Rocky Flats
Environmental Technology Site

Revision 2

SITE QUALITY ASSURANCE PROGRAM

APPROVED BY _____ / R G Card / 5/6/96
Acting President
Kaiser-Hill Company L L C

Responsible Organization Environment, Safety & Health and Quality Effective Date 5-2-96

ORC review not required
Periodic review frequency 1 year from the effective date

Reviewed for
Classification/UCNI

By _____

Date 4/29/96

The signatures on this page document that, for those areas under the representative's cognizance, the representative of each organization concurs that this write-up is accurate, factual, and reflects the organization's position

CONCURRENCE—Kaiser-Hill Company, L L C

S J Bensussen, Vice President
General Counsel

A R Buhl, Vice President
Environment, Safety & Health and Quality

J A Hill, Vice President
Environmental Restoration/
Waste Management and Integration

R N Ogg, Acting Director
Planning and Integration

V Mani, Vice President
Safety Engineering and Technical Services

L A Martinez, Vice President
Finance and Administration

G M. Voorheis, Vice President
Special Materials Management and Integration

N R Tuor, Vice President
Human Resources, Communications, and Economic Conversion

C A H Waller, Vice President
Site Operations and Integration

CONCURRENCE — Principal Subcontractors

W R Gillison
General Manager
Wackenhut Services, L L C

C L Herring
Vice President and General Manager
DynCorp of Colorado, Inc

J L McAnally
President
Rocky Mountain Remediation Services, L L C

J G McKibbin
President
Safe Sites of Colorado

LIST OF EFFECTIVE PAGES

Pages	Effective Date	Change Number
1-34	5-2-96	Rev 2

TOTAL NUMBER OF PAGES 34

TABLE OF CONTENTS

TABLE OF CONTENTS (Con't)

Site Quality Assurance Program

1.0 PURPOSE

The purpose of this document is to define the Rocky Flats Environmental Technology Site (Site) Quality Assurance Program (QAP) and describe how the Site QA requirements are implemented It specifies the roles and responsibilities of the Kaiser-Hill Company, L L C (Kaiser-Hill), the Integrating Management Contractor (IMC) and the Principal Subcontractors with respect to quality It also expresses the relationship between the Site QAP and the Quality Assurance Program Plans (QAPPs) of the Principal Subcontractors Kaiser-Hill will work to the Site QAP

2.0 SCOPE

The Site QAP provides a road map for organizations, management, and stakeholders to help them understand how the Site QA requirements are implemented The Site QAP is applicable to the IMC, Principal Subcontractors, and organizations working under the direction of the IMC or the Principal Subcontractors

The Site QAP describes roles, responsibilities, and commitments for implementing the requirements of Department of Energy (DOE) 10 CFR 830 120 for nuclear facilities and activities, and DOE Order 5700 6C for non-nuclear facilities, activities, and services This Site QAP is a revision to and supersedes the Site QAP dated February 2, 1996

War Reserve activities are excluded from applicability under 10 CFR 830 120 and DOE Order 5700 6C Current War Reserve activities are limited primarily to the areas of storage and packaging War Reserve activities are covered by DOE/AL Quality Criteria (QC)-1 and letters of instruction from the DOE

3.0 DEFINITIONS AND ACRONYMS

Nonreactor Nuclear Facility - *Activities or operations that involve radioactive and/or fissionable materials in such form and quantity that a nuclear hazard potentially exists to the employees or the general public* Incidental use and generating of radioactive materials in a facility operation (e g , check and calibration sources, use of radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and X-ray machines) would not ordinarily require the facility to be included in this definition Transportation of radioactive materials, accelerators and reactors and their operations are not included The application of any rule to a nonreactor nuclear facility shall be applied using a graded approach *Included are activities or operations that*

(1) Produce, process, or store radioactive liquid or solid waste, fissionable materials, or tritium,

(2) Conduct separations operations,

(3) Conduct irradiated materials inspection, fuel fabrication, decontamination, or recovery operations,

(4) Conduct fuel enrichment operations,

(5) Perform environmental remediation or waste management activities involving radioactive materials, or

(6) Design, manufacture, or assemble items for use with radioactive materials and/or fissionable materials in such form or quantity that a nuclear hazard potentially exists

(Emphasis added) (10 CFR 830 3, Definitions)

Nuclear Facility - Reactor and nonreactor nuclear facilities (10 CFR 830 3, Definitions) Note The requirements of 10 CFR 830 120 also apply to a nuclear facility under construction

Quality - The condition achieved when an item, service, or process meets or exceeds the user's requirements and expectations (10 CFR 830 3, Definitions)

Quality Assurance - All those actions that provide confidence that quality is achieved (10 CFR 830 3, Definitions)

Quality Assurance Program (QAP) - The overall program established to assign responsibilities and authorities, define policies and requirements, and provide for the performance and assessment of work (10 CFR 830 3, Definitions)

Quality Assurance Program Plan (QAPP) - The QAP of a Principal Subcontractor Each QAPP is consistent with the Site QAP

Other quality related definitions can be found in the Glossary of Terms in the Quality Assurance Manual

The following acronyms are used in this document

ABP	Activity Based Planning
ACE	Activity Control Envelope
ASAP	Accelerated Site Action Project
DCI	DynCorp of Colorado, Inc
DOE	Department of Energy
EPA	Environmental Protection Agency
ES&HandQ	Kaiser-Hill Environment, Safety & Health and Quality
IMC	Integrating Management Contractor
Kaiser-Hill	Kaiser-Hill Company, LLC
MAL	Master Activity List
M&TE	Measuring and Test Equipment
Ops	Operations
PA	Protected Area
QA	Quality Assurance
QAP	Quality Assurance Program
QAPP	Quality Assurance Program Plan

RMRS	Rocky Mountain Remediation Services, L L C
Site	Rocky Flats Environmental Technology Site
SNM	Special Nuclear Material
S/RID	Standards/Requirements Identification Document
SSOC	Safe Sites of Colorado
TUM	Training User's Manual
WSLLC	Wackenhut Services, L L C

4.0 STANDARDS AND REQUIREMENTS

The Site Quality Assurance (QA) requirements are identified in the Quality Assurance Program Criteria document The Site Standards/Requirements Identification Document (S/RID), Section 2, Quality Assurance, which is under development, contains the same requirements

The foundation upon which the QA S/RID was developed was the DOE Environment, Safety, and Health Configuration Guide The current draft of the QA S/RID began with a search for QA regulations, orders, and consensus standards, without regard to applicability In all, 28 QA documents were obtained The QA documents were reviewed for possible applicability to Site activities, and several documents were set aside due to not being applicable A hierarchy of the documents was selected to place a relative level of importance on the documents in case of conflict between documents The QA criteria of 10 CFR 830 120 and DOE Order 5700 6C were incorporated in their entirety The remaining applicable documents were reviewed and items selected that, in the opinion of the writers, best described specific features that the criteria of 10 CFR 830 120 and the DOE Order 5700 6C required In the end, several documents remained that were applicable but not used This was because they were redundant to, or not as clear as, those items selected from other sources

During the development process, the writers discussed the provisions of the S/RID with knowledgeable persons For example, the U S Environmental Protection Agency (EPA) manager for QA in the Denver office was contacted regarding environmental requirements His guidance was that the current draft of EPA Order 5360 1 should be used and that a program meeting the requirements of ANSI/ASQC E4-1994 would be acceptable Site experts were consulted concerning Documents and Records and Procurement When the document was developed, a group of others with QA experience in the DOE complex or the nuclear power industry reviewed the QA S/RID Based on their comments, the QA S/RID was further refined

Once the QA S/RID was approved by the responsible program manager, it was given to the group responsible for submitting the Site S/RID for review and DOE approval In addition, the Site Quality Assurance Program Criteria document was developed using the same standards as in the QA S/RID The Site Quality Assurance Program Criteria document was issued as Section 9 to the Site QA Manual, to be used as the basis for the Site QAP

When the S/RID is approved, it will replace the Quality Assurance Program Criteria document (Note If the approved S/RID results in the need to change the Site QAP, such changes will be made) Both documents contain requirements from selected parts of the following technical standards

