

# Rocky Flats Environmental Technology Site

Revision 1

## SITE QUALITY ASSURANCE PROGRAM

APPROVED BY

  
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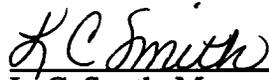
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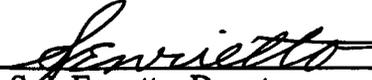
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Site Quality Assurance Program

**1. PURPOSE**

The purpose of the Rocky Flats Environmental Technology Site (Site) Quality Assurance Program (QAP) is to express the vision of Kaiser-Hill Company, L L C (Kaiser-Hill), the Integrating Management Contractor (IMC), with respect to quality and define how the Site QAP is expected to function. It also specifies the roles and responsibilities of the IMC and the Principal Subcontractors with respect to quality and the relationship between the Site QAP and the Quality Assurance Program Plans (QAPPs) of the Principal Subcontractors. The Site QAP is also the Kaiser-Hill QAPP.

**2. SCOPE**

The Site QAP provides a road map for organizations, management, and stakeholders to help them understand how the Site QAP is administered under the IMC. 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 methodologies for ensuring compliance with Department of Energy (DOE) Order 5700 6C (Order) for non-nuclear facilities, activities, and services and 10 CFR 830 120 (Rule) for nuclear facilities and activities. The Site QAP is a revision to and supersedes the Site QAP submitted to DOE by EG&G on November 1, 1994 and the Interim QAP and Implementation Plan submitted to DOE by Kaiser-Hill in September 1995.

Limitations on Liability

To the extent a violation of 10 CFR 830 120 occurs, the cause of which is beyond the control and without the fault or negligence of the IMC or the Principal Subcontractors, such a violation shall not be an enforceable violation of a program, plan, schedule or any other process established by law and such a violation shall not result in liability to the IMC or the Principal Subcontractors. Examples of such causes include:

- 1 acts of God, including flood or fire, or acts of the public enemy,
- 2 acts of the Government in its sovereign or contractual capacity,
- 3 epidemics,
- 4 quarantine restrictions,
- 5 strikes,
- 6 freight embargoes,
- 7 unusually severe weather, and
- 8 pre-existing conditions which relate to or arise out of failure to act on the part of any person, and relating to any part of any nuclear facility at the Rocky Flats Environmental Technology Site which act or failure to act occurred before Kaiser-Hill and the Principal Subcontractors assumed responsibility for the integrated management of the Site on July 1, 1995.

This does not relieve the IMC or the Principal Subcontractors of any obligations imposed upon them as a result of the contractual obligations to the DOE under Prime Contract, No DE-AC34-95RF00825

### 3. STANDARDS AND REQUIREMENTS

The Site QAP describes the Site Quality Assurance (QA) requirements. The requirements are identified in the Quality Assurance Program Criteria and will be identified in the Site Standards/Requirements Identification Document (S/RID), Section 2, Quality Assurance (under development). When the S/RID is issued it will replace the Quality Assurance Program Criteria Document.

The requirements for nuclear activities incorporate

- 10 CFR 830.120, Quality Assurance Requirements
- 10 CFR 820, Procedural Rules for Nuclear Activities

The requirements for non-nuclear activities incorporate

- DOE Order 5700.6C, Quality Assurance

### 4. GENERAL INFORMATION

#### 4.1 Program Overview

The Site QAP describes the roles, responsibilities and methodologies for ensuring compliance with DOE Order 5700.6C (Order) for non-nuclear facilities, activities and services and 10 CFR 830.120 (Rule) for nuclear facilities and activities. Since the Order and the Rule include essentially the same criteria, the IMC has incorporated the requirements into a single program document. The primary distinction between the two requirements is enforcement 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 and activities as described in this and company-specific QAPPs.

