



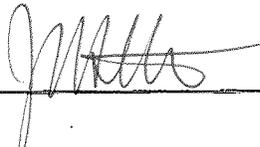
Energy Facility Contractors Group

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

**2015 Quality Assurance
Improvement Project Plan**

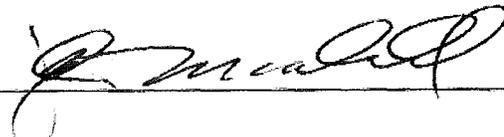
Approved by:

Jim Hutton, DOE/EM
Acting Deputy Assistant Secretary
Safety, Security, & Quality Programs, EM-40



11/24/14
Date

John McDonald, WRPS
Chair, EFCOG ISM/OA Working Group



11/19/14
Date



Office of Environmental Management and Energy Facility Contractors Group 2015 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 budgetary restrictions are realized across the complex.

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 three (3) project focus areas for 2015. 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 and implementable recommendations with specific path forward to the Board for its consideration, 2) provide the Board with an analysis/assessment of the degree to which impacts and implications of the proposed actions on the EM complex have been considered, and 3) provide the Board with indicators that can be exercised to determine the success of the recommendations.

Project Organization:

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

- Mr. Bob Murray, Director, EM Office of Standards and Quality Assurance, (EM-43), and
- Mr. H. Mike Hassell, Director Performance Assurance/Quality Assurance, CH2MHill Plateau Remediation Contract (CHPRC), Chairperson, EFCOG QA Working Group.

The project's Executive Committee includes:

- Mr. Jim Hutton, Acting Deputy Assistant Secretary, Office of Safety, Security, and Quality Programs, EM-40 (EM/HQ), and
- Mr. John McDonald, Manager of Environmental, Safety, Health, and Quality for Washington River Protection Solutions (WRPS), 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 where possible.

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 the project's successful completion.
- Provide periodic status updates to EM senior management 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. 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
- Second Level of Review (1 week review/1 week comment resolution): Executive Committee
- Third Level of Review: EM QA Corporate Board Members (voting and non-voting Full Members)

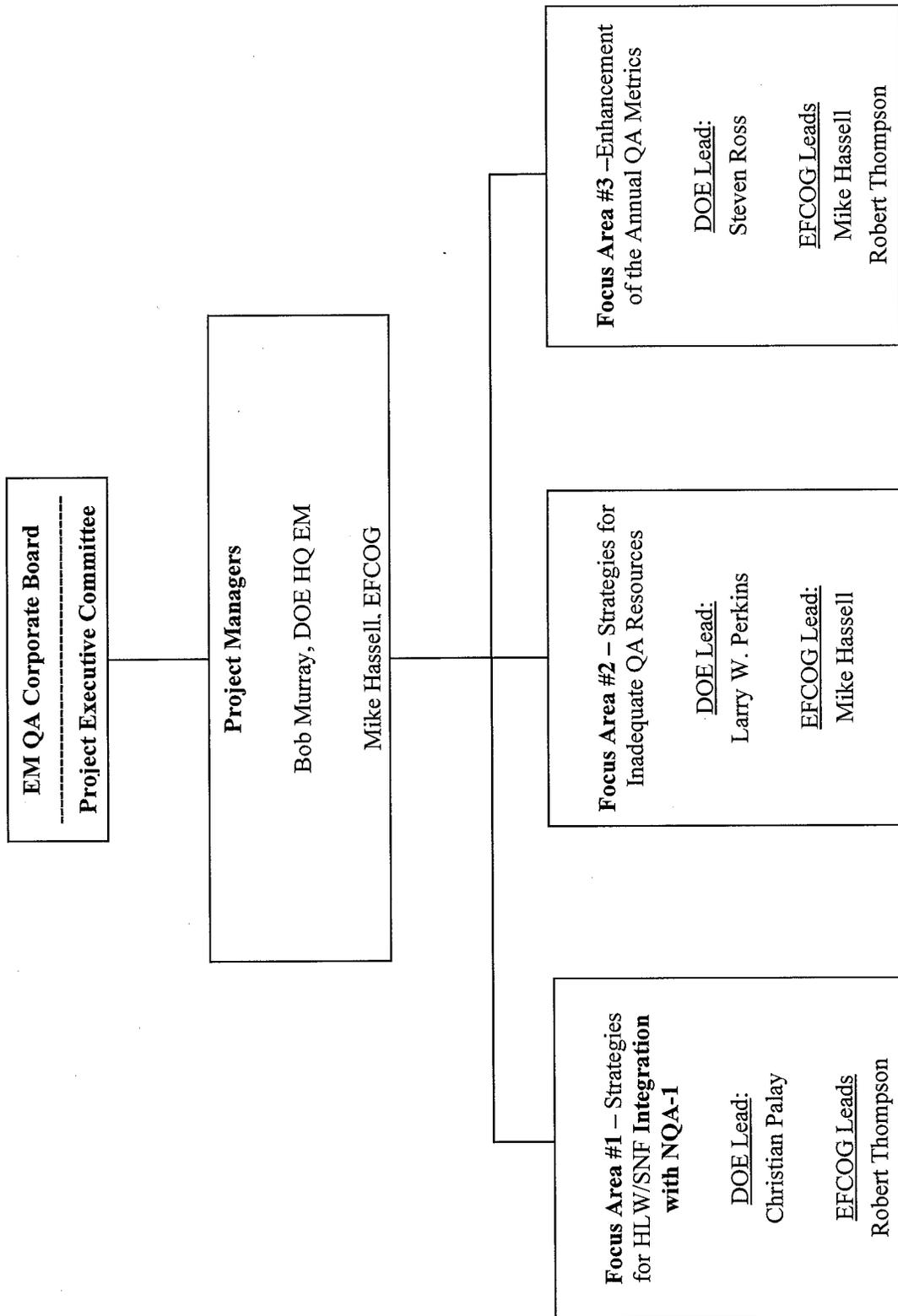
Communications:

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, email and video-conferencing will be used to the extent practical. 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 – Strategies on adopting new NQA-1 requirements for High-Level Waste and Spent Nuclear Fuel

Target Completion Date: October 30, 2015

Background:

On January 24, 2011, the Principal Deputy Assistant Secretary for EM issued the “Environmental Management Interim Policy for Maintaining the Integrity of Quality Assurance Program Commitments for Used Nuclear Fuel/High Level Waste.” This interim policy stated that, “...except for those field elements that have been authorized to work to different revisions of the QARD, EM will continue to implement Revision 20 of the QARD.” On February 4, 2011, the Acting Deputy Assistant Secretary for the Safety and Security Program issued the memo, “Support to the Field Sites Regarding the Environmental Management Interim Policy for Maintaining the Integrity of Quality Assurance Program Commitments for Used Nuclear Fuel/High Level Waste.” This memo stated that in order to support the interim policy and the EM custodians, the Office of Standards and Quality Assurance will conduct independent oversight of the EM Waste Custodians and their principal/prime contractors. The current EM Waste Custodians are listed in the following table.

EM Site	Project	Facility
West Valley	West Valley Demonstration Project	Hot cell in shutdown plant
Savannah River	Liquid Waste Disposition Project	Defense Waste Processing Facility
Idaho	Idaho Cleanup Project	INTEC, ISFSI, and Fort St. Vrain
Hanford	Waste Stabilization and Disposal Project	Canister Storage Building
	Waste Treatment & Immobilization Plant Project	Waste Treatment & Immobilization Plant
	Washington River Protection Solutions	High-Level Waste Glass Storage Building (currently on hold)

However, without OCRWM’s interpretational authority and maintenance, DOE/RW-0333P may become increasingly difficult for some organizations to implement. For instance, Revision 20 of DOE/RW-0333P has typographical errors in the Waste Custodians Appendix that affects EM implementation. While Revision 21 fixed these errors, OCRWM allowed EM to remain at Revision 20 due to mitigation by OCRWM’s QA Director interpretation letter to EM. A future revision of the DOE/RW-0333P was

expected by EM after Construction Authorization for the Federal Repository. With the shutdown of OCRWM, that planned revision is no longer expected.