- ASME-NQA-1-1994, Quality Assurance Requirements for Nuclear Facility Applications, 1994
- ANSI/ASQC-E4-1994, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs
- EPA-5360 1, Program and Policy Requirements to Implement the Mandatory Quality Assurance Program
- ASTM-C-1009-89, Standard Guide for Establishing a Quality Assurance Program for Analytical Chemistry Laboratories Within the Nuclear Industry
- DOE/AL-QC-1,1995, Quality Criteria
- DOE/AL Supplemental Directive AL 57XA, Standards and Calibration Program

Standards that are required by law or contract are mandatory unless a temporary or permanent exemption from that requirement has been granted by one having proper regulatory authority The criteria for granting an exemption to a DOE nuclear safety requirement are specified in 10 CFR 820 62, Criteria

5.0 GENERAL INFORMATION

5.1 Program Overview

The Site QAP describes the roles, responsibilities and commitments for implementing the requirements of 10 CFR 830 120 for nuclear facilities and activities and DOE Order 5700 6C for non-nuclear facilities, activities and services

Since 10 CFR 830 120 and DOE Order 5700 6C include essentially the same criteria, the IMC has incorporated the requirements into a single program document The primary distinction between the two requirements is enforceability and applicability From the perspective of applicability and enforceability, 10 CFR 830 120 applies only to nuclear facilities and nuclear activities and DOE Order 5700 6C applies to non-nuclear facilities, activities, and services

On July 1, 1995 Kaiser-Hill became the IMC for the Site under a performance-based contract As the IMC, Kaiser-Hill has overall responsibility for the Site and implements the Site mission through four Principal Subcontractors DynCorp of Colorado, Inc (DCI), Rocky Mountain Remediation Services, L L C (RMRS), Safe Sites of Colorado (SSOC), and Wackenhut Services, L L C (WSLLC) Each of the Principal Subcontractors have specific areas of responsibility DCI provides sitewide services in support of nuclear facilities such as records management, occupational medicine, transportation, emergency preparedness, limited maintenance, and receipt inspection RMRS performs Site environmental remediation and waste management and is responsible for several specific nuclear facilities SSOC performs operations and maintenance for the

majority of the Site's nuclear facilities WSLLC provides security services for the Site Kaiser-Hill and the Principal Subcontractors form the Kaiser-Hill Team

Due to the varied nature of the activities and responsibilities being performed, the individual Principal Subcontractors are responsible for specific programs and activities that are unique to their area of expertise As such, each of the individual Principal Subcontractors may develop company-specific QAPPs to describe how their company will implement the Site QAP to accomplish their specific mission or may choose to use the Site QAP as their program Kaiser-Hill will work to the Site QAP

The Site is in the post production, cleanup, and closure phase of its life cycle Major planning activities are currently underway to support accelerated closure over the next decade Included in this planning are the identification and prioritization of facilities for decontamination, deactivation, decommissioning, dismantling, and/or future use One of the primary focuses of the Site is the performance of risk reduction activities including the preparation of nuclear materials for interim storage, liquid residue stabilization, and the elimination and mitigation of Site hazards Also among the Site's planning activities are the identification and establishment of interim storage facilities

5.2 Accountability

Quality Assurance is a shared interdisciplinary function It involves management and individual contributors of all organizations responsible for producing items, performing activities and services, and independently verifying that items, activities, and services comply with specified standards and requirements

Each individual is responsible for the quality of their work, for reducing costs, for identifying nonconforming items, and for complying with requirements and procedures Individuals who are responsible for producing an item or performing an activity, and their immediate management, have direct and final responsibility for the quality of the item, activity, or service They are responsible for reviewing item reliability, process implementation, and other quality-related information and analyzing data to identify items and processes needing improvement

Individuals or organizations assigned responsibility for the quality function and for verifying that activities affecting quality have been correctly performed have sufficient authority, access to work areas, and organizational freedom to

- identify quality problems and initiate, recommend, or provide solutions to resolve identified problems,
- verify implementation of solutions,
- verify that nonconforming conditions are dispositioned in accordance with approved procedures, and
- directly access levels of management required to resolve identified problems

5.3 Document Hierarchy

Figure 1 provides an overview of the Site Quality Document Hierarchy It applies to the Kaiser-Hill Team and lower-tier contractors

The Quality Assurance Program Criteria document contains the current Site QA requirements

The quality management philosophy of the IMC is expressed in the Site QA Policy The QA Policy establishes the IMC commitment to ensure that Site QA requirements are addressed and risks and environmental impacts are minimized, while safety, security, reliability, and performance are maximized

The Site Quality Assurance Manual contains the following

- Quality Assurance Program Mission and Vision
- Site Quality Assurance Program The Site QAP describes the responsibilities of the IMC and the Principal Subcontractors regarding the Site QAP The Site QAP also discusses the 10 quality criteria of 10 CFR 830 120 and DOE Order 5700 6C and summarizes how they are implemented across the Site
- Quality Assurance Program Glossary of Terms The Glossary applies to documents developed to standardize the Site QAP and its implementation In case of conflict between the definitions contained in the Glossary of Terms and those contained in other Site documents, the definitions in the Glossary of Terms take precedence where pertaining to quality and the Site QAP
- Quality Assurance Program Infrastructure Document List A list of the Site level infrastructure documents that implement the Site QA requirements
- Site Quality Council Charter The multicontractor Site Quality Council provides a mechanism for interaction between the IMC and the Principal Subcontractors on quality matters The Site Quality Council provides guidance and direction for the development and implementation of the Site QAP

Site Quality Document Hierarchy

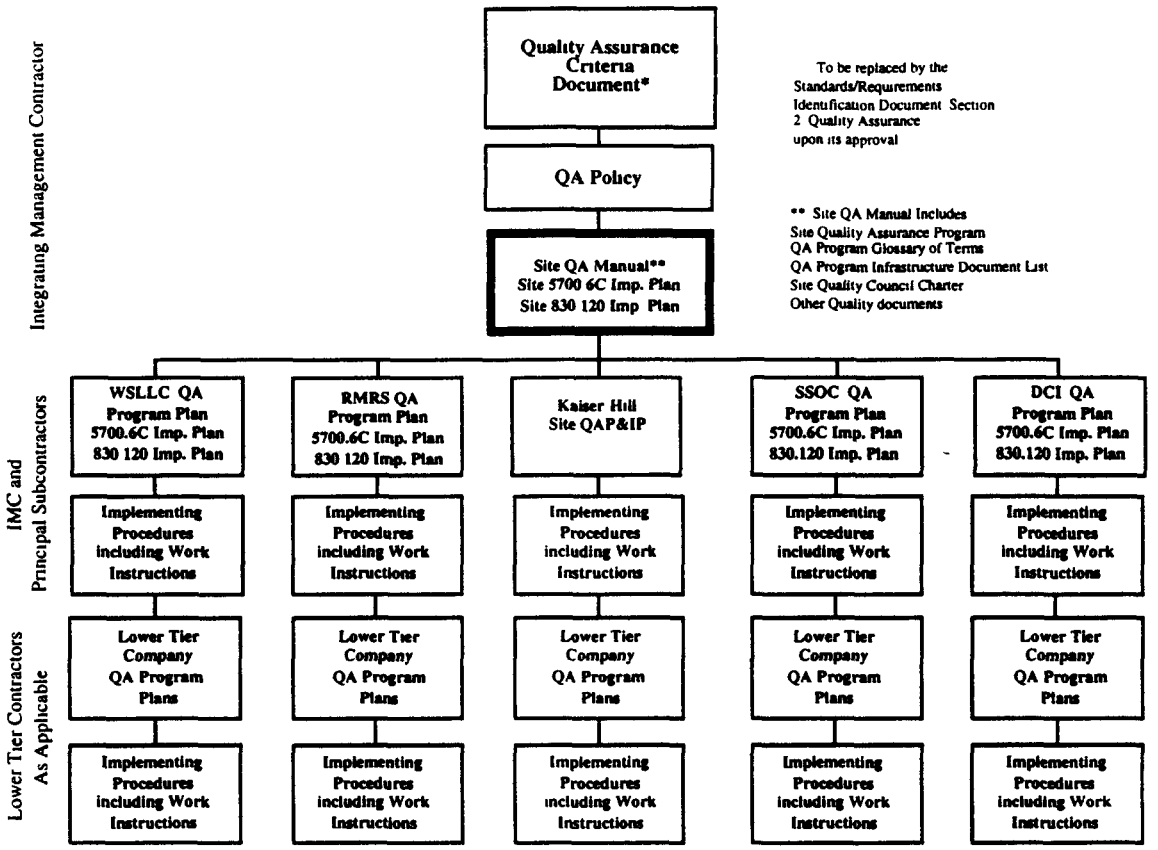

Figure 1
Site Quality Document Hierarchy

The company-specific QAPPs and Implementation Plans describe how each company will implement the applicable QA requirements to accomplish its own specific mission