On July 1, 1995 Kaiser-Hill became the IMC 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 (DynCorp), Rocky Mountain Remediation Services, LLC (RMRS), Safe Sites of Colorado (SSOC), and Wackenhut Services Inc (WSI). Each of the Principal Subcontractors have specific areas of responsibility. DynCorp provides sitewide services in support of nuclear facilities such as records management, occupational medicine, transportation, emergency preparedness, maintenance, and receipt inspection. RMRS provides Site environmental remediation and waste management and is responsible for several specific nuclear facilities. SSOC performs operations for the majority of the Site's nuclear facilities. WSI provides security services for the Site. Kaiser-Hill as the IMC has no operational responsibility for nuclear facilities but does provide support services.

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. Each of the individual Principal Subcontractors have developed company-specific QAPPs to describe

how the company will implement the Site QAP to accomplish their specific mission and how it is implemented within their company. Copies of the company-specific QAPPs are available through the IMC Quality organization. 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 is the identification and prioritization of facilities for deactivation, decontamination, and decommissioning 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.

As risks are being reduced and facilities are prepared for final decommissioning, the cost of the rigor of maintaining compliance with established requirements needs to be considered. The cost of deactivation and decommissioning can be reduced if the Site has approved methods for the selective application of requirements and grading the rigor with which the selected requirements are applied.

The Site is establishing a process for providing an authorization basis recognizing the Site's age and life cycle status. As the work authorization process is better defined, the Site QAP will be modified, if necessary.

The Site QAP is intended to support the accomplishment of Site activities consistent with a graded approach while meeting the requirements of the Rule and the Order.

4.2

#### 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 his/her work, for identifying nonconforming items, and for complying with quality related standards 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.

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

#### 4.3 Document Hierarchy

Figure 1 provides an overview of the Site Quality Document Hierarchy for the IMC, the Principal Subcontractors, and lower-tier contractors

The Site quality requirements are identified and maintained in the S/RID, Section 2, Quality Assurance (under development). Additional program specific requirements may be found in other sections of the Site S/RID (under development). The S/RID is required to be approved by the IMC and the DOE. Until the S/RID is approved, the Quality Assurance Program Criteria document is applied for requirements identification.

The quality management philosophy of the IMC is expressed in the Site QA Policy. This Policy establishes the IMC commitment to ensure that quality 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:

- The Quality Assurance Program Mission and Vision provides a description of the Site Quality Assurance Program Mission and Vision.
- The Site Quality Assurance Program explains the relationship between the various QA documents that jointly describe and implement the QA requirements. 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 the Rule and Order and summarizes the methodology by which they are implemented across the Site.
- The Quality Assurance Program Glossary of Terms is the single authority for definitions related to the Site QAP. The Glossary applies to all documents developed to standardize the Site QAP, and any subsequent documents and efforts associated with 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.
- The Quality Assurance Program Infrastructure Document List provides a consolidated listing of Site infrastructure documents that implement the Site QAP.
- The Site Quality Council Charter provides the authority and scope under which the Site Quality Council operates. The multicontractor Quality Council provides a mechanism for interaction between the IMC and the Principal Subcontractors. The Site Quality Council provides guidance and direction for the development and implementation of the Site QAP.
- The Site Quality Assurance Program Practices section is to be issued in concert with the Site S/RID, Section 2, Quality Assurance (under



explanation as to which criteria apply and how these criteria are being implemented

The company-specific 10 CFR 830 120 Implementation Plans for nuclear facilities, activities, and services and DOE Order 5700 6C Implementation Plans for other activities and services describe each company's compliance with the requirements and provides the method and schedule for resolving identified noncompliances

The company-specific QAPPs and Implementation Plans of the individual Principal Subcontractors will be submitted to the IMC for concurrence Changes to the Site QAP and the company-specific QAPPs will be submitted annually to DOE as required by the Rule

Based on the company-specific Implementation Plans, the IMC will develop the Site Implementation Plan which will be submitted to the DOE for approval Unclassified actions from the company-specific Implementation Plans will be entered into the Plant Action Tracking System. The IMC will monitor each company's progress against stated deliverables and keep the DOE apprised of both progress and problems The Site Implementation Plan will be reviewed and updated as appropriate annually

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 and work instructions 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

