EM Environmental Management
safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

EFCOG Energy Facility Contractors Group

Department of Energy
Office of Environmental Management and
Energy Facility Contractors Group

2010 Quality Assurance
Improvement Project Plan

Approved by:

Steve Krahn, DOE/EM
Deputy Assistant Secretary
Safety and Security Program, EM-20

Joe Yanek, Fluor
EFCOG Board of Directors

Norm Barker, Energy*Solutions*
Chair, EFCOG ISM/QA Working Group

ISM

Office of Environmental Management and Energy Facility Contractors Group 2010 Quality Assurance Improvement Project Plan

Introduction:

This Project Plan is jointly developed by the Department of Energy (DOE) Office of Environmental Management (EM) and the Energy Facility Contractors Group (EFCOG), to provide execution support to the EM Quality Assurance (QA) Corporate Board. The Board serves a vital and critical role in ensuring that the EM mission is completed safely, correctly, and efficiently.

The joint EM-EFCOG approach to enhancing QA signifies the inherent commitment to partnership and collaboration that is required between the contractor community and DOE to proactively improve performance of the EM mission and projects. This mandate is more important today than it has ever been as EM has the added responsibility to diligently leverage and apply American Recovery and Reinvestment (ARRA) funds to accelerate completion of its mission and create thousands of new jobs to revitalize the economy.

The Project Plan documents a formal approach for managing the scope of the EM/EFCOG Quality Assurance Improvement Project. It builds on and leverages the success and operating experience gained from implementation of QA programs already in place at various EM Sites. The Project Plan will be updated as needed to reflect ongoing progress.

Scope:

The scope of this Project Plan is to address the priority QA focus areas identified by the EM QA Corporate Board. The Project Plan's scope includes the three (3) project focus areas for 2010 identified during the EM QA Corporate Board meeting conducted on February 22, 2010 as well as one additional focus area that was identified during the meeting and added based on the current priorities of the field offices (4 total focus areas). The Project Plan provides a description of the initial project focus areas and agreed upon actions and milestones. Additional project focus areas or related initiatives may be added to the scope of this Project Plan upon approval by the EM QA Corporate Board.

The key expectations for each project focus area lead are as follows: 1) provide actionable recommendations with specific path forward to the Board for its consideration, and 2) provide the Board with an analysis/assessment of the degree to which impacts and implications of the proposed actions on EM complex have been considered.

Project Organization:

The overall Project Managers for the joint EFCOG-EM Quality Improvement Initiatives are:

1. Mr. Bob Murray, Acting Director, EM Office of Standards and Quality Assurance , EM-23, and
2. Representing EFCOG, Mr. Chris Marden, Corporate Director QA, Energy*Solutions*.

The project's Executive Committee includes:

- Dr. Steve Krahn, Deputy Assistant Secretary, Office of Safety and Security Program, EM-20 (EM/HQ);
- Mr. Joe Yanek, Executive Director Environmental Safety, Health, & Quality, Fluor, representing the EFCOG Board of Directors; and
- Mr. Norm Barker, Vice President, Integrated Safety Management (ISM)/QA, Energy*Solutions*, Chairperson, EFCOG ISM/QA Working Group.

Additional leadership may be added to the Project Executive Committee, as needed, to further facilitate and support execution of the Project Plan.

Each project area will have designated EM and/or EFCOG Leads. These individuals are expected to interface and coordinate completion of the project area milestones. A critical aspect of the interface and coordination responsibility includes reaching out to appropriate stakeholders within the EM federal and contractor community. This is to ensure that any resultant strategy and recommendation has been fully considered so the Board can make informed decisions regarding any potential programmatic implications, resource requirements, and expected corporate benefits. To this end, the designated EM and EFCOG leads should ensure representatives from each EM site are included in the completion of the focus area deliverables.

Figure 1 presents the project organization and identifies the EM and EFCOG leads for each of the Project focus areas. Additional line participants from both EM operations and contractors will be added to the project teams as needed to ensure accomplishment of the specific objectives.

Key Project Personnel Roles and Responsibilities:

The Project Executive Committee is responsible to:

- Provide advice and counsel to the Project Managers as needed. Ensure barriers to project implementation, issues, and concerns identified by the Project Managers are effectively addressed and resolved. Provide quarterly progress review of agreed upon project focus area milestones. Provide technical expertise and feedback to the project leads, as needed, and to ensure its successful completion.
- Provide periodic status updates to EM senior management, EM Vice President's Forum, and the EFCOG Board of Directors.

The Project Managers are responsible to:

- Lead the overall project coordination effort consistent with the Project Plan, associated schedules, and agreed upon deliverables.
- Work with EM staff and EFCOG's ISM/QA Working Group Chair to identify Project Focus Area Leads and participants.
- Regularly monitor project area milestone completion progress and provide guidance and direction to Project Area Focus Leads as needed.
- On a quarterly basis, report Project Plan progress to the Project Executive Committee and the EM QA Corporate Board.

