	Conduct of Operations
CV	Cost Variance (BCWP-ACWP)
CWBS	Common Work Breakdown Structure
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
EAC	Estimate at Completion (Funds required to cover past and future , normally Fiscal Year, scope as represented in the BAC)
EIS	Environmental Impact Statement
EV	Earned Value (BCWP)
IHSS	Individual Hazardous Substance Site
ICCB	Internal Change Control Board (Kaiser-Hill Chaired)
ISMS	Integrated Safety Management System
IWCP	Integrated Work Control Process
PMB	Life-Cycle Baseline
LOE	Level of Effort
MAL	Master Activity List
MOU	Memorandum of Understanding
ORR	Operational Readiness Review
P&I	Planning and Integration (Kaiser-Hill Organization)
PCS	Project Control System
PEP	Project Execution Plan

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P&I	Planning and Integration
PMB	Performance Measurement Baseline (time phased budget which EV is claimed against)
PTS	Progress Tracking System
RCRA	Resource Conservation and Recovery Act
RFCA	Rocky Flats Cleanup Agreement
RFCP	Rocky Flats Closure Project
RFETS	Rocky Flats Environmental Technology Site
RFLII	Rocky Flats Local Impacts Initiative (Public Group)
SOW	Statement of Work
STP	Site Treatment Plan
SV	Schedule Variance (BCWP-BCWS)
SCCB	Site Change Control Board (RFFO Chaired)
WBS	Work Breakdown Structure
WAD	Work Authorization Document (contractual agreement between RFFO and Kaiser-Hill)
WPD	Work Planning Document (precursor to the WAD documents intended plan for RFFO approval)

15.2 References

[1] Kaiser-Hill Company, Planning and Integration, Rocky Flats Closure Project (RFCP) Project Management Plan, October, 1997

[2] State of Colorado Docket # 96-07-19-01, Final Rocky Flats Cleanup Agreement, July 19, 1996

[3] Kaiser-Hill Document 1-MAN-016-ISM, INTEGRATED SAFETY MANAGEMENT SYSTEM AMNUAL, Revision 0, 9/30/97

[4] Rocky Flats Plant Community Relations Plan, U.S. Department of Energy, December 1, 1991

[5] Kaiser-Hill Company, LLC, ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE QUALITY ASSURANCE MANUAL, ADC-96-00042, 2/2/96

[6] Site Quality Council, Quality Assurance Program Infrastructure Document List, Revision 2, 5/9/96

[7] Kaiser-Hill, Rocky Flats Closure Project (RFCP) Project Management Plan, October, 1997

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Table 1
Project Execution Plan (PEP) Checklist

This checklist serves to identify potential project requirements that must be considered for planning development of the PEP. Check (Yes/No) the included column to note consideration of the topic during the planning process. Add comments to the Approach/Assignment column to document the reason for the inclusion decision.

Section	Section Header/Details	Included (Yes/No)	Approach/Assignment
	Cover/Title Page		
	PEP Approval Signature Page		
	Applicable Vice President(s)		
	Project Manager		
	User		
	K-H Oversight		
	Engineering Manager		
	DOE (if applicable)		
i	Revision Page		
ii	Table of Contents		
1.0	PROJECT IDENTIFICATION		
	Official Title		
	WBS No., WAD No., ADS No., etc.		
	Funding source and fund type		
	Relation to DOE/Program Strategic Plan		
	Relation to Focus 2006		
	Relation to Integrated Site Baseline (ISB)		
	Project history and background		
	Building descriptions and history.		
	Interfaces with other projects		
	Prior year project identifiers		
	Justification summary		
	Life cycle cost analysis		
	Cost payback analysis		
	Regulatory drivers		

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Section	Section Header/Details	Included (Yes/No)	Approach/Assignment
2.0	PROJECT SCOPE		
	Scope summary description		
	Technical design criteria		
	Deliverable descriptions		
	Siting selection factors/criteria		
	Siting evaluation factors		
	RFETS Closure Plan Relationship		
	Project interfaces, dependencies		
	D&D Long-term remediation objectives		
	D&D related scope, e.g. RCRA units		
3.0	TECHNICAL APPROACH		
	Description of work (IWCP)		
	Description of work (non-IWCP)		
	Siting alternative analysis		
	Trade-off study analyses		
	Potential use of new technologies		
	D&D Plan		
4.0	PERFORMANCE CRITERIA		
	Technical performance characteristics		
	Performance measures		
	Federal, State Laws, Order requirements		
	Regulatory constraints		
	Environmental issues, determinations		
	Abatement requirements: lead, asbestos		
	Acceptance criteria		
	Waste disposal criteria		
	Contamination cleanup criteria		

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Section	Section Header/Details	Included (Yes/No)	Approach/Assignment
5.0	PROJECT RISK MANAGEMENT		
	Schedule assumptions		
	Scope assumptions		
	Performance assumptions and risks		
6.0	METHOD OF ACCOMPLISHMENT		
	Davis-Bacon Decision		
	Engineering		
	Construction		
	Procurement		
	Acquisition strategy criteria		
	Government-furnished equipment		
	Types of contracts (fixed-price, etc.)		
7.0	ENVIRONMENTAL/HEALTH/SAFETY		
	Potential hazards identified		
	Potential hazards analyzed per ISM		
	Assess risk to human health /environment		
	Health and Safety Plan		
	Action Description Memorandum		
	EIS Implementation Plan		
8.0	WASTE MGT. & MINIMIZATION		
	Identify Waste Management requirements		
	Identify known waste categories and types		
	Waste Min./Pollution Prevention Plan		
	Waste Management Plan		
9.0	STAKEHOLDERS		
	Schedule onsite and offsite meetings		
	Address socioeconomic impacts		
	Evaluate project vulnerabilities		
	Public Participation Plan		