4 4 Applicability of 10 CFR 830 120, Quality Assurance Requirements

Title 10 CFR Part 830 120 is applicable to nuclear activities associated with the designated nuclear facilities identified by the Kaiser-Hill Nuclear Safety, Safety Analysis organization. A list of current nuclear facilities may be obtained from the Nuclear Safety organization

Kaiser-Hill, as the IMC, has overall responsibility for Site activities Kaiser-Hill may perform certain tasks that are considered to be nuclear activities and, therefore, subject to enforcement under 10 CFR 830 120 The Principal Subcontractors have been assigned responsibility for Site nuclear facilities Each Principal Subcontractor has its own company-specific QAPP in which the nuclear facilities managed by the Principal Subcontractor are identified, as applicable

4 5 Selective Application

The Site S/RID, Section 2, Quality Assurance contains or will contain the standards and requirements that the IMC has deemed necessary and sufficient to provide an acceptable Site QAP for the various Site missions The S/RID, Section 2, Quality Assurance, is developed in accordance with the DOE ES&H Configuration Guidelines It addresses the ten quality criteria of 10 CFR 830 120 and DOE Order 5700 6C The requirements for each of the

criteria are subdivided into general requirements and nuclear requirements. General requirements need to be considered for applicability by Site individuals and organizations for Site non-nuclear activities. The nuclear requirements need to be considered by individuals and organizations involved in nuclear activities.

It is the responsibility of the IMC and each of the Principal Subcontractors to select from the S/RID the requirements that are applicable to their specific mission and to apply them through their company-specific QAPPs.

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 authority. The criteria for granting an exemption to a DOE nuclear safety requirement are specified in 10 CFR 820.62, Criteria.

If Principal Subcontractors believe, that for certain activities or operations under their purview, it is necessary to invoke more restrictive quality standards than included in the S/RID, this may be done at their discretion.

#### 4.6 Graded Approach

Once the applicable set of standards/requirements has been identified, compliance with the standards/requirements is mandatory. The rigor and level by which they will be met may 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.

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 shall be documented as required by 10 CFR 830.7, Graded Approach. The Rule does not further define the required documentation.

Kaiser-Hill does not visualize graded approach as a separate procedure, rather, Kaiser-Hill believes graded approach should be built into infrastructure programs and procedures. For example, graded approach is built into many Site infrastructure programs and procedures such as Occurrence Reporting, Integrated Work Control Program, Procurement, and Lessons Learned. Graded approach is a fundamental concept of activity based management. The Sitewide Commitments Management and Corrective Actions Process provides a mechanism for prioritizing and evaluating deficiencies, concerns, and improvements.

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

5. **DEFINITIONS AND ACRONYMS**

Quality related definitions can be found in the Glossary of Terms in the Quality Assurance Manual. The following acronyms are used in this document:

DOE	Department of Energy
DynCorp	DynCorp of Colorado
ES&H	Environment, Safety, and Health
ESH&Q	Kaiser-Hill Environment, Safety & Health and Quality
IMC	Integrating Management Contractor
Kaiser-Hill	Kaiser-Hill Company, LLC
M&TE	Measuring and Test Equipment
Ops	Operations
Order	DOE Order 5700 6C, Quality Assurance
PA	Protected Area
QA	Quality Assurance
QAP	Quality Assurance Program
QAPP	Quality Assurance Program Plan
RFFO	Rocky Flats Field Office
RMRS	Rocky Mountain Remediation Services, LLC
Rule	10 CFR 830.120, Quality Assurance Requirements
Site	Rocky Flats Environmental Technology Site
SNM	Special Nuclear Material
S/RID	Standards/Requirements Identification Document
SSOC	Safe Sites of Colorado
TIM	Training Implementation Matrix
WSI	Wackenhut Services, Inc

6. **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 are 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 set by Kaiser-Hill as the IMC are carried out by six major organizational units. These units are Finance and Administration, Safety Engineering and Technical Services, Site Operations and Integration, Environmental Restoration/Waste Management and Integration; Special Material Management and Integration, and Human Resources, Communications, and Conversion. Four additional organizations have roles that umbrella the six major organizational units. These four organizations are Environment, Safety & Health and Quality; Standards Integration and Assurance, Planning and Integration, and General Counsel and Internal Audit.