The Project Focus Area Leads are responsible to:

- Identify and obtain EM and EFCOG participants to support completion of project focus area milestones.
- Define and implement the strategy for accomplishing the project focus area milestones.
- Lead efforts to successfully complete assigned milestones and deliverable commitments.
- Coordinate project focus area activities with his/her designated co-lead (contractor or federal).
- Define project focus area completion approach, strategy, and coordinate activities of project area teams.
- Ensure outreach to a broad spectrum of the EM community to identify any programmatic implications resulting from recommendations and products.
- Participate in project status meetings and teleconferences.
- On a quarterly basis, report progress to the designated EM and EFCOG Project Managers. Included in the briefing is an assessment of any programmatic impacts, resource requirements, and characterization of expected corporate benefits.

Project Execution and Performance Management:

This project will be executed consistent with EM project management processes and practices. All key decisions will be coordinated with the Project Managers and, as appropriate, with the respective Project Focus Area Leads. Formal project status reviews of the Project Focus Areas will be held with the Project Executive Committee on a quarterly basis during the duration of the project.

Day-to-day management of specific project milestones, task activity scheduling, and task completions is the direct responsibility of the Project Focus Area Leads. In order to declare a milestone complete, the Project Focus Area Leads must issue the necessary supporting documentation to the Project Managers for acceptance. Any changes to a designated project area scope, milestones, or overall target completion dates must be

approved by the Project Managers. The Project Managers will review and coordinate all proposed changes with the Project Executive Committee.

Review and Comment Process for Project Focus Areas:

The Project Focus Area Leads will follow a progressive three-tier review process for all deliverables or products. The focus of each level of review is to assess adequacy of the technical approach, soundness of the underlying assumptions, and progression of the project is on a path to successful completion consistent with the agreed upon schedule. Specifically; the reviews consist of:

- First Level of Review (2 weeks review/2 weeks comment resolution): Project Managers (Bob Murray and Chris Marden)
- Second Level of Review (1 week review/1 week comment resolution): Executive Committee (Steve Krahn, Joe Yanek, and Norm Barker)
- Third Level of Review: EM QA Corporate Board Members (voting and non-voting Full Members)

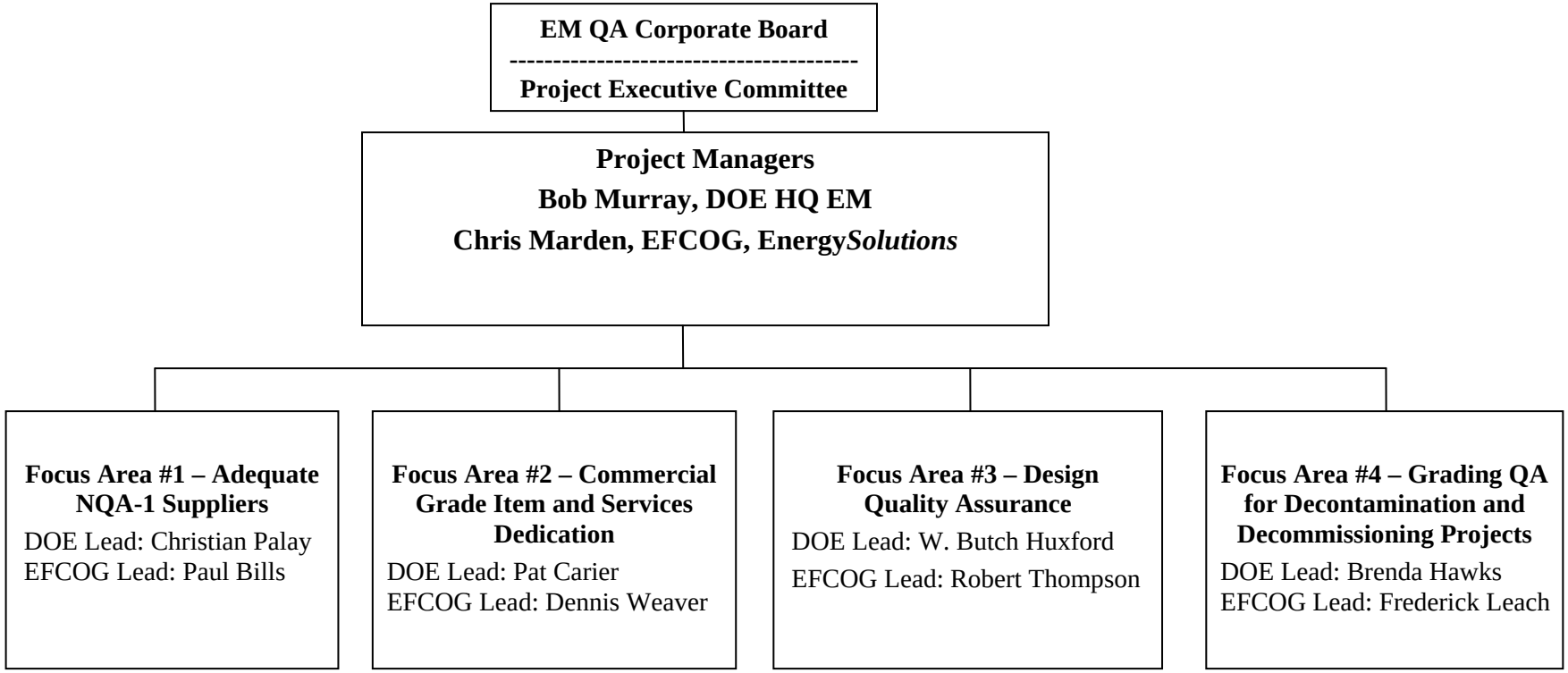
Communications:

The Project Managers will conduct quarterly teleconferences to discuss status of specific project area progress with the Project Focus Area Leads. Additional conference calls or meetings will be scheduled as needed. To facilitate timely and cost-effective communication, to the extent practical email and video-conferencing will be used, Individual Project Focus Area teams will determine the communication needs and methods best suited for their specific teams.

Project Termination:

The Quality Assurance Improvement Project Plan will be maintained in an active state until all actions are completed, or, the EM QA Corporate Board (by vote) terminates the Project.

Figure 1 - Quality Assurance Program Improvement Project Organization



Quality Assurance Project Focus Areas

Project Focus Area #1 –NQA-1 Suppliers

Target Completion Date: December 20, 2011

Background:

A previous Project Focus area team was assigned the tasks of increasing nuclear grade suppliers, developing a common Supplier Evaluation Program and developing a Supplier Alert System. During 2009, these tasks were completed and approved by the EM Corporate QA Board; however, it is recognized that expanding availability of NQA-1 qualified suppliers is an on-going corporate need and challenge. Due to this priority, the NQA-1 Suppliers will continue as a focus area in 2010.

The implementation of the Joint Supplier Evaluation Program (JSEP) that was approved by the EM Corporate QA Board needs to be monitored and managed to ensure effective implementation across the EM complex. Financial and human resources approved by the Board, but not yet transferred to the proper organization and put into force, need to be a primary focus of this team. In order for the JSEP to be fully effective and efficient, there needs to be a high level of participation by EM contractor organizations. This focus area team needs to evaluate levels of participation across the EM complex and develop necessary actions to ensure that adequate participation is obtained and maintained.

Scope:

- Monitor implementation of the JSEP as approved by the Board in 2009.
- Obtain funds and resources approved by the Board and implement the Supplier Information Database.
- Develop actions for increasing and maintaining a high level of participation by EM Contractor organizations in the JSEP.

Status:

- EM-23 has transferred funds for the Supplier Information Database to the DOE-Idaho office.
- EM-23 along with DOE-Idaho has approved the statement for work and the release of funding is imminent.

DOE Lead: Christian Palay

EFCOG Lead: Paul Bills

Support Team: Michael Mason and Brian Anderson

Focus Area #1 Project Milestones:

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
1.1	9/30/10	JSEP Electronic System Information Up Load	Functional database	Yes. Demo of the functional database
1.2	01/07/11	Develop Common Commodity List to include EM Commodities	EM Commodities List	Yes. A JSEP program description document that reflects actual work practices associated with the JSEP
1.2.1		Further defined roles and responsibilities	A description of the roles and responsibilities for each participant in the JSEP	
1.2.2.		Establish primary POCs at each site	A list of the POCs from each site that aligns with the established roles and responsibilities for the JSEP	
1.2.3		Further define audit reporting minimum requirements	A description of how to consistently develop supplier audit reports that meets a standard for the majority of sites to be able to use	
1.2.4		Define review and approval process	A description of supplier audit reports are reviewed and approved	
1.2.5		Develop formal Lead Auditor review and approval validation	A description of the process to review and approve of Lead Auditor credentials	
1.2.6		Obtain auditor disclosure statements	A form that establishes auditors participating in JSEP will not disclose results outside of JSEP	
1.2.7		Develop new NQA-1 matrix documents for EM commodities (materials and services).	A matrix that establishes the baseline NQA-1 Requirements used to evaluate suppliers.	
1.2.8		Conduct gap analysis on existing NQA-1 matrix documents specific to each commodity.	A description of the gasps between the established NQA-1 matrix documents and suppliers that may require special evaluations	
1.3	12/20/11	Operations and Maintenance Assessment of JSEP	Fully Functional JSEP	Yes. An annual status report
1.3.1	TBD	Annual JSEP strategy and scheduling meeting with participants	Annual JSEP schedule	Yes. An annual schedule for resource planning
1.3.2	TBD	Periodic conference calls with participants	Schedule updates	Yes. An annual schedule for resource planning

Project Focus Area #2 – Commercial Grade Item and Services Dedication Implementation

Target Completion Date: December 31, 2010 (except for oversight of CGD classes)

Background:

The challenge of building, operating, and maintaining nuclear facilities is increasing in today's marketplace. Many suppliers that previously supported the construction of commercial nuclear power plants have discontinued maintenance of their nuclear grade quality programs. As a result, EM construction and operational projects have had to rely more on the procurement of components either through alternative suppliers or by purchasing commercial grade items and dedicating them for safety-related use.