Based on company-specific input, the IMC developed the Site Implementation Plan Corrective actions that are identified in the Site Implementation Plan will be tracked The IMC will monitor progress against stated Site Implementation Plan deliverables, and keep the DOE apprised of both progress and problems The Site Implementation Plan will be reviewed and updated as appropriate

The Principal Subcontractors and the IMC are responsible for adhering to the Site infrastructure programs and procedures and for the development and implementation of company-specific procedures as needed for accomplishment of individual company-specific activities Company-specific work instructions necessary for the accomplishment of the individual missions of the IMC and the Principal Subcontractors can be found in their company-specific procedures

5.4 Applicability of 10 CFR 830.120, Quality Assurance Requirements

Title 10 CFR Part 830 120 applies to nuclear facilities and to nuclear activities Designated nuclear facilities are identified by the Kaiser-Hill Nuclear Safety, Safety Analysis organization Nuclear facilities as of May 2, 1996 are as follows

Category 2 Nuclear Facilities		Category 3 Nuclear Facilities	
Building	371	Building	444
	374		447
	440		448
	559		450
	569		451
	664		455
	707		750 / 904 Pads
	771		879
	774		881
	776 / 777		881F
	779		883
	886		884
	991		906
			964
			OU2 / 903 Pad
			RCRA Unit 15A

On February 27, 1996, Kaiser-Hill and DOE, Rocky Flats Field Office signed an Authorization Agreement (Agreement) to establish and maintain the Authorization Bases for activities at the Site as listed in the Master Activity List (MAL)

The Agreement is or will be incorporated into the DOE contract with Kaiser-Hill for the operation of the Site The MAL contains a list of currently identified work activities which are either (1) a baseline activity necessary for performance due to the presence of hazards, (2) a mission program activity authorized for performance, (3) a mission program activity authorized for planning only, or (4) a currently unauthorized mission program activity The MAL contains the list of currently approved nuclear activities, however, not every listed activity is a nuclear activity Efforts to define nuclear activities are ongoing The MAL is a living document and will be updated as needed

Site functions such as Human Resource Development, Financial Management, Benefits Administration, Food Service, Employee Assistance Program, and other functions required as a part of the conduct of business do not meet the definition of an activity Therefore, these functions are not included in the MAL

5.5 Graded Approach

Compliance with the identified applicable set of standards/requirements is mandatory The rigor and level by which they will be met will be based on the following graded approach criteria

- relative importance to safety, environment, safeguards and security,
- magnitude of any hazard involved,
- life cycle stage of a facility or activity,
- programmatic mission of a facility or activity,
- particular characteristics of a facility or activity, and
- other relevant factor(s) as deemed appropriate

The Kaiser-Hill Team applies graded approach in three ways

(1) Because of budget limitations and the life cycle stage of certain Site facilities, graded approach is applied to the implementation of Site QA requirements For example Under Criterion 2, Training and Qualification, training of maintenance crafts will be focused on safety and other regulatory required training (e g Occupational Safety and Health Administration requirements) Other maintenance training and qualification will be limited to maintaining craft job proficiency at the journeyman level Under Criterion 3, Quality Improvement, trending of maintenance history data will be accomplished for specific buildings and equipment based upon a graded approach Maintenance history data will not be maintained for all buildings or equipment Item characteristics, process implementation, and other quality-related information will be reviewed and the data analyzed to identify items, services, and processes needing improvement based upon a graded approach Under Criterion 5, Work Processes, corrective, preventive, and predictive maintenance will be accomplished for specific equipment based upon a graded approach Not all items will be maintained to prevent their damage or deterioration

(2) Graded approach is built into Site infrastructure programs and procedures including, but not limited to, Policies and Procedures, Issues Management, Operational Readiness Reviews, Lessons Learned, Configuration Management, Training and Qualification, Emergency Management, Security and Safeguards, Engineering, Maintenance, Conduct of Operations, Radiation Protection, Occurrence Reporting, Procurement, Waste Management, and Nuclear Safety The Commitments Management and Corrective Actions Process provides a mechanism for prioritizing and evaluating unclassified deficiencies, concerns, and improvements It is the responsibility of the company-specific quality organization to ensure that QA requirements are applied in a manner commensurate with the type of work being accomplished Whenever a graded approach is applied in meeting a DOE nuclear safety requirement, the basis for selecting an action pursuant to the graded approach will be documented as required by 10 CFR 830 7, Graded Approach The requirement and instructions for documenting the basis for selecting an action pursuant to the graded approach are being added to the documents governing the Site procedures process

(3) Graded approach is also implemented by the Site process for Activity Based Management which includes Activity Based Planning (ABP) Activity Based Planning uses the DOE closure process for necessary and sufficient sets of standards (DOE M 450 3-1, dated January 25, 1996)

The central concept of ABP is the identification of a set of standards that is necessary and sufficient to control activities The process involves a deliberate focus on *activities* rather than on *buildings or facilities* and on standards that are

necessary and sufficient rather than the *universe* of codes and standards The basic ABP product is a "control envelope" (an activity control envelope or a facility control envelope) that defines an activity or activities and identifies specifically applicable standards necessary for control of the specific activity The detailed focus on individual activities results in documented justification for the conduct of hazard and uncertainty reduction work without the necessity to restore the total facility to a fully operational status (resumption status) before the work can be performed

An Activity Control Envelope (ACE), developed with facility and Site knowledge as well as technical expertise, identifies the standards set to be used in the development of work control documents The ACE is developed by a carefully selected team with experience relevant to the activity to be performed The team uses an iterative process to define a finite scope of work with manageable uncertainty This iterative process includes specifying the tasks to be performed, identifying specific expectations or standards, defining bounding conditions, and performing a hazard assessment for the subject activity Expectations identified in the ACE are then correlated to mandatory and appropriate standards

The resulting ACE reflects those standards that, in the consensus of the development team, are necessary and sufficient for the safe accomplishment of the activity This method for the team to reach a finding of adequacy on their product is known as "expert closure "

The ACE process is expected to be initiated after general project specifications are defined, project goal activities are identified, and the technical processes that enable the goal activities are defined The completed ACE will assist in planning for final details in readiness preparation, but should not delay efforts to plan and commence general preparatory actions for readiness

Graded approach is to be used to determine the appropriate level of effort in complying with a requirement It is not to be used to provide relief from requirements Exemptions from DOE requirements must be processed through appropriate exemption mechanisms, as specified in DOE directives and approved by DOE Exemptions from legal requirements must be processed through the appropriate mechanism as specified by the law and approved by an appropriate legal entity

6.0 ORGANIZATIONAL ROLES AND RESPONSIBILITIES

6.1 Organization

The Site organizational structure, functional responsibilities, lines of authority, and interfaces are shown in Figure 2, Kaiser-Hill Team Organization Further details of the organizational structure will be found in the Site Organization Manual, which is currently under development, and can be obtained through Kaiser-Hill Human Resources

The functions, objectives and goals of Kaiser-Hill as the IMC are carried out by the following organizational units Finance and Administration, Safety Engineering and Technical Services, Site Operations and Integration,

