

# PROJECT MANAGEMENT PLAN EXAMPLES

## Prepare Project Support Plans and Documentation - Quality Assurance Plan Examples

### Example 64

#### 8.3 QUALITY ASSURANCE

This section describes policies and procedures that will be used to meet QA program objectives. This section also develops the strategies PFP will use to ensure the S&M of the PFP inventory, the material stabilization project, the deactivation project, and the dismantlement of the PFP Complex buildings and are completed in a high quality manner.

##### 8.3.1 QA Program

The QA program for the PFP Stabilization and Deactivation Project is implemented in accordance with the requirements of 10 CFR 830.120, *Quality Assurance Requirements*, (QA Rule) and HNF-PRO-260, *Quality Assurance Program*. The manner in which the requirements are implemented is specified in QA program plans and implementing procedures for the PFP Complex. The QA program is applied using a graded approach commensurate with the importance of activities to the success of the PFP Stabilization and Deactivation Project.

##### 8.3.2 QA Strategy

The PFP Stabilization and Deactivation Project activities will require a significant level of QA and quality control as stabilization operations, supporting material testing and characterization, and transition objectives are implemented. Examples where a high degree of focus will be required include procedure compliance, data management, data verification, and continuous process improvement.

### Example 65

#### 9 Quality Assurance Strategy

##### 9.1 Introduction

A contractor will be responsible for the management, control, and oversight of the 771 Closure Project. The RMRS QA Plan (QAPP) will be used to control and monitor the quality aspects of the project activities. The QAPP will describe roles, responsibilities, and methodologies for ensuring compliance with DOE Order 5700.6C (the Order), and IO CFR 830.120, (Price-Anderson Amendments Act, also known as the Rule). The 771 Closure Project will follow the requirements set forth in the QAPP.

##### 9.2 Purpose and Scope

The contractor's QAPP will identify the strategy and controls currently employed, or to be developed and implemented by the contractor, to consistently deliver products and services that meet the requirements of customers and stakeholders. The QAPP will serve as a map of the current controls employed by the contractor, and will present a concise strategy for the continuing development of the contractor's QA Program.

The QAPP is relevant and applicable to the specific operations of the contractor and its subcontractors, and where applicable, to the interface controls between the contractor and K-H, and between the contractor and other K-H subcontractors. When Safety Class or Augmented Quality conditions exist, Project Management may decide to obtain subcontractors who have earned the "Approved Supplier" status. Approved suppliers are required to submit a quality program which meets equivalent standards to the integrator's QAPP. The evaluation and approval of such programs is performed by K-H for placement into the Site Approved Supplier List.

##### 9.3 Program Requirements

The QAPP will identify the QA elements of the QA Program and defines them in the context of implementing programs and controls. Specific programs and controls are also referenced in the QAPP, such as floor level procedures, plans and documents used to control all activities involved in the 771 Closure Project. The QAPP applies to all project personnel. Project personnel will understand the program's impact from training, indoctrination and the commitment evidenced by management.

One of the primary aspects of the QA program is management involvement. The project will be implemented through a project management team. This criteria also includes self assessments by the management team.

### **9.3.1 QA Systems and Description**

The contractor will require that closure activities be appropriately planned in accordance with the provisions of the QAPP and that when activities deviate from planned outcomes and indicate significant conditions adverse to quality, personnel are required to stop the activity until corrections can be made.

All personnel are responsible for performing activities in accordance with approved documents; identifying and participating in quality improvements, customer interface, supplier interface, and processes with which they are associated. The project team is responsible for exercising stop work authority over significant conditions adverse to quality, and for attending training. The QA Program is inherent to the work. This is accomplished during the planning of work, through the participation of Quality Engineers. Integration of the QA program at the onset of the project will reduce the need for extensive inspections and assessments. This early integration supports primary principle of a QA program whereby the achievement of quality is embedded in the work processes, and that assessment should only be a tool for monitoring quality and continuous improvement.

### **9.3.2 Personnel Qualifications and Training**

Project personnel are qualified to perform their respective tasks based on a combination of related experiences, education, and training. Education and experience constitute the primary means of qualification. Closure management, in conjunction with training program administrators are responsible for providing any additional skills and training prior to assigning employees specific project duties. Typical training methods include computer-based training, classroom instruction, required reading, and on-the-job training. Qualification requirements and training records are maintained and retrievable through the project manager. These records reside at a centralized training record repository.

### **9.3.3 Improvement**

Employee participation in the assurance of quality, and the continuous improvement process is achieved through taking ownership of their processes, and actively seeking means to improve those processes. Closure project management will use lessons learned in each phase of the project to improve succeeding phases. The project team approach is one of the management tools employed to enhance productivity and continuity throughout the project.

Items, materials and hardware that do not meet established requirements are identified, segregated, controlled, documented, analyzed and corrected in accordance with the Non-Conformance Reporting (NCR) process. Activities, services and processes that do not meet established requirements are also identified and corrected in accordance with the Quality Condition Reporting (QCR) process. Quality Engineers are responsible for supporting the NCR and QCR processes and for assisting in the disposition and correction of identified deficiencies.