In October 2006, the Principal Deputy Assistant Secretary for EM requested that every project within EM assess its own vendors and suppliers for how Commercial Grade Dedication (CGD) is currently being defined and implemented. A summary of the results of the evaluations were expected by November 30, 2009.
To provide corporate assistance, the Office of Standards and Quality Assurance, EM-23, developed, organized, and delivered a series of CGD training courses across the EM complex for EM Federal and contractor personnel. Included was a CGD Train-the-Trainer to facilitate access to a pool of qualified CGD trainers to expand site sponsored CGD training capacity.

Scope:

- Develop formal EM guidance on commercial grade dedication
- Monitor implementation of actions approved by the Board in 2009
- Develop actions to continue to increase the number of qualified trainers.
- Development of a “common” CGD procedure for use across the EM complex
- Develop actions to improve the self-assessments of CGD activities

Status:
Training has been provided to approximately 300 people at all the major EM Sites (Savannah River, Hanford, Oak Ridge) with a current cadre of 30 trainers being available to teach additional classes. Future classes will be considered for oversight by EM-23 and this team’s subject matter experts to ensure that the rigor of the training is maintained.

Proposed EM guidance on CGD has been drafted by EM-23 and will be turned over to this Project Team for socialization amongst the various groups in the EM Complex and finalization.

EFCOG has begun work to develop a standardized process for performing CGD. EM-23 has been providing oversight of this effort and the work will continue with participation/oversight as part of this focus area.

DOE Lead: Pat Carier – DOE

EFCOG Lead: Dennis Weaver

Support Team:

Proposed project team composition includes contractor and/or federal representatives from each DOE-EM Site

- Richland
- River Protection
- Savannah River
- Idaho
- Oak Ridge
- Portsmouth/Paducah
- Consolidated Business Center Representatives
- Carlsbad

Focus Area #2 Project Milestones:

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
1	**08/06/10**	**Develop EM Guidance on Commercial Grade Dedication**	**Recommended guidance**	**N/A**
1-1	06/11/10	EM-23 to transition draft guidance to Project Team Lead	Draft guidance	No
1-2	06/25/10	Project Team to review and revise guidance and send to field elements for comment (including consistency verification with Subpart 2.14 of NQA-1)	Draft guidance	No
1-3	07/23/10	Comment period ends	N/A	N/A
1-4	08/06/10	Resolve field element comments and finalize guidance.	Recommended Guidance	Yes
1-5	08/06/10	Draft endorsement and transmittal memo for Recommended Guidance from EM-1 to all Field Elements	Transmittal Memo	Yes
2	**12/31/10**	**Develop, with EFCOG, a common process to perform commercial grade dedication.**	**Recommended procedure with endorsement from EM**	**N/A**
2-1	07/30/10	Draft procedure for DOE/Contractor review and comment (including consistency verification with Subpart 2.14 of NQA-1)	Draft procedure	No
2-2	08/27/10	Comment period ends	N/A	N/A

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
2-3	09/15/10	Resolve comments and forward through EFCOG the recommended procedure to all DOE contractors.	Recommended procedure	Yes
2-4	09/30/10	Draft endorsement and transmittal memo for Recommended Procedure from EM-1 to all Field Elements	Transmittal Memo	Yes
2-5	12/31/10	EM Sites to complete implementation of the Recommended Procedure	N/A	N/A
2-6	12/31/10	Develop a checklist to be used during audit/assessment of CGD program and implementation	Checklist	Yes
2-7	04/01/11	Assist EM-23 in assessing Recommended Procedure implementation at major EM Sites	Assessment Report	N/A
3	**08/20/10**	**Determine need for and conduct one additional Train-the-Trainer CGD Course**	**Course completed**	**N/A**
3-1	06/25/10	Determine need for additional Train-the-Trainer Course	Report to Project Team Lead and to Director, EM-23	Yes
3-2	07/16/10	Publish notice of class if needed	E-mail to EM QA Managers	No
3-3	08/20/10	Hold class	Training Roster	No
4	**09/30/11**	**Perform oversight of future CGD classes**	**Oversight Reports**	**N/A**
4-1	Case Basis	Upon notification of CGD training class the Project Team Lead will assist EM-23 in identifying available Subject Matter Experts to assist in oversight of the class	N/A	N/A

Project Focus Area #3 – Design Quality Assurance for Construction Projects

Target Completion Date: November 01, 2010

Background:

In 2009, EM issued an Interim Policy establishing the Code of Record (COR) concept for EM nuclear facilities. A COR serves as a management tool and source for the set of requirements that are used to design, construct, operate, and decommission a nuclear facility over its lifespan. Early establishment and lifecycle maintenance of applicable facility requirements are essential to provide for the protection of our workers, the public, and the environment. Consequently, the COR includes those requirements invoked during the design phase, and later used to initiate operations, to ensure they are available to all responsible parties during each lifecycle, organizational, and mission change.