Environmental Restoration/Waste Management and Integration, Special Material Management and Integration, Human Resources, Communications, and Economic Conversion, Environment, Safety & Health and Quality, Planning and Integration, and General Counsel

Work is performed by multiple contractors The four major direct subcontractors are known as Principal Subcontractors Each of the Principal Subcontractors report to one of the IMC's organizational units In addition, several lower-tier contractors provide support to the IMC and/or the Principal Subcontractors

The interfaces and interactions between the IMC and the Principal Subcontractors are established in their respective subcontracts

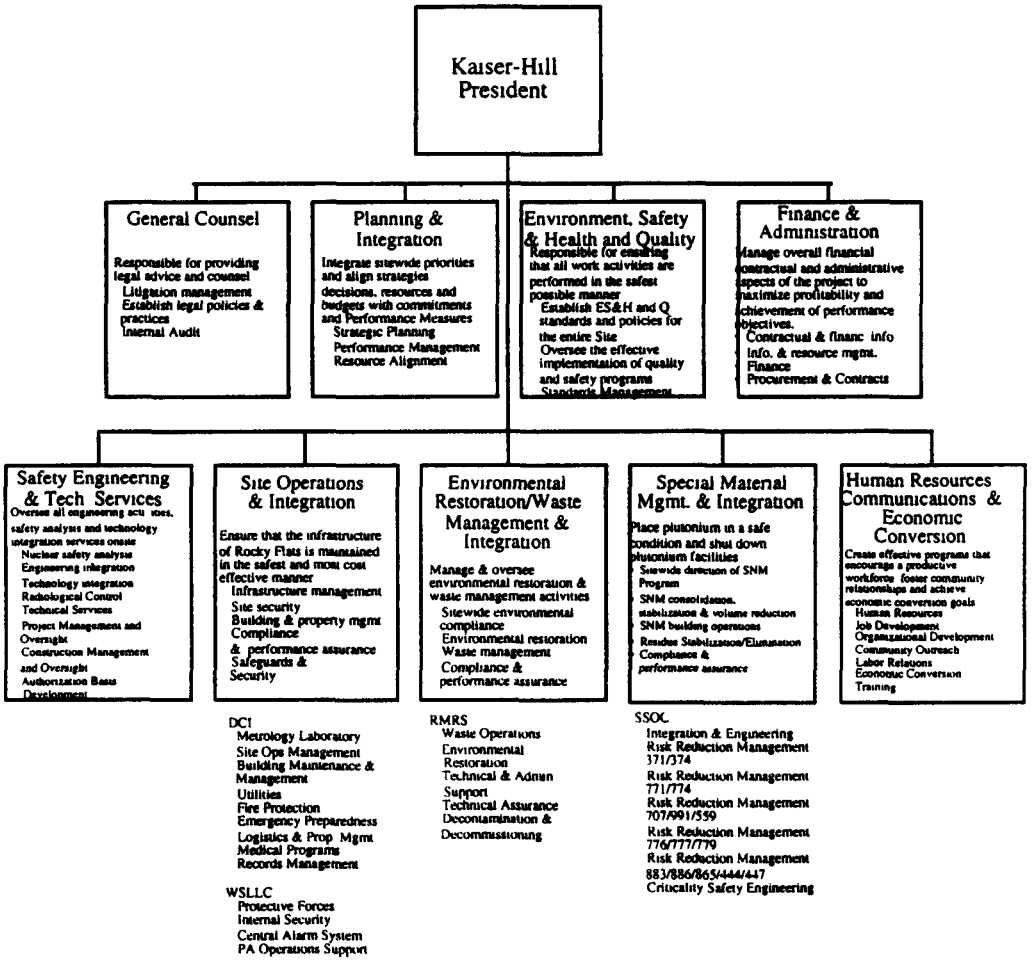

Figure 2
Kaiser-Hill Team Organization

6.2 Roles

The following is a brief discussion of the roles the IMC and Principal Subcontractors play in accomplishing the mission of the Site

Kaiser-Hill as the IMC has overall responsibility for Site activities and is accountable to the DOE for the safe performance of work

Rocky Mountain Remediation Services, L L C (RMRS), as a subcontractor to Kaiser-Hill, is responsible for the waste management, environmental remediation, and decontamination and decommissioning activities at the Site

Safe Sites of Colorado (SSOC), as a subcontractor to Kaiser-Hill, is responsible for the reduction of plutonium and residue vulnerabilities and deactivation of special nuclear materials facilities

DynCorp of Colorado, Inc (DCI), as a subcontractor to Kaiser-Hill, provides Site support services including occurrence reporting, fire and emergency services, management of emergency preparedness, occupational medicine, receiving inspection, and document and record control

Wackenhut Services, L L C (WSLLC), as a subcontractor to Kaiser-Hill, provides Site protective forces and other security related services

6.3 Responsibilities

The principal responsibilities for individuals and organizations implementing the Site QAP are as follows

6.3.1 The Kaiser-Hill President is responsible for

- Approving overall policy and management direction for the Site QAP
- Approving allocation of resources to implement Site QA requirements

6.3.2 All Kaiser-Hill Vice Presidents are responsible for

- Providing resources for their organizations necessary to implement the Site QA requirements, as applicable
- Incorporating applicable QA requirements into documents that govern work, activities, and the procurement of items and services
- Communicating applicable QA requirements to Principal Subcontractors and lower-tier contractors, as appropriate
- Providing integration, coordination, and oversight (management assessments) of activities under their purview including those performed by subcontractors
- Taking timely corrective action for identified quality problems
- Initiating the stop work process when appropriate

6.3.3 In addition to the responsibilities stated in 6 3 2, the Kaiser-Hill Vice President, Environment, Safety & Health and Quality is responsible for

- Establishing direction and guidance for defining, implementing, and maintaining the Site Quality Assurance infrastructure including the Site QAP
- Resolving Site QA related problems not resolved at lower or peer organization level
- Developing and maintaining the program for reporting noncompliance with the Price-Anderson Amendments Act
- Developing and maintaining the Site Commitments Management and Corrective Actions Process, the Management Assessment Program, and the Independent Assessment Program

6.3.4 In addition to the responsibilities stated in 6 3 2, the Kaiser-Hill Vice President, Finance and Administration is responsible for

- Establishing a sitewide procurement process and appropriate procedures and instructions to meet QA requirements for the procurement of commodities, items, and services
- Evaluating the adequacy of controls established to meet QA requirements applicable to business services and finance, and ensuring effective implementation

6.3.5 In addition to the responsibilities stated in 6 3 2, the Kaiser-Hill Vice President, Human Resources, Communications, and Economic Conversion is responsible for

- Maintaining the manual containing Site organizational charts, functional responsibilities, and levels of authority for both the IMC and the Principal Subcontractors
- Developing and maintaining the Site training program and overseeing the Principal Subcontractor training programs
- Assisting Site organizations in the application of organizational development concepts including quality improvement methodologies to achieve their goals

6.3.6 In addition to the responsibilities listed in 6 3 2, the Kaiser-Hill Vice President, Safety Engineering and Technical Services is responsible for

- Establishing Site infrastructure programs that control the design process
- Establishing and maintaining the functions of the Site Chief Engineer
- Providing Engineering Documentation Services
- Developing and maintaining the Authorization Basis process

6.3.7 In addition to the responsibilities listed in 6 3 2, the Kaiser-Hill Acting Director, Planning and Integration is responsible for

- Developing and maintaining systems and processes to integrate Site priorities and align strategies, decisions, resources, and budgets with goals, commitments, and performance measures

6.3.8 In addition to the responsibilities stated in 6 3 2, the Kaiser-Hill Vice President, Site Operations and Integration is responsible for

- Serving as the Kaiser-Hill contract technical representative for the contracts with DCI and WSLLC

6.3.9 In addition to the responsibilities stated in 6 3 2, the Kaiser-Hill Vice President, Environmental Restoration/Waste Management and Integration is responsible for

- Serving as the Kaiser-Hill contract technical representative for the contract with RMRS