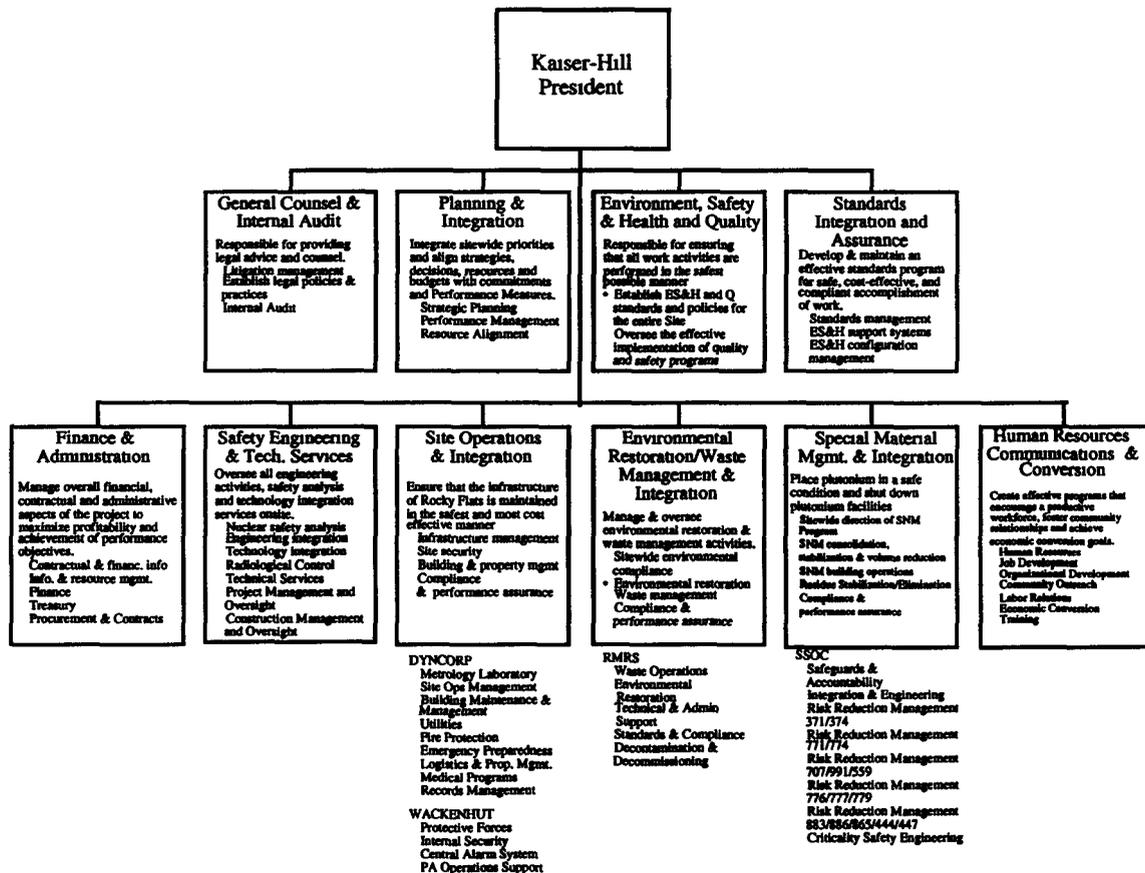
Support is provided by two levels of contractors. The four major direct subcontractors are known as Principal Subcontractors. Each of the Principal Subcontractors report to one of the IMC's organizational units. In addition,

several lower-tier contractors provide support to both the IMC and the Principal Subcontractors

The interfaces and interactions between the IMC and the Principal Subcontractors are established in their respective contracts and expanded upon by documented agreements between the various subcontractors

The Site Quality Council provides a mechanism for interaction between the IMC and the Principal Subcontractors with regard to quality. The Site Quality Council, chaired by a representative of the IMC, has representatives from each of the Principal Subcontractors. The Site Quality Council provides guidance and direction for the development and implementation of the Site QAP. Each of the members of the Site Quality Council are empowered to make decisions and commitments related to the Quality Assurance Program for the organization that they represent. The Charter for the Site Quality Council is contained in the Site Quality Assurance Manual.