Additionally; EM finalized the 2nd Edition of the DOE Standard Review Plan (SRP) for capital and major construction projects. SRP review modules are developed consistent with project expectations and requirements defined in DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Asset*, DOE-STD-1189-2008, *Integration of Safety into the Design Process*, and EM's internal business management practices. The 2nd Edition was completed and the official release memo was issued by EM in March 2010. The 2nd Edition consists of 29 stand-alone SRP review modules that provide EM's core expectations and technical framework associated with Critical Decision (CD) review and approval process. The disciplines addressed include Engineering and Design, Safety, Project Management, Quality Assurance, Environment, and Security. The Review modules are on the DOE EM website at http://www.em.doe.gov/Pages/StandardReviewPlanModules.aspx

Scope:

- Determine existing processes within the EM complex for ensuring quality in design control functions
- Develop best practices for consideration across the EM complex
- Specifically evaluate:
  - Records required to adequately meet NQA-1 requirements
  - Flow down of engineering requirements
  - Inspection and test requirements and acceptance criteria
  - Design definition, communication and verification
  - Quality Assurance groups' role in design control
  - Configuration management

Status:
Initiated team meetings and started work on the deliverables for the focus area.

DOE Lead: W. Butch Huxford

EFCOG Lead: Robert Thompson

Support Team:

Representatives from the following projects:

- Waste Treatment Plant
- Salt Waste Processing Facility
- Sodium Bearing Waste
- U233 Project
- DUF6
- Tank 48
- Deactivation and Decommissioning (D&D) site representatives
- Others as needed

Focus Area #3 Project Milestones:

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
Start Date June 9, 2010 – following Board approval				
1	06/18/10	Identify FA3 team and initiate planning activities	Roster	Yes
2	07/19/10	Develop final scope of the effort, specifically addressing feedback from recent CPRs (e.g., Idaho). Include deliverables, such as: • Questionnaire to major projects describing existing practices	Scope outline	Yes
3	08/02/10	Deliver questionnaire to major projects	Questionnaire	No
4	09/01/10	Receive results from major projects	Completed Questionnaire	No
5	10/01/10	Provide analysis for PM review/calibration	Tables/charts/ text documents describing FA3's recommended path forward for ultimate deliverable	Yes
6	11/01/10	White Paper for EM consideration communicating Design Quality Assurance expectations/recommendations/etc.	White Paper	Yes

Project Focus Area #4 – Grading QA for Deactivation and Decommissioning Projects

Target Completion Date: N/A

Background:

Deactivation and Decommissioning (D&D) Projects present a challenge in the application of NQA-1. The focus of NQA-1 is on the development and maintenance of nuclear power quality assurance. The standard clearly states in the introduction that "This Standard focuses on the achievement of results, emphasizes the role of the individual and line management in the achievement of quality, and fosters the application of these requirements in a manner consistent with the relative importance of the item or activity." The relative importance of the facility and equipment is very low when the ultimate end state is to demolish and permanently dispose of the material. While it is very important that any items that are desirable to another project be preserved and the proper techniques are employed to prevent insult to the workers and/or environment during the D&D the end state must be remembered when establishing the quality requirements for the various stages of activities. Work must be accomplished in a quality manner and within contractual requirement; however, the establishment of the contractual requirements must consider the end state and hazards of the activity to be performed. Too many times, the end state is not kept in focus and the quality requirements for an operating or construction activity are employed on a D&D project resulting in higher costs that provide little to no addition to EM mission accomplishment or safety.

Scope:

- Enhance awareness of the need to properly grade activities.
- Take advantage of the allowance for grading.
- Provide some examples of things to consider when executing the grading and ways to grade.

Status:

1. Ensure EM Corporate Quality Policy allows and encourages grading – Complete
   - EM Corporate Quality Policy allows grading – "It is EM Policy that all EM projects will have a consistent quality assurance approach while allowing for grading based on importance to the EM mission and safety, and for site-specific requirements."

2. Ensure EM Quality Assurance Program Document, EM-QA-001, allows and encourages appropriate grading – Complete
   - EM Quality Assurance Program Scope states: "The requirements of the QAP are applied in a graded fashion commensurate with the type of work being performed and the importance of the work contributing to safe completion of the EM mission."