6.3.10 In addition to the responsibilities stated in 6 3 2, the Kaiser-Hill Vice President, Special Material Management and Integration is responsible for

- Serving as the Kaiser-Hill contract technical representative for the contract with SSOC

6.3.11 The Site Quality Council Chair, under the Vice President, Environment, Safety & Health and Quality is responsible for

- Identifying, documenting, and maintaining the Site QA requirements
- Developing, preparing, and maintaining the Site QAP to meet the requirements of 10 CFR 830 120 and DOE Order 5700 6C
- Developing, coordinating, approving, and maintaining the Site QA Manual
- Establishing, in coordination with the responsible implementing organizations, controls to ensure that conditions which are not in compliance with the Site QA requirements are identified and promptly corrected
- Providing Kaiser-Hill assistance, indoctrination, and training in QA practices, procedures, and regulations
- Serving as the Site interface with DOE, RFFO quality organization on quality-related matters

6.3.12 Kaiser-Hill Director, Performance Oversight, under the Vice President, Environment, Safety & Health and Quality, is responsible for

- Performing independent assessment activities for the Site
- Providing documented results of independent assessment activities to Site management
- Providing independent oversight of proposed corrective action plans for certain significant deficiencies
- Verifying selected completed corrective actions for Site and external oversight identified deficiencies
- Providing independent oversight of the preparation for, and conduct of, the startup and restart of nuclear facilities
- Implementing, in conjunction with other organizations, a centralized supplier evaluation/audit program for procurements of commodities and services
- Providing Site waste certification and acceptance for purposes of onsite and radioactive offsite waste disposal
- Interfacing with Site waste generators, operations, and support staff on waste certification issues
- Interfacing with waste receiving sites on certification and waste issues

6.3.13 Principal Subcontractors are responsible for

- Providing resources to implement the Site and company-specific QA requirements, as applicable
- Implementing Site infrastructure programs and procedures, as applicable
- Providing resources for the development and maintenance (when Site infrastructure procedures do not exist) of procedures and instructions to support accomplishment of their company-specific missions
- Communicating QA requirements to lower-tier contractors and suppliers and approving the QAPPs of their lower-tier contractors, when applicable
- Providing company-specific organizational charts, functional responsibilities, levels of authority and updating as necessary
- Performing management assessments of their respective quality related activities and reporting results to management
- Tracking and providing timely corrective action for identified quality problems
- Initiating the stop work process when appropriate

- Reviewing quality data to determine measures to strengthen performance
- Facilitating the resolution of quality-related problems

6.3.14 In addition to the responsibilities listed in 6 3 13, DynCorp of Colorado, Inc is also responsible for:

- Providing Document Control and Records Management Programs and services for the Site
- Providing receipt-inspections for procured items for the Site, as applicable
- Providing field inspection for Site maintenance and construction activities, as applicable
- Providing engineering (design) services for DCI that meet design requirements and which are consistent with Site infrastructure programs, as established by the Site Chief Engineer

6.3.15 In addition to the responsibilities listed in 6 3 13, Safe Sites of Colorado is also responsible for:

- Implementing the Criticality Safety Program across the Site
- Providing engineering (design) services for SSOC that meet design requirements and which are consistent with Site infrastructure programs, as established by the Site Chief Engineer

6.3.16 In addition to the responsibilities listed in 6 3 13, Rocky Mountain Remediation Services, L L C is also responsible for:

- Providing engineering (design) services for RMRS that meet design requirements and which are consistent with Site infrastructure programs, as established by the Site Chief Engineer

6.3.17 In addition to the responsibilities listed in 6 3 13, Wackenhut Services, L L C is also responsible for:

- Providing security services for the Site

7.0 SITE QUALITY ASSURANCE PROGRAM

The remainder of this document is divided into three subsections which correspond to the criteria of 10 CFR 830 120(c) and DOE Order 5700 6C

Section 5 of the Quality Assurance Program Manual, Quality Assurance Program Infrastructure Document List, contains a list of the Site Level implementing documents for each of the criteria

7 1 Management

7.1.1 Criterion 1, Program

7.1.1.1 Requirements

10 CFR 830 120 (c) (1) (i) for Nuclear Facilities/Activities
"A written quality assurance program (QAP) shall be developed, implemented, and maintained The QAP shall describe the organizational structure, functional responsibilities, levels of authority and interfaces for those managing,

performing, and assessing the work The QAP shall describe management processes, including planning, scheduling, and resource considerations "
DOE Order 5700 6C, 9 b (1)(a) for Non-Nuclear Activities
"Organizations shall develop, implement, and maintain a written Quality Assurance Program (QAP) The QAP shall describe the organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing adequacy of work The QAP shall describe the management system, including planning, scheduling, and cost control considerations "

7.1.1.2 Discussion

The Site Quality Assurance Manual, which contains the Site QAP, is developed, implemented, maintained and approved by the IMC Each Principal Subcontractor will perform work to the Site QA requirements

The Site QAP is consistent with DOE G-830 120-Rev 0, Implementation Guide for use with 10 CFR 830 120 Quality Assurance

The individual company-specific QAPPs of the Principal Subcontractors (or the Site QAP) will apply to their subcontracted work, whether performed by the Principal Subcontractor or a lower-tier contractor The lower-tier contractor may work to the QAPP of the Principal Subcontractor (or the Site QAP) or they may develop their own QAPP as long as their Plan is consistent with the QAPP and has been approved by the responsible Principal Subcontractor

The Kaiser-Hill Team has prepared an Accelerated Site Action Project (ASAP) strategic plan (also titled Choices for Rocky Flats) to radically decrease the Site risks and increase land availability as compared to the Site's past course of action This strategic plan provides a number of alternatives for moving forward While the alternatives are being evaluated through the National Environmental Policy Act and the decision process is ongoing, the Site is proceeding with short-term plans that focus on reducing Site risks and operating costs When a long-term alternative is selected, short-term plans will be adjusted, as necessary, to fit the selected alternative

The Site follows the defined DOE budgeting process for funding current fiscal year work and for planning work for future fiscal years Currently authorized work is identified on the Master Activity List and in approved budget work packages

The Site QAP describes the processes by which organizations perform work activities which meet QA requirements The Site infrastructure provides for the development of program documents and procedures needed to satisfy the requirements of rules, regulations, and DOE Orders which are applicable to Site activities The Site basic organizational structure, functional responsibilities, lines of authorities, and interfaces are described in Section 6 of this document, Organizational Roles and Responsibilities Policies applicable to the IMC and Principal Subcontractors are found in the Policy Manual, and are developed and maintained in accordance with the Policy Program

The document hierarchy which includes the Site QAP is described in Section 5 3, Document Hierarchy, and illustrated in Figure 1, Site Quality Document Hierarchy

Implementation of QA requirements is accomplished through the establishment of policies, programs, procedures, and work instructions Procedures that implement the activities are written, reviewed, and approved to satisfy the criteria according to the risk(s), hazard(s), and/or consequence(s) identified A list of Site level infrastructure documents which implement the Site QA requirements is found in the QA Manual Records generated by procedural adherence are identified within each approved procedure

Quality is achieved by the individuals who are responsible for producing an item or performing an activity Quality may be measured by acceptance criteria, technical evaluations, inspections, management assessments, and independent assessments

Deficiencies and nonconformances are documented and, based on their significance, corrective actions are formulated, documented, implemented, and selectively verified to prevent recurrence Significance criteria are established in the Site Commitments Management and Corrective Actions Process

7.1.1.3 Implementation Documents

Kaiser-Hill management's philosophy with respect to quality is stated in the Site Quality Assurance Policy The QA Policy can be found in the Policy Manual

The Site QAP is found in the QA Manual The QA Manual consists of the Site QAP, the Quality Assurance Glossary of Terms, the Quality Assurance Program Infrastructure Document List, the Site Quality Council Charter, and other Quality documents The Site QAP is submitted to DOE for approval in accordance with 10 CFR 830 120 and DOE Order 5700 6C The Site QAP reiterates the requirements of 10 CFR 830 120 and DOE Order 5700 6C and describes how these requirements are or will be met by the Kaiser-Hill Team organizations, personnel, and lower-tier contractors