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Section	Section Header/Details	Included (Yes/No)	Approach/Assignment
10.0	ORGANIZATION/RESPONSIBILITIES		
	Key personnel		
	Organizational Breakdown Structure		
	Responsibilities Assignment Matrix		
	Subcontract relationships		
11.0	PROJECT WBS		
	WBS description/rationale		
	WBS relationship (appendix chart)		
	WBS dictionary (appendix)		
12.0	BUDGET AND COST PLAN		
	Funding determination		
	Funding priority		
	Contingency/risk level		
	Basis of estimate explanation		
	Life Cycle Cost Estimate		
	Alternative funding analysis		
	Estimate Breakdown (appendix)		
	Capital and expense costs segregated		
	Value engineering impact to estimate		
	Table of earned values		

Section	Section Header/Details	Included (Yes/No)	Approach/Assignment
13.0	PROJECT SCHEDULE		
	Gantt Chart (appendix) reference		
	Critical Path (appendix) reference		
	Logic diagram (appendix) reference		
	D&D technical sequencing requirements		
	Milestones:		
	DOE Critical Decisions		
	Performance Milestones		
	Construction substantially complete		
14.0	PROJECT DOCUMENTATION, REPORTING, AND CONTROLS		
	Management control description		
	Authorization requirements		
	Change control thresholds		
	Special reporting requirements		
	Meeting schedule		
	Periodic review schedule		

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Section	Section Header/Details	Included (Yes/No)	Approach/Assignment
15.0	REFERENCE INFORMATION		
	Work Breakdown Structure (WBS)		
	Organizational Breakdown Structure		
	Responsibility Assignment Matrix		
	Estimate Breakdown		
	Schedule		
	Documentation & Reporting Matrix		
	Checklist (as applicable)		
	File Management Checklist		
	PEP Checklist		
	D&D Checklist		
	Technical references		
	Conceptual Design Criteria		
	Drawings		
	Statement of Work		
	Support plans		
	Security Plan		
	Health & Safety Plan		
	Configuration Management Plan		
	Quality Assurance Plan		
	Responsible VP Transition Plan		
	Value Engineering Plan		
	NEPA documentation (EA/EIS/FONSI)		
	Value Engineering Plan		
	Feasibility studies		
	Property Management Disposition Plan		
	Hazard and Risk Management Plan		
	D&D support plans:		
	Waste Management Plan		
	Demolition Plan and Survey		
	Characterization Plan		
	Decontamination Plan		
	Stakeholder Issues Mgmt Plan		
	RCRA Unit Closure Description Doc.		
	Hazard Assessment Summary		
	Technical Sequencing Flow Chart		
	Spill/Release Controls		

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Table 2

Standard Cost Collection Template For D&D Projects

This cost collection template serves as the prescribed menu of cost elements to be captured for all D&D projects . The following cost elements must be reflected in the project specific PEP.

01 CHARACTERIZATION
As applicable, this element would cover all the task specific direct labor, equipment, materials, and direct nonlabor (A5x) costs associated with the characterization of Decommissioning projects. The scope of this element would include, but not be limited to, activities such as characterization planning, lead analysis, concrete coring, characterization technical, admin, and analytical support, etc.

02 RAD.OPERATIONS/RAD.ENGINEERING
As applicable, this element would cover all the task specific direct labor, equipment, materials, and direct nonlabor (A5x) costs associated with the radiological planning and execution of Decommissioning projects. The scope of this element would include, but not be limited to, RCT support, rad. operations, rad surveys, gridding, in process rad surveys, final rad. surveys, etc.

03 ASBESTOS ABATEMENT
As applicable, this element would cover all the task specific direct labor, equipment, materials, and direct nonlabor (A5x) costs associated with the asbestos abatement of Decommissioning projects. The scope of this element would include, but not be limited to, the mitigation and/or removal of asbestos covering ducts, pipes, floor/ceiling tile, building siding and roof material, etc.

04 STRIPOUT
As applicable, this element would cover all the task specific direct labor, equipment, materials, and direct nonlabor (A5x) costs associated with Decommissioning projects. The scope of this element would include, but not be limited to, the decontamination of building interior/exterior surfaces, equipment, gloveboxes, and hardware, removal of equipment and furniture, removal of chemicals and process equipment, removal of distributive systems, equipment surveys, disassembly/dismantlement of gloveboxes, piping/ducting, etc. , isolation, termination, and removal of utility systems, equipment surveys, site preparation for size reduction, etc.

05 DEMOLITION
As applicable, this element would cover all the task specific direct labor, equipment, materials, and direct nonlabor (A5x) costs associated with building/cluster demolition. The scope of this element would include, but not be limited to, the demolition of the roof, walls, and building structure to the floor slab or foundation, size reduction and the packaging of gloveboxes, equipment, materials, piping, ducting, etc. for subsequent

turnover to Waste Management for disposal, clean up of the site, establishment of building rubble loading or roll off areas, etc

06 DISPOSAL

As applicable, this element would include all the task specific direct labor, equipment, and materials and the direct nonlabor cost (A5x) associated with disposal phase of Decommissioning projects. The scope of this element would include, but not be limited to, activities such as the appropriate disposal of the building/cluster rubble and debris generated in the demolition phase - see 05 above. Disposal includes, for example, subcontract costs associated with disposal of the building rubble in a sanitary landfill .

07 MATERIALS/SUPPLIES

As applicable, this element would cover the costs of the miscellaneous and disposable equipment, materials, and supplies associated with the planning and execution of Decommissioning projects. This would include, but not be limited to, office supplies, computers, PPE, tent materials, plastic sheeting, etc.