Figure 2  
Kaiser-Hill Team Organization



Individuals representing the three Kaiser-Hill Compliance and Performance Assurance organizations are encouraged to attend and participate in the Site Quality Council. They represent the following three Kaiser-Hill organizations: Special Material Management and Integration, Site Operations and Integration, and Environmental Restoration/Waste Management and Integration.

Kaiser-Hill's Quality Systems Integration has assigned a quality liaison person to work directly with each of the Principal Subcontractor Quality Assurance organizations. These individuals provide assistance in the development of the quality assurance program and in identifying and resolving quality related issues.

6.2 Roles

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

Kaiser-Hill as the IMC has overall responsibility for Site activities and has the full authority for ESH&Q related matters and is accountable to the DOE for the safe performance of work and the overall success of Site activities and the ESH&Q Program for the Site.

Rocky Mountain Remediation Services, LLC (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, 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, Inc., 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
- Establishing overall policy and management direction for the Site QAP
  - Providing resources necessary to implement the Site QAP
- 6.3.2 All Kaiser-Hill Vice Presidents and Directors are responsible for
- Providing resources for their organizations necessary to implement the Site QAP
  - Incorporating QA requirements into documents that govern applicable work, activities, and the procurement of items and services
  - Passing applicable QA requirements down to Principal Subcontractors and lower-tier contractors, as appropriate
  - Providing integration, coordination, and oversight 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
  - Developing Authorization Basis process
  - Reviewing quality data to determine measures to strengthen the Site QAP
  - Resolving Site QAP related problems not resolved elsewhere
- 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 requirements of the Site QAP for the procurement of commodities, items, and services
  - Evaluating the adequacy of controls established to meet Site QAP 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 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 training program for the IMC and overseeing Site and Principal Subcontractor training programs
  - Assisting Site organizations in the application of Organizational Development concepts including Total Quality Management and other 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 and ensure management of the Site lands and Site structures, systems, and components
  - Establishing the Site Nuclear Safety Program
  - Establishing the Site Criticality Safety Program
  - Providing Engineering Documentation Services
- 6 3 7 In addition to the responsibilities listed in 6 3 2, the Kaiser-Hill Director, Standards Integration and Assurance is responsible for
- Assisting in the development and maintenance of procedures and instructions to meet QA requirements for Site activities
  - Reviewing performance data to determine trends for the improvement of Site programs
  - Maintaining the S/RID process and obtaining DOE approval of S/RIDs
  - Developing and maintaining the program for ensuring compliance with the Price-Anderson Amendments Act
  - Developing and maintaining the Sitewide deficiency tracking and corrective action system
- 6 3 8 In addition to the responsibilities listed in 6 3 2, the Kaiser-Hill Director, Planning and Integration is responsible for