The Site QAP and the Principal Subcontractor's QAPPs have been prepared in accordance with procedure 1-C40-QAP-02 01, Preparation of Quality Assurance Program Plans

Additional documents, or applicable portions, that are used or may be used to implement QA requirements include the Accelerated Site Action Project plan, (Choices for Rocky Flats) the Kaiser-Hill Environmental, Safety & Health Management & Implementation Plan, procedure 1-50000-ADM-05 01, Document Hierarchy Definition and Administration, and procedure 1-S27-ADM-02 28, Price-Anderson Amendments Act Process, 1-40ADM-MCS-1001, Management Control System, 1-40ADM-MCS-1002, Work Package Development and Documentation, 1-R32-ADM-02 38, Activity Definition Process, the Master Activity List Authorization Agreement, and the Master Activity List

7.1.2 Criterion 2, Personnel Training and Qualification

7.1.2.1 Requirements

10 CFR 830 120 (c) (1) (ii) for Nuclear Facilities/Activities
"Personnel shall be trained and qualified to ensure they are capable of performing their assigned work Personnel shall be provided continuing training to ensure that job proficiency is maintained "

DOE Order 5700 6C, 9 b (1)(b) for Non-Nuclear Activities
"Personnel shall be trained and qualified to ensure they are capable of performing their assigned work Personnel shall be provided continuing training to ensure that job proficiency is maintained "

7.1.2.2 Discussion

Training programs, including initial training, are designed to qualify and train personnel responsible for managing, developing, performing, and assessing work activities Continuing training is provided to ensure job proficiency is maintained

The qualification and training process is designed to enable management to determine and document job-specific and general training requirements for their employees Training methods include formal training conducted by qualified instructors, briefings conducted by management approved personnel, required readings, workshops, seminars, and awareness training Implementation requirements and responsibilities for personnel training and qualification are documented

The training and qualification process is applied using a graded approach For example, training of maintenance crafts will be focused on safety and other regulatory required training (e g Occupational Safety and Health Administration requirements) Other maintenance training and qualification will be limited to maintaining craft job proficiency at the journeyman level

7.1.2.3 Implementation Documents

The Training User's Manual (TUM) implements the requirements of DOE Order 5480 20, Personnel Selection, Qualification, and Training Requirements at DOE Nuclear Facilities The TUM references the Site organization, and the planning and administration of the qualification/certification program, and sets forth the responsibilities, authorities, and methods for conducting training The Training Implementation Matrix documents compliance to DOE Order 5480 20 for each nuclear facility

The training program includes general employee training which covers general requirements applicable to common elements of employees' work assignments Personnel may also be required to complete area-specific training, based on their specific work area, building assignments, and access needs
A matrix for line management to determine the general training requirements for each individual is available electronically Employees may also be required to complete job-specific training in the unique aspects of individual jobs

Continuing training programs are designed and implemented to maintain and enhance job proficiency identified in the certification/qualification program

7.1.3 Criterion 3, Quality Improvement

7.1.3.1 Requirements

10 CFR 830 120 (c)(1)(iii) for Nuclear Facilities/Activities
"Processes to detect and prevent quality problems shall be established and implemented Items, services, and processes that do not meet established requirements shall be identified, controlled, and corrected according to the importance of the problem and the work affected Correction shall include identifying the causes of problems and working to prevent recurrence Item characteristics, process implementation, and other quality-related information shall be reviewed and the data analyzed to identify items, services, and processes needing improvement "

DOE Order 5700 6C, 9 b (1)(c) for Non-Nuclear Activities
"The organization shall establish and implement processes to detect and prevent quality problems and to ensure quality improvement Items and processes that do not meet established requirements shall be identified, controlled, and corrected Correction shall include identifying the causes of problems and preventing recurrence Item reliability, process implementation, and other quality-related information shall be reviewed and the data analyzed to identify items and processes needing improvement "

7.1.3.2 Discussion

Infrastructure programs have been established and implemented to detect, prevent, and correct quality related problems

Those items and activities that do not meet established criteria and/or predetermined quality requirements are identified, documented, analyzed, dispositioned, corrected, and selectively verified in accordance with the Site nonconforming items process Nonconforming items are controlled to prevent inadvertent installation, testing, or use Based upon the importance to safety and the significance of the identified problem, causal factors are evaluated to establish the cause

The occurrence reporting process establishes reporting requirements, followup corrective actions, root cause analysis, and tracking of Site occurrences The the Commitments Management and Corrective Actions Process establishes the responsibilities and instructions for deficiency reporting and corrective action systems and procedures to ensure that unclassified deficiencies are documented, analyzed, evaluated for significance, and prioritized for corrective action

Significance is determined based on potential impact to operations, safety, security, reliability, performance, regulatory compliance, and the environment

Independent verifications and follow-up activities are performed on selected corrective actions depending, in part, upon the significance of the identified deficiency When conditions require immediate cessation of activities, the stop work process is initiated

Management assessments provide a consistent approach for management to evaluate compliance with requirements and commitments, measure effectiveness of established processes, identify and correct deficient conditions and work practices, and to implement needed improvements Item characteristics, process implementation, and other quality-related information and data will be reviewed and the data analyzed to identify items, services, and processes needing improvement based upon a graded approach Trending of maintenance history data will be accomplished for specific buildings and equipment based upon a graded approach

The Cause Analysis process is established to determine the root and contributing causes of events and conditions, and the associated corrective actions that, if implemented, will prevent recurrence The rigor of cause analysis is based on the significance of the issue

The Lessons Learned Program is established to collect, evaluate, and distribute experience information related to concerns, deficiencies, occurrences, findings, defects, weaknesses, or other information with generic implications

7.1.3.3 Implementation Documents

The quality improvement process is described and implemented, in part and as applicable, by several procedures Procedure 1-P04-CMCAP-16 00, Commitments Management and Corrective Actions Process, establishes the process and responsibilities for identification, documentation, characterization, categorization and significance screening of deficiencies, management directives, and Site improvements

Procedure 1-A65-ADM-15 01, Control of Nonconforming Items, establishes the process and responsibilities for identifying, controlling, resolving, modifying, evaluating, dispositioning, and verifying completed corrective actions for nonconforming items associated with non weapons applications Weapons related nonconformances are processed in accordance with 1-50000-ADM-15 04, Quality Disposition Record The Waste organization uses procedure 2-U76-WC-4030, Control of Waste Nonconformances, for identifying, controlling, resolving, evaluating, providing dispositions, and verifying completed corrective actions for nonconforming waste items and packages at the Site

Deficiencies identified as Industrial Hygiene and Safety hazards are reported and administered in accordance with the Health and Safety Practices Manual, 1-E35-HSP-1 06, Hazards and Deficiencies Abatement Management Process

Other procedures or applicable portions, that are used to identify and implement improvements are 1-V10-ADM-15 02, Stop Work Action, 1-11000-ADM-16 03, Cause Analysis, 1-C78-ADM-16 05, Lessons Learned Process, 1-D97-ADM-16 01, Occurrence Reporting Process, 1-E93-ADM-16 18, Performance Indication and Trend Analysis, 1-Q05-ADM-02 26, Standards Identification, Assessment, and Noncompliance and 1-P45-MA-001, Management Assessment Program and Management Assessment Implementation Guide

7.1.4 Criterion 4, Documents and Records

7.1.4.1 Requirements

10 CFR 830 120 (c)(1)(iv) for Nuclear Facilities/Activities
"Documents shall be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design Records shall be specified, prepared, reviewed, approved, and maintained "

DOE Order 5700 6C, 9 b (1)(d) for Non-Nuclear Activities
"Documents shall be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design Records shall be specified, prepared, reviewed, approved, and maintained "

7.1.4.2 Discussion

The Site Document Control and Records Management Programs are provided by DCI with oversight by the IMC Engineering Document Control is provided by the IMC Principal Subcontractors are responsible for assuring adherence to the Site Document Control and Records Management Programs through their company-specific QAPPs