Scope:

A Task Proposal Notice was approved by the NQA-1 Main Committee to develop Subpart II requirements for High-Level Waste and Spent Nuclear Fuel consistent with 10 CFR 60 and 10 CFR 63. The path forward is for the Subcommittee to integrate the additional requirements from DOE/RW-0333P, Quality Assurance Requirements and Description into the next revision of NQA-1. Given that EM is a key stakeholder in this area, the EM QA Corporate Board has tasked this focus area with supporting the NQA-1 revision effort. Operating experiences from organizations familiar with implementation of both NQA-1 and DOE/RW-0333P standards can be used to provide value-added input for strategies on adopting new NQA-1 requirements for High-Level Waste and Spent Nuclear Fuel.

There are two key points with the inclusion of the High-Level Waste and Spent Nuclear Fuel requirements in NQA-1. First, a national consensus standard will be available to use as the QA requirements for programs involved in High-Level Waste and Spent Nuclear Fuel which should result in no impact to existing project baselines at no additional cost with no reduction in commitments. Second, EM Organizations currently having to implement two QA standards can streamline their program by only having to implement one standard. In keeping with these two goals, this focus area will serve to develop a gap analysis between NQA-1 and DOE/RW-0333P. This deliverable will be provided to the NQA-1 Waste Management Subcommittee for their consideration and use in the NQA-1 revision. This focus area will also be tasked with developing a strategy for transitioning contracts from DOE/RW-0333P requirements to the NQA-1 Subpart II requirements. This strategy will emphasize minimizing the impact on operations while ensuring the appropriate level of quality is maintained. The strategy will also provide suggestions and recommendations on accomplishing the transition with minimal impact to the sites.

Status:

EM Field Elements and their contractors have maintained their implementation of DOE/RW-0333P, Quality Assurance Requirements and Description since the shutdown of OCRWM. EM Headquarters has been fulfilling the oversight role without OCRWM participation in accordance with the High-Level Waste and Used Nuclear Fuel Oversight Program established after the shutdown of OCRWM. This effort will ensure the necessary quality requirements are maintained in a manner such that there will be no reduction in commitment. The focus area is a new effort so the status of the group will be provided to the project managers as necessary.

DOE Lead: Christian Palay (EM-43)

EFCOG Leads: Robert Thompson and Robert Hinds (EFCOG)

Support Team:

To be determined by the DOE and EFCOG leads

Focus Area #1 Project Milestones:

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
FA1-01 (Complete)	08/15/2014	Establish NQA-1 version to be used in support of GAP analysis	N/A	No
FA1-02 (In Progress)	03/06/2015	Develop a gap analysis between NQA-1 and DOE/RW-0333P and distribute to the EM site offices and EM Waste Custodians for comment	Draft Gap Analysis	No
FA1-03	05/01/2015	Resolve comments on the gap analysis	Comment Resolution	Yes
FA1-04	05/01/2015	Present the gap analysis to the EM QA Corporate Board for concurrence.	Final Gap Analysis	Yes
FA1-05	07/17/2015	Develop a strategy for transitioning contracts from DOE/RW-0333P requirements to the NQA-1 Subpart II requirements and distribute the strategy to EM site offices for comment	Draft Strategy White Paper with Suggestions	No
FA1-06	09/25/2015	Resolve comments on the strategy white paper	Comment Resolution	Yes
FA1-07	10/30/2015	Present the strategy with suggestions to the EM QA Corporate Board for concurrence and distribution.	Final Strategy White Paper	Yes
FA1-08	TBD	As requested, develop draft language for consideration by the ASME committee on incorporation into Part II (once approval of the gap analysis is received by appropriate NQA-1 subcommittees).	Draft Language	Yes

Project Focus Area #2 – Strategies for addressing inadequate QA resources within the EM Complex**Target Completion Date:** May 25, 2015**Background:**

In 2007, the Office of Environmental Management, Office of Safety Management and Operations, began a series of quality assurance assist visits at its line item construction and operational projects. In addition to identifying and recommending solutions to quality affecting issues within these projects, the effort was intended to gauge the general health of QA within EM projects. Consequently, this information was a key factor in developing the EM Quality Improvement Initiative. One of the key weaknesses identified by the assist visit teams was the minimal qualified QA resources available in the field. A couple of efforts were utilized to evaluate the need and enhance the QA resources. For example, a Centralized Training Platform was implemented for a period of time but may not have been as effective as initially expected in addressing the QA resource issue. Two resources evaluations/surveys have also been conducted (one in 2009 and one in 2012). These surveys were utilized to obtain an estimate of the existing QA resources available to the contractor and federal offices and provide a qualitative evaluation of the adequacy of existing numbers. The responses and conclusions from these efforts were somewhat inconsistent in methodology and did not match the discussions held during the EM QA Corporate Board meetings. Specifically, the issue of inadequate resources was discussed as a more prevalent issue in the meetings than represented in the surveys. In addition, the resources issue is continuing to become more significant with the current budget environment.