3. Evaluate NQA-1 to determine if it clearly allows for grading as needed in the DOE complex due to the significant variations in types of activities and contracts. - Complete
   - NQA-1 Introduction states: "This Standard focuses on the achievement of results, emphasizes the role of the individual and line management in the achievement of quality, and fosters the application of these requirements in a manner consistent with the relative importance of the item or activity."

4. Provide examples of things to consider when evaluation of grading. Complete

See Attachments. (Things to consider when evaluating grading of Quality Assurance Criteria; Examples of Ways to Grade NQA-1 Requirements for Deactivation and Demolition Projects; and ASME NQA-1, Part II Applicability)

DOE Lead: Brenda Hawks

EFCOG Lead: Frederick Leach

Support Team and Milestones:

The activities and milestones required to complete the recommendations for this focus area have already been completed and are in place. Additional examples will be added to the information provided in the attachments to address the Board's request. The remaining effort is for the EM QA Corporate Board to endorse the approach and flow the approach down through their individual organizations. This endorsement includes all EM federal sites and associated contracts.

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
1	11/01/10	Obtain additional perspective from other D&D sites within EM.	N/A	No
2	01/01/11	Update the attachments/tables to provide examples of each grading.	Updated Table	Yes

Attachment A for Focus Area #4
Things to Consider when Evaluating Grading of Quality Assurance Criteria

Things to consider when evaluating grading of Quality Assurance Criteria:

- Scope of contract
- Length of contract
- Importance to EM Mission
- Size of contractor staff/employees
- Hazard level of activities (nuclear, security, chemical, industrial, electrical, etc.)
- Method of performance – direct, subcontract to qualified vendor, memorandum of agreement with other DOE Prime Contractors
- Complexity of work activities
- What is the end state for the facility/activity

Attachment B for Focus Area #4
Examples of Ways to Grade NQA-1 Requirements for Deactivation and Demolition Projects

NQA-1 Requirement		Grading
Part I Introduction	300 – States – "The organization invoking this Part shall be responsible for specifying which requirements, or portions thereof, apply, and appropriately relating them to specific items and services. The organization implementing this Part, or portions thereof, shall be responsible for complying with the specific requirements to achieve quality results."	As stated in this introduction, it is the responsibility of the contractor to specify which requirements and/or portions thereof are applicable. All of this should be included as it only establishes the allowance for grading and definitions.
1. Organization	300 – "When more than one organization is involved in the execution of activities,"	This requirement establishes basic organizational expectations. It should be noted that the Interface Control section does have the stipulation that "Where more than one organization is involved…" – this is typically done through Memorandums of Agreement (or whatever term specific contractors utilize) between various contractors for site activities. This is an acceptable means to achieve compliance as the agreement should clearly the appropriate interface authorities. Internal interfaces can be handled through a section in the QAP with very small simple contractors to eliminate the need for a formal document as the internal interfaces would not require a separate document.
2. Quality Assurance Program	200 – Indoctrination and Training - "Indoctrination and training shall be commensurate with scope, complexity, importance of the activity, and the education, experience, and proficiency of the person." 202 – Training -- "The need for a formal training program…. Shall be determined. Training shall be provided, if needed…	Section 200 – provides the basis for grading in this area. Scope of the contract, complexity of the contract, the importance of the activity to DOE/regulators/etc., and the people assigned. This section clearly allows for small contractors especially when have short term contracts to rely on the education/experience/proficiency of their staff in lieu of elaborate procedures. While this would most likely not be allowed for a large contactor or one with extensive operating time frame, when the contractor is very small and short term the development of some procedures might not be warranted and the QAP can clearly state the reason specify the qualification of personnel performing the activity versus development of elaborate procedures. (Procedures for field operations would still be expected.) Section 202 – Training requirements can be very limited based on the scope of work. Compliance with OSHA requirements and basic training for others might be all that is needed. The QAP can clearly specify this. When in a nuclear hazard

Attachment B for Focus Area #4
Examples of Ways to Grade NQA-1 Requirements for Deactivation and Demolition Projects