08 PM, CM, ENGINEERING

As applicable, this element would cover all direct labor, equipment, materials, and the direct non labor (A5x) costs associated with the planning, management, execution, documentation and reporting of Decommissioning projects. This element would include, but not be limited to, activities such as training, procurement, security, QA, preparation of the required project decision and permitting documents, oversight and inspection, project engineering, PM/CM, etc.

APPENDIX 5

SUGGESTED SUBCONTRACTOR PERFORMANCE EVALUATION

SUGGESTED SUBCONTRACTOR PERFORMANCE EVALUATION

TABLE OF CONTENTS

Subcontractor Performance Evaluation

INSTRUCTIONS

SUGGESTED D&D/CONSTRUCTION SUBCONTRACTOR PERFORMANCE EVALUATION

1.0 INTRODUCTION

Given the bias of Closure Projects Integration (CPI) to subcontract as much D&D and assigned construction work out as possible, it is incumbent upon us to objectively evaluate subcontractor performance. It is the goal of CPI to only rehire those D&D and construction lower tier subcontractors whose evaluation is "Good" or :Excellent". This need is particularly important when evaluating our major or significant AECCM subcontractors, e.g. RFEC, DWRC. We do a disservice to ourselves and the lower tier subcontractors if we do not define our expectations up front, share them with the subcontractor, and evaluate performance against those expectations. The suggested D&D and construction subcontractor evaluation system, using a graded approach, is nominally based on 80% objective performance indicators and 20% subjective performance indicators. The product of the suggested performance evaluation provides a weighted assessment of six indicators of D&D and construction subcontractor performance using both quantitative and qualitative factors.

The recommended six performance indicators and their weighting values are as follows: (Note: each project, using a graded approach, can adjust the recommended performance indicator description and their respective weighting values to their specific project needs if warranted and/or applicable.)

- Safety and Health Performance Index @ 25%.
- Schedule Performance Index @ 25%.
- Quality Performance Index @ 25%.
- Budget Performance Index @ 15%.
- Submittal Performance Index @ 5%.
- Management Performance Index @ 5%.

Nominally, each of the above performance indicators is further subdivided into an 80% objective performance measure fraction and a 20% subjective portion. A complete schedule of values is shown in Table 1. Table 2 is an example evaluation using the Table 1 schedule of values . Following are descriptions of the performance indicator for each of the six performance areas, their weighting values, and their scoring/grade criteria:

2.0 PERFORMANCE MEASURES/INDICATORS

2.1 SAFETY AND HEALTH PERFORMANCE INDEX (25%)

2.1.1 S&H OBJECTIVE PERFORMANCE MEASURE (20%)

There are three suggested component Safety and Health performance indicators which make up the quantitative portion of the S&HPI. These industry standard performance indicators measure the subcontractor's safety /performance to national average rates.

Following is a description of the three S&H component performance indicators and their weighting values:

- OSHA Reportable Rate (50%)
  National Average Rate

- Lost Work Case Rate (30%)
  National Average Rate

- Lost Work Day Rate (20%)
  National Average Rate

S&HPI scoring values and descriptive grades for each of the performance indicators are as follows:

<0.85 = Excellent (3 base performance points)
>0.85 - 0.95 = Good (2 base performance points)
>0.95 - 1.05 = Fair (1 base performance point)
>1.05 = Unsatisfactory (0 base performance points)

2.1.2 S&H SUBJECTIVE PERFORMANCE INDICATOR (5%)

The qualitative portion of the S&HPI is based on the performance criteria such as the subcontractor's safety attitude and practices, enforcement of safety requirements, compliance to their Safety Plan, etc. Subcontractor performance would be scored as follows:

Excellent = 3 base performance points
Good = 2 base performance points
Fair = 1 base performance point
Unsatisfactory = 0 base performance points

2.2 SCHEDULE PERFORMANCE INDEX (25%)

2.2.1 SCHEDULE OBJECTIVE PERFORMANCE MEASURE (20%)

The quantitative portion of the Schedule Performance Index (SPI) is calculated as follows: (Note that different completion indicators, e.g., PA&T can be established if warranted.)

$$SPI = \frac{\text{Actual work day duration from start to task substantially complete}}{\text{Baseline work day duration from start to planned date task substantially complete}}$$

SPI scoring values and descriptive grades are as follows:

<0.95 = Excellent (3 base performance points)
≥0.95 - 1.00 = Good (2 base performance points)
>1.00 - 1.05 = Fair (1 base performance point)
>1.05 = Unsatisfactory (0 base performance points)

As an example, a project with a Baseline planned work day duration of 100 days to substantial completion that was actually substantially complete in 106 work days has an SPI of 1.06. This indicates that it is more than 5% behind schedule and therefore the schedule performance is "Unsatisfactory" with 0 base performance points earned. Schedule factors outside the control of the Subcontractor, e.g. building closures, would be excluded from the SPI calculation and the baseline work day duration adjusted accordingly. Conversely, work days would be added to the completion duration on a one for one basis if the subcontractor arbitrarily chose to start the task later than the agreed upon start date. In other words, even though the task was completed in the agreed upon 100 work days, but the task start was arbitrarily delayed 6 days, the SPI = $\frac{100 + 6}{100} = 1.06$

2.2.2 SCHEDULE SUBJECTIVE PERFORMANCE INDICATOR (5%)

The qualitative portion of the SPI would be based on the performance criteria such as subcontractor's schedule awareness of the critical path and milestones, management of resources to promptly address, control, and resolve schedule problems, etc. Subcontractor performance would be scored as follows:

Excellent = 3 base performance points
Good = 2 base performance points
Fair = 1 base performance point
Unsatisfactory = 0 base performance points

2.3 QUALITY PERFORMANCE INDEX (25%)

2.3.1 QUALITY OBJECTIVE PERFORMANCE MEASURE (20%)

The quantitative portion of the QPI is suggested to be determined from a comparison of the adjusted number of measurable or valid Non Conformances/NCRs at substantial completion of a task versus the "baseline" number of NCRs. There are some projects where a baseline number of 20 NCRs would be reasonable over the performance period of the task . For other tasks, 0 or 1 NCRs might be a reasonable baseline number. (For some projects, a better quality measure may be developed from a baseline value for ECRs or CFCs and this performance measure should be revised accordingly.)