The Site Document Control Program is designed such that Site documents to prescribe processes, specify requirements, or establish design are prepared, reviewed, approved, issued, and controlled for use by personnel managing or performing work Controlled documents are distributed to the user in a manner to ensure the use of the latest revision, controlled to ensure that obsolete and superseded documents are stamped, destroyed, or recalled to prevent their inadvertent use, routinely verified to ensure controlled status, and maintained by indices

A Records Management Program has been established to ensure that Site records providing evidence of quality are specified, prepared, reviewed, approved, authenticated, legible, transferred, collected, maintained, stored, retained to identified retention periods, and indexed for accountability and retrievability The scope of records to be retained is normally identified by line management within the procedure that generates the record The Records Management organization provides assistance to Site organizations in the determination of records and appropriate retention schedules

Computer hardware and software that are used to store, maintain, index, and access records are controlled to ensure records protection from loss or damage, and to ensure accountability and retrievability

7.1.4.3 Implementation Documents

Correspondence is controlled in accordance with procedure 1-11000-ADM-003 Correspondence Control Program, and the Correspondence Manual
Documents are reviewed for appropriate technical content and accuracy
Manuals and procedures are distributed and controlled in accordance with procedure 1-77000-DC-001, Document Control Program
Records generated by the Kaiser-Hill Team are controlled in accordance with procedure 1-77000-RM-001, Records Management Guidance for Records

Sources The procedure establishes the requirements and responsibilities of Site records sources for the identification, generation, correction, authentication, protection, and turnover of records, regardless of media type, to the Site Records Management organization

7.2 Performance

7 2.1 Criterion 5, Work Processes

7.2.1.1 Requirements

10 CFR 830 120 (c)(2)(i) for Nuclear Facilities/Activities
"Work shall be performed to established technical standards and administrative controls using approved instructions, procedures, or other appropriate means Items shall be identified and controlled to ensure their proper use Items shall be maintained to prevent their damage, loss, or deterioration Equipment used for process monitoring or data collection shall be calibrated and maintained "

DOE Order 5700 6, 9 b (2)(a) for Non-Nuclear Activities
"Work shall be performed to established technical standards and administrative controls Work shall be performed under controlled conditions using approved instructions, procedures, or other appropriate means Items shall be identified and controlled to ensure their proper use Items shall be maintained to prevent their damage, loss, or deterioration Equipment used for process monitoring or data collection shall be calibrated and maintained "

7.2.1.2 Discussion

Work processes and activities including special processes, are performed as permitted by established Site infrastructure programs and procedures, including Activity Based Management

Controls for work processes affecting quality are established by the generation of instructions, procedures, drawings, training requirements, and other approved means Proceduralized infrastructure programs and process control systems have been established to assure standardized and consistent achievement of requirements, goals, and objectives

Individual employees and line management are responsible for the achievement of quality Line managers ensure that activities affecting quality are controlled by approved procedures or other appropriate means

The extent of the controls applied to the work is commensurate with the scope complexity, and risk associated with the assigned task Corrective, preventive, and predictive maintenance will be accomplished for specific equipment based upon a graded approach Not all items will be maintained to prevent damage and deterioration Equipment used for monitoring or data collection is calibrated and maintained Line management observes work performed, reviews work documentation, conducts management assessments, and ensures documentation and correction of deficiencies and nonconformances Activities affecting quality are controlled through approved documents

The Site Measuring and Test Equipment (M&TE) Program provides controls to calibrate and maintain M&TE The Metrology organization provides administrative and technical expertise for Site calibration organizations Metrology also develops requirements for the control of M&TE Organizations that are responsible for the M&TE implement requirements for control M&TE includes measuring and testing instruments, standards, reference materials, and auxiliary apparatus that are necessary to perform a measurement in the course of testing, inspection, or calibration

7.2.1.3 Implementation Documents

The MAL contains a list of currently identified work activities which are either (1) a baseline activity necessary for performance due to the presence of hazards, (2) a mission program activity authorized for performance, (3) a mission program activity authorized for planning only, or (4) a currently unauthorized mission program activity The MAL contains the list of currently approved nuclear activities, however, not every listed activity is a nuclear activity

Activities affecting quality are controlled through approved documents Policies are controlled through procedure 1-50000-ADM-05 02, Development and Control of Rocky Flats Plant Policies The Site procedures system provides a documented process for procedure preparation, review, change, revision, and approval The procedure process is described in procedures covering Procedure Process, Procedure Writing, and Procedure Edit, Review, and Comment The Conduct of Engineering Manual and Engineering Drafting Manual provide a documented process for drawing preparation, review, revision, approval, and controlled distribution

Activity Based Management is implemented through procedure 1-D55-ADM-02 37, Activity Control Envelope Development, and other Activity Based Management procedures

Maintenance work activities are implemented through several procedures including the Integrated Work Control Program Manual, the Nuclear Safety Program, Welding Operations, the Quality Control Manual for the Repair and Alteration of Boilers and Pressure Vessels to the National Board Inspection Code, and the welding programs of each of the Principal Subcontractors Operations work is governed by the procedures found in the Conduct of Operations Manual Radiological work is governed by the Radiological Control Manual Other work is governed by the Waste Management Program, the Nuclear Control and Accountability Process, the Emergency Preparedness Program, the Procurement Program, M&TE procedures, etc

A list of the Site level infrastructure documents which implement the Site QA requirements is found in the Quality Assurance Manual

7.2.2 Criterion 6, Design

7.2.2.1 Requirements

10 CFR 830 120 (c)(2)(ii) for Nuclear Facilities/Activities
"Items and processes shall be designed using sound engineering/scientific principles and appropriate standards Design work, including changes, shall

incorporate applicable requirements and design bases Design interfaces shall be identified and controlled The adequacy of design products shall be verified or validated by individuals or groups other than those who performed the work Verification and validation work shall be completed before approval and implementation of the design "

DOE Order 5700 6C, 9 b (2)(b) for Non-Nuclear Activities
"Items and processes shall be designed using sound engineering/scientific principles and appropriate standards Design work, including changes, shall incorporate applicable requirements and design bases Design interfaces shall be identified and controlled The adequacy of design products shall be verified or validated by individuals or groups other than those who performed the work Verification and validation work shall be completed before approval and implementation of the design "

7.2.2.2 Discussion

Kaiser-Hill provides engineering oversight for the Site Design requirements upon which final design work is based include inputs such as existing design bases, performance requirements, regulatory requirements, codes, standards, environmental considerations, risk, and interfaces with new or existing structures and equipment A systematic engineering approach is utilized

The design program provides controls for design of items and processes using engineering/scientific principles and appropriate standards Design work includes the identification of the Authorization Basis and consideration of nuclear materials safety Design work includes incorporation of applicable requirements and design bases, identification and control of design interfaces, and verification and validation of the adequacy of design products by individuals or groups other than those who performed the work The verification and validation is completed before approval and implementation of the design

Design control applies to items, facilities, and processes and is documented and implemented through procedures, design packages, and work packages The Software Management Program requires that design software, including changes, be documented, concurred with, and approved by qualified technical personnel The requirements for computer testing are documented in software development plans and procedures

7.2.2.3 Implementation Documents

Primary design controls are established, as applicable, within the Conduct of Engineering Manual, the Configuration Change Control Program Manual, the Integrated Work Control Program Manual, procedure 1-45000-CSM-001, Computer Software Management, and procedure 1-91000-NSM, Nuclear Safety Manual The authorization basis process and procedures are being developed

7.2.3 Criterion 7, Procurement

7.2.3.1 Requirements

10 CFR 830 120 (c)(2)(iii) for Nuclear Facilities/Activities
"Procured items and services shall meet established requirements and perform as specified Prospective suppliers shall be evaluated and selected on the basis of specified criteria Processes to ensure that approved suppliers continue to provide acceptable items and services shall be established and implemented "

DOE Order 5700 6C, 9 b (2)(c) for Non-Nuclear Activities
"The organizations shall ensure that procured items and services meet established requirements and perform as specified Prospective suppliers shall be evaluated and selected on the basis of specified criteria The organization shall ensure that approved suppliers can continue to provide acceptable items and services "

7.2.3.2 Discussion

The IMC provides the Site with one common Procurement System for the procurement of commodities, items, and services, however, each of the Principal Subcontractors maintains an individual procurement organization to process specific procurement documents The Site procurement process provides a planned and controlled approach to procurement activities to ensure procured items and services conform to specified requirements Procurement documents contain the technical, quality, and acceptance requirements for the procurement of items and services The procurement process ensures that prospective suppliers are evaluated and selected on the basis of specified criteria.