### **9.3.4 Documents and Records**

Quality affecting documents, such as work-plans, operating procedures, and health and safety plans are prepared and controlled in accordance with approved processes. These documents receive the required reviews and approvals; they are uniquely identified, and their distribution is formally established. Other essential policies, plans, procedures, decision, data and transactions produced by the contractor are documented to an appropriate level of detail. Document reviews by subject matter experts; management and Quality Assurance are performed as appropriate and as specified in governing procedures. Quality records are prepared and managed to ensure that information is retained, retrievable, and legible. The document and record processes for the 771 Closure Project are the same as the established controls for all Engineering, Construction, Decommissioning and Facilities (E/C/D/F) projects, and are maintained in a consistent and approved method.

### **9.3.5 Work Processes**

Closure processes and activities are controlled to a degree commensurate with the risks associated with the closure process or activity. Documented and approved instructions are incorporated to control closure processes and activities, maintaining compliance with referenced standards, engineering specifications, workmanship criteria, quality plans or other requirements.

Work is controlled from the onset of the project through project management procedures, engineering procedures, records management procedures, construction management procedures and work packages. The IWCP is the formalized process that controls the development of the closure work packages. Established Waste Management Procedures and other controls ensure that the generation and handling of waste meets governing requirements.

### **9.3.6 Design**

Sound engineering, scientific principles and appropriate technical standards are incorporated into all design activities to assure intended performance. Site infrastructure programs, primarily the Conduct of Engineering Manual (COEM), provide controls for the design of items and processes. Design work includes incorporation of applicable requirements and design bases, identification and control of design interfaces, and verification or validation of design products by independent, qualified individuals, subject matter experts or groups other than those who performed the work. The verification and validation is completed before approval and implementation of the design.

The design control processes for the 771 Closure Project are existing and well established. The design control process is approved and documented through procedures for the control of design inputs, outputs, verifications, reviews, changes, modifications, and configuration change control. Design control requirements for procured design and engineering services are also incorporated into procurement specifications.

### **9.3.7 Procurement of Items and Services**

The Closure Program implements a procurement and subcontracts system that complies with the appropriate protocols required by the Site. All procurement documents receive a documented independent quality review by Quality Engineers to assure incorporation of appropriate quality assurance requirements. The QA organization reviews procurement documents to ensure that the requirements for items and services are clearly depicted, including specific performance requirements. Procurement documents are retained and administered in accordance with approved procedures.

The contractor will employ control systems for identification, maintenance and control of items, including consumables. The controls ensure that items are properly labeled, tagged, or marked and that only appropriate items are used for the application. Controls

ensure that items are identified, handled, stored, transferred, and shipped in a manner that prevents loss, damage, or deterioration.

### **9.3.8 Inspection and Acceptance Testing**

Closure activities or items that require inspections and/or acceptance testing will be specified in work- controlling documentation, such as IWCP work packages, operating procedures and data management plans. Acceptance criteria and hold points are clearly defined, in accordance with approved procedures. Inspections are designed and controlled in accordance with approved processes. Oversight and acceptance of services is performed in accordance with approved documents by qualified personnel from the Closure Program staff or by the designated Quality Engineer.

Testing is conducted when necessary to verify that items and processes perform as planned. Testing activities are planned and implemented in accordance with approved procedures that include provisions for performing the test, item configuration, environmental conditions, instrumentation requirements, personnel qualifications, acceptance criteria, inspection hold points, and documentation requirements for records purposes. Only controlled and calibrated measurement and test equipment are used for testing, measuring and data collection activities.

### **9.3.9 Assessment Program**

The contractor will establish and maintain an assessment program and procedures for planning and implementing assessments. Assessments are scheduled by an independent branch of the QA organization, based on the risk and OA performance indicators of the activities being conducted. Assessments are conducted by qualified QA personnel, independent of the 771 Closure Project. The results of assessments are documented, reviewed by appropriate management and are tracked to verify development and effective implementation of corrective actions.

As previously indicated the QA organization consists of personnel who participate with and are matrixed to the closure organization. These personnel conduct monitoring and surveillance activities as a continuous barometer of quality assurance compliance and implementation. Closure Program management also performs documented Management Assessments of the closure organization to determine the effectiveness of the GA Program and overall organization performance. In addition to the assessments completed within the QA organization the project management has established the following monthly reviews:

1. Review compliance with IWCP requirements, (2 packages-random selection).
2. Inspect for adequate training requirements, (5 people-random selection).
3. Verify proper PPE is being worn, (10 people-random selection).
4. Verify RWP requirements are being followed, (2 crews-random selection).
5. Verify pre-evolution briefings are adequate, (2 crews-random selection).

These inspections are documented in project logs, or in a formal report to the project manager.