Since the cost/schedule impacts to a task may vary significantly, due to the resolution of an NCR, a graded multiplier ranging from 1 to 10 may be applied to the absolute number of valid NCRs to account for these impacts. A 1 multiplier could be used where the resolution impacts to cost/schedule are "minor" or "insignificant" whereas a 10 multiplier may be applied to the absolute number when the resolution impacts to cost/schedule are "major" and "significant". Through the use of this graded NCR multiplier, the evaluator can make some discretionary adjustments to the QPI so as to account for the cost/schedule impacts associated with the resolution of a Non Conformance/NCR.

In any event, using a graded approach, the Project Manager will establish, for this performance indicator, a baseline number of NCRs to measure subcontractor quality performance. The objective QPI will be calculated as follows:

$$QPI = \frac{\text{Adjusted number of actual NCRs at task substantially complete}}{\text{Baseline number of NCRs planned at task substantially complete}}$$

QPI scoring values and descriptive grades for each of the performance indicators are as follows:

<0.90 = Excellent (3 base performance points
≥0.90 - 1.15 = Good (2 base performance points)
>1.15 - 1.30 = Fair (1 base performance point)
>1.30 = Unsatisfactory (0 base performance points)

As an example, if a project had 20 NCRs as a baseline, but actually had 25 NCRs at task completion, it would have a QPI of 1.25 or a performance rating of Fair. This would earn 1 base performance point for Quality performance.

2.3.2 QUALITY SUBJECTIVE PERFORMANCE INDICATOR (5%)
The qualitative portion of the QPI would be based on performance criteria such as the overall quality of the subcontractors workmanship, conformance to requirements and customer expectations, resolution of quality issues, etc. Subcontractor performance would be scored as follows:

Excellent = 3 base performance points
Good = 2 base performance points
Fair = 1 base performance point
Unsatisfactory = 0 base performance points

2.4 BUDGET PERFORMANCE INDEX (15%)
2.4.1 BUDGET OBJECTIVE PERFORMANCE MEASURE (12%)
The quantitative portion of the Budget Performance Index (BPI) is calculated as follows:

$$BPI = \frac{\text{Actual cost obligated at task completion}}{\text{Bid cost + approved changes (approved subcontract construction baseline value)}}$$

BPI scoring values and descriptive grades are as follows:

<0.95 = Excellent (3 base performance points)
≥0.95 - 1.00 = Good (2 base performance points)
>1.00 - 1.05 = Fair (1 base performance point)
>1.05 = Unsatisfactory (0 base performance points)

As an example, for a project that has an actual/obligated cost at task completion of $98 versus a baseline cost of $100, the BPI is 0.98. This BPI earns the project 2 base performance points for budget performance and a performance rating of "Good". Cost factors outside the control of the Subcontractor will be excluded from the BPI calculation.

2.4.2 BUDGET SUBJECTIVE PERFORMANCE INDICATOR (3%)

This portion of the BPI evaluation is based on a subjective evaluation of the subcontractor's ability to effectively and efficiently control, document, report, and manage the project costs. Subcontractor performance would be scored as follows:

Excellent = 3 base performance points
Good = 2 base performance points
Fair = 1 base performance point
Unsatisfactory = 0 base performance points

2.5 SUBMITTAL PERFORMANCE INDEX (5%)

2.5.1 SUBMITTAL OBJECTIVE PERFORMANCE MEASURES (4%)

There are two component submittal performance indicators which make up the quantitative portion of the Submittal Index (SI). The two component Submittal performance indicators are related to the timeliness of the submittals and the first time acceptability of the submittals. Following is a description of the component performance indicators and their weighting values:

- **Scheduled Submittal Index (50%)**
  The SSI is the number of submittals received on/or ahead of schedule divided by the total number of submittals planned.

- **Submittal Acceptance Index (50%)**
  The SAI is the number of submittals accepted the first time divided by the total number of submittals planned.

The scoring values for each of these component performance indicators and their descriptive grades is as follows:

1.00 = Excellent (3 base performance points)
0.97- <1.00 = Good (2 base performance points)
0.95 - <0.97 = Fair (1 base performance point)
<0.95 = Unsatisfactory (0 base performance points)

As indicated above, 50% of this performance indicator is concerned with the received submittals being acceptable to the customer the first time. As an example, if 24 of the 25 planned submittals are acceptable to the customer the first time, the SAI would be 0.96. This would earn 1 base performance point and a performance rating of "Fair" for Submittal Acceptance.

2.5.2 SUBMITTAL SUBJECTIVE PERFORMANCE INDICATOR (1%)

The qualitative portion of Submittal performance would be based on performance criteria such as their willingness to promptly correct and resubmit unsatisfactory submittals, etc. Subcontractor performance would be scored as follows:

Excellent = 3 base performance points
Good = 2 base performance points
Fair = 1 base performance point
Unsatisfactory = 0 base performance points

2.6 MANAGEMENT PERFORMANCE INDEX (5%)

The Management Performance Index (MPI) is 100% subjective and is based on the qualitative performance evaluation of the subcontractor's management". As much as anything, this is an indicator of how effective, cooperative, responsive, and supportive the subcontractor management is to the customer and their task management.