- Developing and maintaining systems and processes to integrate sitewide priorities and align strategies, decisions, resources, and budgets with goals, commitments, and performance measures
- 6 3 9 In addition to the responsibilities listed in 6 3 2, the Kaiser-Hill Director, Quality Systems Integration is responsible for
- Developing and maintaining the Site S/RID, Section 2, Quality Assurance,
  - 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 QA Manual which contains the Site QAP and other Site quality documents
  - Identifying, developing, and maintaining (in concert with other organizations) procedures to implement the Site QAP
  - Reviewing and concurring with Principal Subcontractor QAPPs and Implementation Plans
  - Development of the annual audit schedule and conducting audits of organizations and subcontractor performance for compliance with established quality requirements and for achievement of quality objectives
  - Establishing, in coordination with the responsible implementing organizations, controls to ensure that conditions which are not in compliance with the Site quality requirements, are identified and promptly corrected
  - Implementing in conjunction with other organizations a centralized supplier evaluation and supplier audit program for procurement of commodities, items, and services
  - 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
  - Providing for the independent assessment of the adequacy of the overall Site QAP annually and providing results to Site management and DOE, RFFO
- 6 3 10 Kaiser-Hill Manager, Waste Certification Program is responsible for
- Reporting to the President, Kaiser-Hill for operational Waste Certification functions, and to the Director of Kaiser-Hill Quality Systems Integration for administrative functions
  - Providing Site waste certification and acceptance for purposes of onsite and radioactive offsite waste disposal
  - Providing oversight of the Site Waste Management Program
  - Initiating the stop work process when appropriate
  - Interfacing with Site waste generators, operations, and support staff on waste certification issues
  - Interfacing with waste receiving sites on certification and waste issues
  - Administering the Waste nonconformance reporting program
  - Initiating waste quality action reports for significant adverse trends and programmatic deficiencies
- 6 3 11 Kaiser-Hill Director, Performance Oversight is responsible for
- Performing independent assessment activities for the Site
  - Documenting deficiencies identified during independent assessment activities
  - Initiating the stop work process when appropriate

- Providing documented results of independent assessment activities to Site management
- Providing independent oversight of proposed corrective action plans for certain significant deficiencies
- Verifying 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

**6 3 12 Principal Subcontractors are responsible for**

- Developing and implementing a company-specific QAPP that is consistent with the Site QAP and submitting it to the IMC for review and concurrence
- Selecting the applicable subset of requirements from those included in the S/RID, Section 2, Quality Assurance (under development), that apply to their company-specific missions
- Implementing Site infrastructure programs and procedures, as applicable
- Providing for the development and maintenance (when Site Infrastructure procedures do not exist) of procedures and instructions to support accomplishment of their company-specific missions and to meet the requirements of the organization's QAPP
- Passing QA requirements down to lower-tier contractors and suppliers of services and approving the QAPPs of their lower-tier contractors, when applicable.
- Assisting the IMC with supplier evaluation and supplier surveillance programs for procurement of services
- Providing resources necessary to implement the QAPP
- Providing company-specific organizational charts, functional responsibilities, and levels of authority and updating as necessary
- Assessing the adequacy of implementation of the company-specific QAPP
- 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 13 In addition to the responsibilities listed in 6 3 12, DynCorp of Colorado 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 for Site Emergency Preparedness, Site Occurrence Reporting, Site Emergency Services, Occupational Medicine, Site Metrology, Site Integrated Work Control Program, and Site Transportation
- Providing engineering (design) services for DynCorp that meet design requirements of the QAPP and which are consistent with Site infrastructure programs, as established by the Site Chief Engineer

- 6.3 14 In addition to the responsibilities listed in 6.3 12, 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 of the QAPP 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 12, Rocky Mountain Remediation Services is also responsible for
- Providing engineering (design) services for RMRS that meet design requirements of the QAPP 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 12, Wackenhut Services, Inc is also responsible for
- Providing security services for the Site
- 6.3 17\* Principal Subcontractor Quality organizations are responsible to provide Quality Program support services to the performing organization. These include, as applicable:
- Reviewing and concurring with Integrated Work Control Program work package generation and closeout
  - Participating in Design Review and Readiness Determination activities
  - Preparing and reviewing procedures to implement requirements of the QAPP
  - Reviewing and approving purchase requisitions to ensure quality requirements are adequately incorporated
  - Performing management assessments of their respective quality related activities and reporting results to appropriate levels of management
  - Meeting inspection and verification requirements for Hold/Witness Points, as appropriate
  - Performing acceptance inspections and acceptance tests, as appropriate

## 7. 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. Source information can be found in the S/RID, Section 2, Quality Assurance (under development)

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 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 QAP through company-specific QAPPs.