NQA-1 Requirement		Grading
		category 1, 2, or 3, the training requirements are typically in accordance with DOE O 426.2 (the old 5480.20) for those individuals who can impact the safety basis through their involvement in the operation, maintenance, and technical support. Section 300 – This section states shall specify the required qualification. One way to grade this is to state the contractor will not qualify any individual for activities like Nondestructive examination and tests to verify quality. All such activities will be performed by a procured source that has the required qualification program. 303/304/305 - Qualifications of the "auditing" individuals, warrants evaluation for befit of formal program when the contractor is small, the scope is very limited, and/or the period of performance is short. Allowance for a trained, educated, experience cadre can be frequently justified in Deactivation and Decommissioning activities. 400 – The records of those individuals performing NDE need to be maintained even if it is in the procurement documentation. The records of the Lead Auditor personnel can be handled in a graded manner.
3. Design Control		Typically Deactivation and Decommissioning contractors do not do a lot of "design" activities. Therefore, this requirement is typically not applicable. Even if some very simple Design activities are required for say a simple radiological containment, the application of Requirement 3 might not be warranted. Contractors doing formal "design" activities are clearly known and are expected to fully implement this requirement.
4. Procurement Document Control	100 – "… The extent necessary, procurement documentations shall require Suppliers to have a quality assurance program consistent with the applicable requirements of this Standard."	The procurement process for Deactivation and Decommissioning contractors needs to be graded based on the end state for the facility/item. The period of performance needs to be taken into consideration for procured items. When the time period is extremely short, justification on the level of procurement can potentially be downgraded as the increased level does not enhance safety or EM mission accomplishment. Procurement process can also be utilized for procurement of specialty personnel to prevent the need to establish extensive programs like Nondestructive Examination, Inspection and Test, and even Lead Auditor. This is a good way to grade systems and utilize another section/requirement to meet the needs of the unique contacting

Attachment B for Focus Area #4
Examples of Ways to Grade NQA-1 Requirements for Deactivation and Demolition Projects

NQA-1 Requirement		Grading
		arrangements.
5. Instructions, Procedures, and Drawings	100 – "… The activity shall be described to a level of detail commensurate with the complexity of the activity and the need to assure consistent and acceptable results. The need for, and level of detail in, written procedures or instructions shall be determined based upon complexity of the task, the significance of the item or activity, work environment, and worker proficiency and capability (education, training, experience)."	This is a very simple requirement and no grading of the actual requirement is needed. The requirement itself requires grading of the implementation as stated in the requirement.
6. Document Control		This requirement is very basic in concept and the requirements can be met with simple processes based on the contract scope. The main requirement is that documents be controlled to ensure that correct documents are being employed. The contractor can utilize very simple systems to meet this requirement when the complexity of operations is simple. The more complex the activities and organizations involved the more complex the document control process will need to be.
7. Control of Purchased Items and Service		This requirement provides requirements that are based to ensure the Supplier provides the items or service in accordance with the requirements of the procurement documents. The real grading in this requirement is more in the establishment of the "requirements" for the procurement. When establishing the requirements for the procurement the contractor needs to take into consideration the D&D activity and the length of time the item or service will be needed as well as safety and other quality requirements.
8. Identification and Control of Items		This requirement ensures that only correct and accepted items are used or installed. The grading in this area is not as much in the application of the control but rather in the requirement established for the items acceptable for service. With D&D activities, there can be greater allowance for use of items.
9. Control of Special Processes	100- "Special processes that control or verify quality, such as those used in welding, heat treating, and nondestructive examination, shall be	When "special processes" are required, this requirement needs to be met fully. However, in D&D activities, one way to meet this requirement is through procurement of qualified individuals that have qualified procedures. This prevents the prime

Attachment B for Focus Area #4
Examples of Ways to Grade NQA-1 Requirements for Deactivation and Demolition Projects

NQA-1 Requirement		Grading
	performed by qualified personnel using qualified procedures in accordance with specified requirements.	contractor from having to have the programs and qualification processes in place.
10. Inspection		This requirement is graded in the determination of characteristics subject to inspection and inspection methods. For example, in lieu of inspecting gages, they can be sent out to a qualified supplier who does the inspection and calibration. Another example is receipt inspection, this process can be limited if the supplier has a robust quality program or the prime contractor could hire an independent third party to do the inspections required.
11. Test Control		This requirement can be graded as most D&D contractors do not execute computer program testing; therefore, they would not have to have a program to execute this function. Testing should be limited in D&D activities for the most part and the contractors programs can be graded based on the characteristics to be tested and the test methods to be employed. As this is highly contractor dependent, each contractor would have to evaluate the types of testing required and grade their program based on that evaluation.
12. Control of Measuring and Test Equipment	100 – "Tools, gages, instruments, and other measuring and test equipment used for activities affecting quality shall be controlled, calibrated at specific periods, adjusted, and maintained to required accuracy limits."	The grading of this requirement is very dependent on the size and type of work the contractor will be executing. Some D&D activities require extensive control of measuring and test equipment while others require very little. In either case, the contractor needs to evaluate the level of in-house program they need to maintain and what part is better to procure through a supplier. This evaluation and final determination is the basis for grading the contractors program in this area.
13. Handling, Storage, and Shipping		For many D&D activities there is little on site storage of materials and shipping is executed in accordance with Department of Transportation requirements. This requirement can be graded based on application of the DOE Orders, OSHA compliance, and other contractual requirements that govern handling, storage, cleaning, packaging, shipping, and preservation of items. Basically, this requirement should be met if the contractor complies with the requirements in most D&D contracts.
14. Inspection, Test, and Operating Status	100 – "The status of inspection and test activities shall be identified on the items or in documents traceable to the items where it is necessary to ensure that required inspections and test are performed and to ensure that	This requirement is very basic and can be ensured in many ways. The grading of this requirement is in the methods utilized to document and identify the inspection, test, and operating status.