The MPI grading values and grades are as follows:

Excellent = 3 base performance points
Good = 2 base performance points
Fair = 1 base performance point
Unsatisfactory = 0 base performance points

TABLE 1 - SCHEDULE OF VALUES

	OBJECTIVE MEASURE			SUBJECTIVE INDICATOR		
	FRACTION	BASE POINTS	SCORE	FRACTION	BASE POINTS	SCORE
S & H	0.20			0.05		
OSHA	0.50					
LWCR	0.30					
LWDR	0.20					
SUB TOTAL	1.00					
SUB SCORE	0.20 x S&H Sub Total					
SCHEDULE	0.20			0.05		
QUALITY	0.20			0.05		
COST	0.12			0.03		
SUBMITTAL	0.04			0.01		
TIME	0.50					
ACCEPT	0.50					
SUB TOTAL	1.00					
SUB SCORE	0.04 x Submittal Sub Total					
MGT				0.05		
SUB TOTAL						
TOTAL(WPS)						

NOTE:

- Weighted Performance Score (WPS) = Objective Score + Subjective Score
- Objective Score = Performance Measure Fraction x Base Performance Points
- Subjective Score = Performance Indicator Fraction x Base Performance Points
- For scoring purposes, any Performance Measure/Indicator marked "NA" will earn a performance rating of "Fair" and 1 base performance point.
- Overall Subcontractor Performance Evaluation Matrix:
  - Unsatisfactory <1.00
  - Fair ≥1.00 - 1.75
  - Good >1.75 - 2.50
  - Excellent >2.50 - 3.00

Table 2. EXAMPLE EVALUATION

	OBJECTIVE					SUBJECTIVE			
MEASURE	**FRACT**	**INDEX SCORE**	**RATING**	**BASE POINTS**	**SCORE**	**FRACT**	**RATING**	**BASE POINTS**	**SCORE**
S&H	0.20					0.05	*GOOD*	2	**0.10**
OSHA	0.50	0.90	*GOOD*	2	1.00				
LWCR	0.30	0.90	*GOOD*	2	0.60				
LWDR	0.20	1.00	*FAIR*	1	0.20				
SUB TOTAL	1.00				1.80				
SUB SCORE	S&H fract. x S&H Sub Total = (0.20 x 1.80)				**0.36**				
SCHEDULE	0.20	1.06	*UNSAT*	0	**0.00**	0.05	*FAIR*	1	**0.05**
QUALITY	0.20	1.25	*FAIR*	1	**0.20**	0.05	*FAIR*	1	**0.05**
COST	0.12	0.98	*GOOD*	2	**0.24**	0.03	*GOOD*	2	**0.06**
SUBMITTAL	0.04					0.01	*GOOD*	2	**0.02**
TIME	0.50	1.00	*EXCELL*	3	1.50				
ACCEPT	0.50	0.96	*FAIR*	1	0.50				
SUB TOTAL	1.00				2.00				
SCORE	Submit fract x Submit Sub Total = (0.04 x 2.00)				**0.08**				
MGT						0.05	*GOOD*	2	**0.10**
SUB TOTAL									**0.38**
TOTAL					**0.88**				**1.26**

NOTE: - Overall Subcontractor Performance Evaluation Matrix

Unsatisfactory <1.00 Good >1.75 - 2.50

Fair ≥1.00 - 1.75 Excellent >2.50 - 3.00

Numerical score of 1.26 gives an overall rating of "Fair" but at the low end. Subcontractor has major problems with schedule and quality that need to be worked on. Without some corrective actions he should not be considered for future work.

APPENDIX 6

PROJECT FILE INDEX/RECORDS CHECKLIST

Project File Index/Records Checklist

Consolidation of: ☐ CM Files ☐ ENG Files ☐ PM Files ☐ Other

Title: _____ Authorization Number: _____

	Records Checklist	YES (X)	
Section A	**Project History**	X=In File	Inventoried
	A-1 Project Team-Org. Chart, Phone Nos., Location, Dept., etc.		
	A-2 Project Chronology-Listing of important events, approvals, reviews, special meetings, decisions, actions, etc.		
	A-3 Project Issue Reports		
*	A-4 External Status Reports- PTS, 4700.1 Report, etc. (current/final)		
*	A-5 Presentations, Briefings, Special Briefings, etc. (current/final)		
*	A-6 Closure Comments-Lessons Learned, other final information		
	A-7 Other		
Section B	Authorizations	X=In File	Inventoried
*	B-1 ORD/Project Initiation/Request Documents/ User Functional Requirements		
*	B-2 Funding Release Documents-Directives (older projects, CNAR/CNAF, DOE Funding Release, etc.		
	B-3 NEPA Documentation- *Checklist, CX, ADM, EA, FONSI, EIS, ROD		
	B-4 Security Plan-Checklist, Approvals		
	B-5 Key/Critical Decision Requests & Approvals- Includes LOA for older projects		
*	B-6 Project Execution Plan		
	B-7 D-B Submittal & Determination		
*	B-8 BCP Log/BCP		
*	B-9 Partial and/or Final Project Closeout (FPCO)		
	B-10 Accounting Closeout (ACO)		
	B-11 Validation/Justification, Validations Summary Report, & Checklists-ADS, Sched. 44, etc. (current)		
	B-12 Permits/compliance documentation		
	B-13 Other		
Section C	Correspondence	X=In File	Inventoried
	C-1 DOE Incoming/Outgoing		
	C-2 Architect/Engineer		
	C-3 Procurement		
	C-4 Internal-User, H&S, Inter-dept.		
	C-5 External-EPA, CDPH&E, Stakeholders, other regulatory agencies		
	C-6 Other		