The individual company-specific QAPPs of the Principal Subcontractors will normally apply to all of 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 they may develop their own QAPP as long as their Plan is consistent with the Site QAP and has been approved by the responsible Principal Subcontractor.

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. Further details of the Site organizational structure are or will be found in the Site Organization Manual. Policies applicable to the IMC and Principal Subcontractors are found in the Site Policy Manual and are developed and maintained in accordance with the Site Policy Program.

The document hierarchy which includes the Site QAP is described in Section 4.3, Document Hierarchy, and 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. 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 Site 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 Kaiser-Hill and Principal Subcontractor 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 to implement QA requirements include: 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. A Site level procedure describing management processes including planning, scheduling, and resource consideration is being prepared.

## **7.1.2 Criterion 2, Personnel Training and Qualification**

### **7.1.2.1 Requirements**

#### **10 CFR 830.120 (c) (1) (ii) for 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."

#### **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

### 7.1.2.3 Implementation Documents

The Training Implementation Matrix (TIM) implements the requirements of DOE Order 5480 20A (11-15-94), *Personnel Selection, Qualification, and Training Requirements at DOE Nuclear Facilities* The TIM 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 TIM outlines the training program for personnel who work in the Site's designated nuclear facilities 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 by computer 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 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 identified and 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 Site Commitments Management and Corrective Actions Process establishes the responsibilities and instructions for deficiency reporting and corrective action systems and procedures to ensure that 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, as provided in Principal Subcontractors QAPPs and the Site QAP, 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 reliability, process implementation, and other quality-related information and data are reviewed and analyzed to identify items and processes needing improvement.

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 1-50000-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-ADM-16 10, Management Assessment Program and Implementation Guide.

#### **7.1.4 Criterion 4, Documents and Records**

##### **7.1.4.1 Requirements**

###### **10 CFR 830.120 (c)(1)(iv) for 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."

###### **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 DynCorp with oversight by the IMC. Engineering Document Control is provided by the IMC. Principal Subcontractors are responsible for assuring adherence 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. All 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, or an alternative process endorsed by the Site Document Control Organization.

Records generated by Kaiser-Hill and Principal Subcontractors 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 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

Controls for work processes affecting quality are established during the generation of instructions, procedures, drawings, and training requirements. 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 held 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. Items are identified and controlled to ensure their proper use and to prevent loss, 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.

Work is also accomplished in accordance with standards and administrative control systems, using, as appropriate, approved procedures and instructions developed in accordance with Activity Based Management and the Site procedure development process, or other approved means.

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, and calibration.

### 7.2.1.3 Implementation Documents

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 procedures that are to be developed.

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 Quality Assurance Procedures 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 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 and 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. An authorization basis process and procedure are being developed.

## **7.2.3 Criterion 7, Procurement**

### **7.2.3.1 Requirements**

#### **10 CFR 830.120 (c)(2)(iii) for Nuclear 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 Price-Anderson Amendments Act regulatory requirements and conditions. 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.

DynCorp 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 Kaiser-Hill Procurement System Volume I and Volume II and the Kaiser-Hill Acquisition Guidelines for Requisitioning Commodities and Services (attached to Standing Order 30).

#### **7.2.4 Criterion 8, Inspection and Acceptance Testing**

##### **7.2.4.1 Requirements**

###### **10 CFR 830.120 (c)(2)(iv) for Nuclear 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 located in strategic locations within Site facilities

The Site Measuring and Test Equipment Program and Site Metrology Program, as a whole, are provided by Dyncorp, 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 Testing 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 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, who retain overall responsibility for management assessment, 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 or will be implemented, as appropriate, by Site organizations in accordance with approved procedures.

Other forms of management assessments are performed and documented, as applicable, in accordance with procedure 1-31000-COOP-002, Internal Surveillance Program, and other aspects of the Conduct of Operations Program such as mentoring.

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 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 the development and implementation of the Independent Assessment Program. If desired, Principal Subcontractors may perform independent assessments. 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. IMPLEMENTATION PLAN**

The implementation plan will be submitted as a separate document