Attachment B for Focus Area #4
Examples of Ways to Grade NQA-1 Requirements for Deactivation and Demolition Projects

NQA-1 Requirement		Grading
	items have not passed the required inspections and tests are not inadvertently installed, used, or operated.	
15. Control of Nonconforming Items		This requirement is very basic and can be ensured in many ways. The grading of this requirement is in the methods utilized to document and identify the inspection, test, and operating status. One way grading is different for D&D is that there is a greater potential for acceptance of an item in a D&D type activity as the justification for usage is more flexible.
16. Corrective Actions		The requirement can be graded in the manner in which the identification, cause and corrective actions are generated and documented. The system used to track the condition reports and actions can be another manner in which this requirement can be graded. The grading can be applied based on the type/scope of the activity like D&D as well as on the size of the contractor and period of performance.
17. Quality Assurance Records		The grading in this requirement for D&D is in the designation of what is a quality assurance record. As the facility is to be demolished, this allows for greater flexibility in the determination of the length of time the records need to be maintained for some items. Also, grading can be evaluated as to whom will hold the records, through contract negotiations, the records could be turned over to DOE earlier in the process thereby reducing the storage burden on the contractor. One costly area is the storage of records and the requirements for those facilities. Again, through contract negotiations, this can be graded providing the records are maintained and final disposition is appropriately achieved.
18. Audits		The number of formal Audits for D&D work should be tailored and graded based on the type of activities being performed. One way of grading is in the determination of the experience and training required to lead and participate in the audits.

Attachment C for Focus Area #4 - ASME NQA-1, Part II Applicability

The applicability of each Subpart II requirement is discussed and potential contract requirements that govern the requirement are identified that can be used in lieu of ASME NQA-1 as the applicable standard.

ASME NQA-1 2004, Part II, Subparts:	Applicability
2.1 Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components for Nuclear Power Plants	**Not applicable** to the majority of D&D contracts/Scope of Work.
2.2 Quality Assurance Requirements for Packing , Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants	**Not applicable** to the majority of D&D contracts/Scope of Work. Contractors normally implement the following contract requirements for these work elements: DOE O 460.1B, Packaging and Transportation Safety DOE O 460.2A, Departmental Materials Transportation and Packaging Management DOE M 460.2-1A, Radioactive Material Transportation Practices
2.3 Quality Assurance Requirements for Housekeeping for Nuclear Power Plants	**Not applicable** – this Subpart applies to Housekeeping during construction of facilities. For D&D activities normally implement applicable OSHA requirements and DOE O 5480.19, Conduct of Operations.
2.4 Installation, Inspection, and Testing Requirements for Power, Instrumentation, and Control Equipment at Nuclear Power Plants	**Not applicable** to the majority of D&D contracts/ Scope of Work. One way contractors meet this is by implementing NFPA 70 – 2008 National Electric Code and NFPA 70E - 2009 Standard for Electrical Safety in the Workplace
2.5 Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete, Structural Steel, Soils, and Foundations for Nuclear Power Plants	**Not applicable** – this does not apply to operations and is not part of the majority of D&D contracts/
2.7 Quality Assurance Requirements for Computer Software for Nuclear Facility Applications	**Applicable** to the current scope of operations. DOE contractors implement ASME NQA-1 2004, Part II, Subpart 2.7 as applicable to the scope of work.
2.8 Quality Assurance Requirements for installation, Inspection, and Testing of Mechanical Equipment and Systems for Nuclear Power Plants	**Not applicable** to the majority of D&D contracts/Scope of Work.
2.15 Quality Assurance Requirements for Hoisting, Rigging, and Transporting of Items for Nuclear Power Plants	**Not Applicable** to the majority of D&D contracts/Scope of Work. The requirement is written for hoisting, rigging, and transporting during construction. Most DOE contractors implement DOE-STD-1090-2007, Hoisting and Rigging.
2.16 Requirements for the Calibration and Control of Measuring and Test Equipment Used in Nuclear Facilities	**CANCELLED**

Attachment C for Focus Area #4 - ASME NQA-1, Part II Applicability

ASME NQA-1 2004, Part II, Subparts:	Applicability
2.18 Quality Assurance Requirements for Maintenance of Nuclear Facilities	**Not Applicable** to the majority of D&D contracts/Scope of Work. Most DOE contractors implement the requirements in accordance with DOE Order DOE O 433.1A, Maintenance Management Program for DOE Nuclear Facilities and DOE O 433.1A Implementation Matrix.
2.20 Quality Assurance Requirements for Subsurface Investigations for Nuclear Power Plants	**Not applicable** to the majority of D&D contracts/Scope of Work.