	Records Checklist	YES (X)	
Section D	**Engineering Documents**	X=In File	Inventoried
	D-1 Engineering Summary Reports		
	D-2 Scope Definition		
	D-3 Conceptual Design Report		
	D-4 Design Criteria		
	D-5 Preliminary Design Basis Documentation Title I Design Title I Review-EO, Comments, Meeting Minutes, Comment/Resolution details, Design Review Record		
	D-6 Final Design Basis Document- Title II Design Title II Review-EO, Comments Review Meeting Minutes, Comment/Resolution details, Design Review Record		
	D-7 Design Revisions Engineering Change Request (ECR), Reviews & Approvals, Field Change Orders (FCO),		
	D-8 Engineering Studies-VE, cost/benefit analysis, etc.		
	D-9 Drawings, Calculations, Specifications		
	D-10 Acceptance Criteria, Quality Assurance Plan		
	D-11 List of Technical Basis Documents (TBD), as-builts, updated TBDs.		
	D-12 Nuclear Safety Documentation		
	D-13 Support Requests		
	D-14 Other documents		
Section E	**Cost Information and Estimates** Note: Section E normally contains detailed estimate breakdowns & supporting data not found in the summary estimates presented in other sections and documents.	X=In File	Inventoried
	E-1 Project Data Sheet (PDS) Detailed Estimate- Required for Line Items		
	E-2 Scope Estimate		
	E-3 CDR Estimate		
	E-4 Design Criteria Estimate		
	E-5 Title I Estimate		
	E-6 Title II Estimate		
	E-7 Bid Estimates-Equipment, construction, A/E		
	E-8 Change Order Estimates		
	E-9 Value Engineering/Study Estimates		
	E-10 Other Estimates		
Section F	Schedules	X=In File	Inventoried
*	F-1 Project Baseline Sched. & Milestones, Revisions		
*	F-2 Detailed Working Sched.-Current/final level 4, 5, or greater detail		
	F-3 Subcontractor Schedules & Revisions- Vendors, Construction Contractors, A/Es, etc.		
	F-4 Other		

* Minimum requirements for all projects

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Project File Index/Records Checklist

Title: _____

Authorization Number: _____

	Records Checklist	YES (X)	
Section G	**Procurement**	X=In File	Inventoried
	G-1 Procurement Status Report-Requistion and POs		
	G-2 Purchase Requistions		
	G-3 Statements of Work		
	G-4 Bid Evaluations		
	G-5 Contracts/POs/Change Orders		
	G-6 Submittals		
	G-7 Inspections/Other Reports		
	G-8 Invoices		
	G-9 Other		
Section H	**Construction and Installation**	X=In File	Inventoried
	H-1 Construction Notification		
	H-2 Daily Status Reports/Logs		
	H-3 Non Conformance Reports		
	H-4 Construction Field Changes		
	H-5 Inspection Reports/Acceptance Criteria		
	H-6 Project Beneficial Occupancy Notice		
	H-7 Construction Transmittal		
	H-8 Pay Requests		
	H-9 Procurement/Schedules/Deliveries		
	H-10 Construction Redlines		
	H-11 Communications		
	H-12 Subcontractor Information, Badging, Qualifications		
	H-13 GFE Information		
	H-14 Safety		
	H-15 Subcontractor's Performance Evaluation		
	H-16 Photos		
	H-17 Miscellaneous		
	H-18 Project Acceptance & Transfer		
	H-19 Integrated Work Control Package		
	H-20 Other		
Section I	**Reports & Misc. Documentation (Archive Data)**	X=In File	Inventoried
*	I-1 Monthly MCS Reports/VARS (current/final)		
	I-2 Monthly Project Summary Report (PSR) (current/final)		
	I-3 Performance Indicators		
	I-4 Project Issues Reports (current/closed)		
	I-5 Project/Lessons Learned Summary Report		
	I-6 Other (Special Briefings, PATS, etc.)		

	Records Checklist	YES (X)	
Section J	**D&D Activities**	X=In File	Inventoried
	J-1 Decision to prepare Initial Project Scope (letter)		
	J-2 Initial Project Scope (report)		
	J-3 Decision to Proceed with detail planning (letter)		
	J-4 Reconnaissance Level Characterization Report		
	J-5 Notification Letter		
	J-6 Decommissioning Operations Plan (DOP) or IM/IRA or PAM, (report)		
	J-8 Decision to Perform Project (letter)		
	J-9 Disposition Readiness Demonstration (report)		
	J-10 Environmental Readiness Evaluation Approval (letter)		
	J-11 Post Strip Out Characterization (report)		
	J-12 Additional Decontamination Required (letter) (documentation method is a Work Package)		
	J-13 Independent Verification (report)		
*	J-14 Release for Reuse or Demolition (letter)		
*	J-15 Demolition Certificate		
	J-16 Other		

Sign: _____ Date: _____

Project Manager (Sign at completion of file consolidation)

* Minimum requirements for all projects

APPENDIX 7

CLOSE-OUT DOCUMENTATION

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PARTIAL and/or COMPLETE SUB-CONTRACT CLOSEOUTS FORM

WBS# _____ TITLE/DESCRIPTION: _____

B&R # _____ EXPENSE ☐ CAPITAL ☐ DEMOLITION

PRN# _____

If this is a demolition project, provide a list of equipment, systems & structur removed or demolished, with their respective inventory numbers and values.

CORE CHARGE # _____

SECTION I: PARTIAL SUB-CONTRACT CLOSURE

This section provides for the capitalization of equipment/property that has received a Beneficial Occupancy Notice which is This does not close the Charge Number or Sub-contract .