The procurement process also contains controls for technical, quality, and acceptance requirements to flow down to suppliers and lower-tier contractors Included in this flow down are applicable Price-Anderson Amendments Act requirements The procurement process provides measures to ensure that approved suppliers continue to provide acceptable items and services

Procurement specifications for equipment, commodities, and services are developed in accordance with procurement levels as specified in the Conduct of Engineering Manual Changes to procurement specifications are controlled through the Configuration Change Control Program Procurement requisitions in support of work packages are initiated through the Integrated Work Control Program

DCI is responsible for Site receipt, inspection, and certification Receipt inspection and certification activities for procured items are conducted to verify compliance with the procurement documents These activities include selected inspections, review of required documentation, selected testing, and ensuring the proper disposition and closure of nonconformance documents

7.2.3.3 Implementation Documents

Procurement requirements are implemented in accordance with the Procurement System Volume I and Volume II and the Acquisition Guidelines for Requisitioning Commodities and Services (attached to Standing Order 30) and successor documents

7.2.4 Criterion 8, Inspection and Acceptance Testing

7.2.4.1 Requirements

10 CFR 830 120 (c)(2)(iv) for Nuclear Facilities/Activities
"Inspection and testing of specified items, services, and processes shall be conducted using established acceptance and performance criteria Equipment used for inspections and tests shall be calibrated and maintained "

DOE Order 5700 6C, 9 b (2)(d) for Non-Nuclear Activities
"Inspection and acceptance testing of specified items and processes shall be conducted using established acceptance and performance criteria Equipment used for inspections and tests shall be calibrated and maintained "

7.2.4.2 Discussion

Site infrastructure programs provide for inspection, testing, and calibration of specified items, services, and processes to demonstrate that items and processes perform as intended Inspection, testing, and calibration are conducted using established acceptance and performance criteria Equipment used for inspections and tests is calibrated and maintained Inspections, testing, and calibration to verify conformance of an item to specified requirements and/or demonstrate satisfactory performance for service will be planned, documented, performed, and evaluated using a graded approach according to risk

Controls are established and provide for documented methods to communicate the status of operations, equipment, and systems to affected personnel The work package planning process specifies lock-out and tag-out situations and utilizes methods to convey the status of preoperational and post-maintenance activities to promote the safe operation of equipment and systems A formal return to service process following successful post-maintenance testing is established

The status of operations is communicated through the Shift Relief and Turnover process, and the status of inspections and tests through Inspection, Test and Operating Status Control Boards strategically located within Site facilities

The Site Measuring and Test Equipment Program and Site Metrology Program are provided by DCI, as well as field inspection support of applicable maintenance/construction work The Site Metrology Program includes process, inline instruments as well as the standard Measuring and Test Equipment Controls are provided so that inspection and acceptance testing, identified in the technical documents, is performed and documented as required and in accordance with procedures

7.2.4.3 Implementation Documents

The inspection, testing, and calibration of specified items, services, and processes, including equipment, is controlled through the Conduct of Engineering Manual, the Integrated Work Control Program, and through the Procurement, Metrology, and Control of Measuring and Test Equipment programs Applicable portions of the following documents implement this criterion 1-D23-QAP-10 02, Inspection, 1-31000-COOP-019, Returning Systems and Equipment to Service, 1-V51-COEM-DES-210, Design Process Requirements, and 1-I97-ADM-12 01, Control of Measuring and Test Equipment

7.3 Assessments

7.3.1 Criterion 9, Management Assessment

7.3.1.1 Requirements

10 CFR 830 120 (c)(3)(i) for Nuclear Facilities/Activities
"Managers shall assess their management processes Problems that hinder the organization from achieving its objectives shall be identified and corrected "

DOE Order 5700 6C, 9 b (3)(a) for Non-Nuclear Activities
"Management at all levels shall periodically assess the integrated quality assurance program and its performance Problems that hinder the organization from achieving its objectives shall be identified and corrected "

7.3.1.2 Discussion

Management assessment places emphasis on the use of human and material resources to achieve Site goals and objectives Management assessments include an introspective evaluation to determine if the entire integrated management system effectively focuses on meeting Site and company goals Self-evaluations or self-assessments are one form of management assessment Other forms of management assessment include, but are not limited to, critiques, reviews, walkdowns, and appraisals

The IMC and Principal Subcontractor management retain the overall responsibility for management assessments Direct participation by managers is essential to assure that effective programs have been established and implemented Managers conduct assessments of their processes to identify problems which may prevent the organization from achieving its goals and objectives Problems detected by management assessments are documented and corrected

7.3.1.3 Implementation Documents

Management assessments are conducted by Site organizations in accordance with 1-P45-MA-001, Management Assessment Program and Management Assessment Implementation Guide, and other approved procedures Compliance with DOE Orders and other standards is established and documented in accordance with procedure 1-Q05-ADM-02 26, Standards Identification, Assessment, and Noncompliance Processes

7.3.2 Criterion 10, Independent Assessment

7.3.2.1 Requirements

10 CFR 830 120 (c)(3)(ii) for Nuclear Facilities/Activities
"Independent assessments shall be planned and conducted to measure item and service quality, to measure the adequacy of work performance, and to promote improvement The group performing independent assessments shall have sufficient authority and freedom from the line to carry out its responsibilities Persons conducting independent assessments shall be technically qualified and knowledgeable in the areas assessed "

DOE Order 5700 6C, 9 b (3)(b) for Non-Nuclear Activities
"Planned and periodic independent assessments shall be conducted to measure item quality and process effectiveness and to promote improvement The organization performing independent assessments shall have sufficient authority and freedom from the line organization to carry out its responsibilities Persons conducting independent assessments shall be technically qualified and knowledgeable in the areas assessed "

7.3.2.2 Discussion

The IMC is responsible for establishing direction and guidance for the Independent Assessment Program and performing independant assessments Principal Subcontractors may perform independent assessments within their specific company Independent assessment activities are used to evaluate the performance of work processes with regard to requirements, expectations of the customer, and progress toward achieving the Site mission and goals Independent assessment activities are conducted to assure the appropriate QA requirements are incorporated into Site work control processes and documents and are included in Site daily activities Independent assessment activities evaluate floor level compliance with Site infrastructure programs and procedures Independent assessment activities are documented and reports are provided to appropriate levels of management Findings are used to evaluate effectiveness of the processes and identify needed improvements Independent assessment concerns are tracked and follow-up actions taken to verify that corrective action is accomplished as scheduled

Those performing independent assessment activities have sufficient authority and freedom to carry out their responsibilities Persons performing independent assessment activities are technically qualified, knowledgeable in the areas assessed, and do not have direct responsibility in the areas assessed

DOE requires that all contractors and their subcontractors allow access to all facility areas for the purpose of conducting assessment activities To enhance the performance and efficiency of assessments, all employees, to the level of their knowledge and authority, provide requested information and documentation during the assessment process For effective communication and where corrective action is necessary, management of the assessed organization(s) should participate in the assessment process

7.3.2.3 Implementation Documents

Independent assessment activities are performed in accordance with procedure 2-B52-ADM-02 01, Independent Assessment, or its successor The procedure establishes the method and processes for planning, scheduling, preparing, performing, and documenting independent assessment activities to measure item quality, process effectiveness, work processes and operations, and to promote improvement

8.0 IMPLEMENTATION PLAN

The implementation plan for 10 CFR 830 120 will be submitted as a separate document