P.O. = PURCHASE ORDER NUMBER %=PER CENT OF SUB-CONTRACT COMPLETE

CHARGE NO.	P.O. #/ TASK #/ LINE #	%	TOTAL $ PER CHARGE #	CHARGE NO.	P.O. #/ TASK #/ LINE #	%	TOTAL $ CHARG

Attach a list of Equipment, Systems & Structures, if applicable, with their respective inventory numbers, values, and a copy Beneficial Occupancy Notice to this form.

Total value of sub-contract partial closure, including property/equipment, is: $ _____

SECTION II: SUB-CONTRACT AND/OR CHARGE NUMBER CLOSURE

This section provides for total closure of sub-contract(s)at the task level and the initiation of charge number closeout after s contracts have achieved 100% completion.

P.O. = PURCHASE ORDER NUMBER

CHARGE NO.	*OTHER SUB-CONTRACTS STILL OPEN? Y-N	P.O. #/ TASK #/ LINE #	P.O. #/ TASK #/ LINE #	P.O. #/ TASK #/ LINE #	P.O. #/ TASK #/ L #

*If yes, closeout only the sub-contract(s) as listed above. If no, closeout the applicable sub-contract(s) task # referenced ab and initiate financial closeout of the charge number(s) as listed. These Charge Numbers will not have any labor hours charge against them after one of the following:

☐ 90 days from the date this notice is submitted to Procurement or

☐ after _____ (date)

Attach a list of equipment, systems & structures with their respective inventory numbers, values and a copy of the Benefi Occupancy Notice and/or Project Acceptance and Transfer.

COMMENTS: See sheet 2 for continuation of Sections I & II and sign-offs.

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WBS#_____ B&R # _____ PRN # _____ CORE CHARGE #_____

SECTION I CONTINUED

P.O. = PURCHASE ORDER NUMBER %=PER CENT OF SUB-CONTRACT COMPLETE

CHARGE NO.	P.O. #/TASK #/ LINE #	%	TOTAL $ PER CHARGE #	CHARGE NO.	P.O. #/ TASK #/ LINE #	%	TOTAL $ CHARG

SECTION II CONTINUED

P.O. = PURCHASE ORDER NUMBER

CHARGE NO.	*OTHER SUB-CONTRACTS STILL OPEN? Y-N	P.O. #/ TASK #/ LINE #	P.O. #/ TASK #/ LINE #	P.O. #/ TASK #/ LINE #	P.O. #/ TASK #/ LI

_____ / _____ /

End User (Print/Sign/Date) All deliverables have been received, the contract(s) is functionally complete, and is ready for financial and/or charge nu closeout. (Required for Sections I & II)

_____ / _____ /

Project Manager (Print/Sign/Date) All deliverables have been received, the contract(s) is functionally complete, and is ready for financial and/or cl closeout. (Required for Sections I & II)

_____ / _____ /

Procurement (Print/Sign/Date) Procurement has been notified that the sub-contract(s) is functionally and technically complete and has received tl systems, structures, components and deliverables associated with the project. (Required for Sections II only)

_____ / _____ /

Receiving/Property Management (Print/Sign/Date) (The attached list of all equipment, systems, structures and components with a value over $25 of three years or more has been received, tagged, entered into the MARS G database as received, and PEMS database and has been withdrawn from V storage.) (Required for Sections I & II)

Distribution:		
Accounting	Property Management	CTR (for labor contracts only)
Maintenance	User	

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FINAL CLOSEOUT FORM (FPCO)

WBS#_____ B&R # _____ PRN #_____ CORE CHARGE #_____

PROJECT CHARGE NO(s).: _____ , _____ , _____

_____ , _____ , _____ , _____

_____ , _____ , _____ , _____

_____ , _____ , _____ , _____

☐CANCELED ☐SCOPE/ESTIMATE ONLY ☐STUDY ☐COMPLETE ☐PROCUREMEN

Attach the "PARTIAL and/or COMPLETE SUBCONTRACT CLOSEOUT forms". Financial closeout has been initiated for this char number. This charge number will be closed to all charges on_____ (date). All closeout activities must be complet time.

_____ / _____ / _____

Project Engineer (Print/Sign/Date) The subcontract's redline drawings are complete and in accordance with the designed s work and includes all approved field changes. Red-lined drawings have been received from the sub-contractor.

_____ / _____ / _____

Project Manager (Print/Sign/Date) All applicable sub-contracts have been accepted as complete, the design and construct management files have been consolidated into the project files, indexed in accordance with the Project File Index/Records Cl and a lessons learned letter provided to the Closeout Manager for reference on future similar projects(if applicable).

_____ / _____ / _____

Closeout Project Manager (Print/Sign/Date) Ownership of the attached list of equipment, systems, structures and compon been transferred to the permanent property custodian, and the project files are ready to be archived.

DATE OF CHARGE NUMBER CLOSEOUT: _____

COMMENTS: REF. OLD CHARGE NUMBER _____

_____ / _____ / _____

Records Management Manager (Print/Sign/Date) The project files have been received and are acceptable. (Project Closeout responsible for submitting FPCO to Records Management for signature.)

Distribution:		
Accounting	Property Management	CTR (for labor contracts only)
Project Manager	BM&I	Project. Closeout Manager

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ROCKY FLATS PLANT

PROJECT ACCEPTANCE AND TRANSFER

DATE: _____

PROJECT: _____

BUILDING: _____

AUTHORIZATION# _____

SUB CONTRACT# _____

SUB CONTRACTOR: _____

AN INSPECTION OF THIS PROJECT REVEALS THAT IT HAS BEEN COMPLETED IN COMPLIANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.

THIS PROJECT IS ACCEPTED FOR FINAL OCCUPANCY AND IS HEREBY TRANSFERRED TO KAISER-HILL FOR OPERATION.

REQUIRED APPROVALS	REQUIRED DISTRIBUTION
FACILITIES INSPECTION	
FACILITY MANAGER	
PROJECT MANAGER	
PLANT PROJECT ENGINEERING	
AREA CONSTRUCTION MANAGER	
K-H CONSTRUCTION MANAGER	

THE ABOVE PROJECT WAS COMPLETED THROUGH INTEGRATED WORK CONTROL PACKAGE (IWCP) NUMBER(S)_____

RF-47122 (REV 7-16-97)

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ROCKY FLATS PLANT

PROJECT BENEFICIAL OCCUPANCY NOTICE

DATE: _____

PROJECT: _____

BUILDING: _____

AUTHORIZATION# _____

SUB CONTRACT# _____

SUB CONTRACTOR: _____

BENEFICIAL OCCUPANCY IS TAKEN OF THE FOLLOWING ROOMS/AREAS AND/OR EQUIPMENT OF THE REFERENCED PROJECT WITH EXCEPTIONS AS NOTED:

USE OR POSSESSION OF THE ABOVE LISTED ROOMS OR AREAS IS NOT AN ACCEPTANCE OF ANY WORK UNDER THE TERMS OF THE CONTRACT.

REQUIRED APPROVALS	REQUIRED DISTRIBUTION
FACILITIES INSPECTION	AREA UTILITIES MANAGER
FACILITY MANAGER	PLANT ALARMS
PROJECT MANAGER	TELECOMMUNICATIONS
PLANT PROJECT ENGINEERING	FIRE PREVENTION BUREAU
AREA CONSTRUCTION MANAGER	WACKENHUT SERVICES INC.
K-H CONSTRUCTION MANAGER	HEALTH & SAFETY AREA MANAGEMENT
	ENVIRONMENTAL RESTORATION
	WASTE OPERATIONS
	CRITICALITY ENGINEERING
	EMERGENCY PREPAREDNESS
	SUBCONTRACTOR ADMINISTRATOR
	SHIFT SUPERINTENDENT
	CLOSEOUT ADMIN. LYNN MOSS
	PLANT SERVICES
	PROPERTY MANAGEMENT

THE ABOVE PROJECT IS BEING COMPLETED THROUGH INTEGRATED WORK CONTROL PACKAGE (IWCP) NUMBER(S) _____

RF-47121 (REV 7-16-97)

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APPENDIX 8

DAILY CONSTRUCTION REPORT

Construction Status Report

Weather	AM	PM
Sunny		
Cloudy		
Rain		
Snow		
Wind		
<40°F		
40° - 60°F		
60° - 80°F		
>80°F		

Workforce	NO.	LT*
Super		
Foreman		
Carpenter		
Carpet Layer		
Cement Finisher		
Dry Wall		
Electrician		
Glazer		
Instrument		
Insulator		
Iron Worker		
Laborer		
Mason		
Millwright		
Oper. Engineer		
Painter		
Pipefitter		
Roofer		
Sheet Metal		
Teamster		
Tile Setter		
Total		
Equipment		

*LOST TIME HOURS

Job Title: _____

Contract/Task #: _____ Authorization #: _____

Type of Funding: _____ Work Order (IWCP)#: _____

Type of Subcontract: _____ Subcontractor: _____

Scheduled Start: _____ % Scheduled to be Completed: _____

Schedule Completion: _____ % Actually Completed: _____

Revised Completion: _____ Nonconformances: _____

Job Description:

Buildings/Areas:

Progress:

Planned Activities:

Support Requirements:

Problems/Resolutions

Cost Information:

Subcontract Value$: _____

Total billed $: _____ as of: _____

Changes to Subcontract:

Total Cost of Changes $: _____

Total Number of Changes: _____

Submittals Outstanding:

Safety Evaluation: Daily: ____ Weekly: ____ Monthly: ____

Project Team

Project Manager: _____ Field Engineer: _____

Const. Superintendent: _____ Project Engineer: _____

Construction Manager: _____

Updated by: _____ Date: _____

Signature: _____ Date: _____

Use the revese side of this form for additional comments

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APPENDIX 9

MONTHLY MANPOWER REPORT

FIXED PRICE CONTRACTOR/MONTHLY MAN COUNT REPORT

Month January
Project 123 D&D Strip Out
Auth. # FBO-142

Field Engineer/Supervisor Lorenzo Casey
Contractor DWRC RTG AFICI

Craft	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Asbestos Workers																																0
Boilermakers																																0
Bricklayers																																0
Carpenters																																0
Carpet/Linoleum																																0
Electricians																																0
Elevator Constructors																																0
Glaziers																																0
Iron Workers																																0
Laborers																																0
Millwrights																																0
Operating Engineers																																0
Painters/Drywallers																																0
Pipefitters																																0
Plasterers																																0
Plumbers																																0
Roofers																																0
Sheetmetal Workers																																0
Sprinkler Fitters																																0
Teamsters																																0
Tile & Terzo Workers																																0
																																0
																																0
																																0

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APPENDIX 10

CONSTRUCTION PROGRESS PHOTOGRAPHS

PHOTO

CHARGE NUMBER 48870 (Film roll number is shown on back of photo)
DESCRIPTION - ROCKY FLATS FIELD OFFICE (Typed exactly as shown)
BUILDING TB86D MODULAR LABORATORY UTILITIES (Name of Job)
SUBCONTRACTOR - ROY F. WESTON (Name of Subcontractor)
NCA0600S (Job Number)
DATE 3/24/94 (Date photo taken)
#1 FACING NORTHWEST AT COMPLETED PIER FOUNDATIONS FOR MODULAR (Negative number shown on back of photo and description of photo)