In 2014, EM-43 formed a team to provide assistance to the Office of River Protection in the area of QA. This team served a number of functions, but one of which was to complete a detailed quality oversight staffing analysis and review of work performed to date with the QAD Director. This effort resulted in a final report that recommended needed staff levels in QA for both federal and contractor efforts. EM-43 is currently documenting the process used for the staffing analysis in a procedure/report. Once completed, this documented process will be shared and utilized at other site offices to evaluate the QA resource needs versus staffing levels.

Scope:

This focus area was originally developed to help provide recommendations associated with how to report current QA resources, how to determine the needed level of QA resources, and what the EM QA Corporate Board could do to assist with this effort. However, the EM-43 effort that has been initiated with ORP has already made significant progress in this area. In order to avoid duplication of effort, the scope of this focus area was altered to provide a review function for the process developed in EM-43. The review team will provide comments and recommendations on enhancement to the focus area leads that will consolidate the comments and provide to the EM-43 leads for the process development. The review should consider both federal and contractor perspectives of the process and any concerns with how the process will be used. The review team will make

a recommendation to the Corporate Board on whether to endorse the process once the comments are resolved.

Status:

This is a newly revised Focus Area with a new scope. Status updates will be provided at the EM Corporate QA Board meetings.

DOE Lead: Larry W. Perkins, EM-43

EFCOG Lead: Mike Hassell, EFCOG

Support Team:

To be determined by the DOE and EFCOG leads

Focus Area #2 Project Milestones:

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
FA2-01	02/02/15	Identify the appropriate review team from both federal and contractor offices.	List of Reviewers	Yes
FA2-02	02/27/15	Review the draft process for QA resource determination.	N/A	No
FA2-03	03/13/15	Provide comments on the process from both a federal and contractor perspective.	Comment Matrix	Yes
FA2-04	05/01/15	Prepare Guidance Document incorporating the final process with comments resolved.	Guidance Document	Yes
FA2-04	05/25/15	Make a recommendation to the EM QA Corporate Board with respect to endorsement of the documented resources process guidance.	Presentation at EM QA Corporate Board Meeting	Yes

Project Focus Area #3 – Enhancement of the Annual QA Metrics**Target Completion Date:** May 25, 2015**Background:**

In Fiscal Year 2009, the EM QA Corporate Board endorsed the use of a set of QA Metrics that is presented as “Stoplight Charts”. These charts include 13 categories with 50 subcategories and utilize a color coding scheme to indicate the adequacy of each category and subcategory. The color coding is defined as:

- Blue (Excellent) – Process, plans or procedures established to address criteria. Assessment evidence demonstrates that system in place is programmatically compliant and has been effectively implemented. Previously identified issues have been corrected and incorporated into the program (feedback and continuous improvement).
- Green (Good) – Process, plans or procedures established to address criteria. Assessment evidence demonstrates that system in place is programmatically compliant; however, implementation concerns require attention. Concerns have been addressed in the corrective action program but have not yet been resolved.
- Yellow (Investigate) – Process, plans or procedures established to address criteria; however, no assessment evidence is available to demonstrate compliance or process implementation, or evidence demonstrates a continuing legacy concern that has not been addressed.
- Red (Define Actions) – Process, plans or procedures are not established to address criteria. Assessment evidence shows that the process, plans or procedures are programmatically inadequate or process, plans or procedures are established to address criteria; however, significant quality issues (e.g. PAAA) were identified during the period.

The Stoplight Charts have been incorporated into the annual ISM/QA declarations with the submittals including completed metrics for the federal and prime contractors. However, the experience in completing and reviewing these charts over the past few years has identified a possible need for enhancement. Specifically, the sites have indicated the effort in completing these charts is better than before, but still a significant resource need with a limited return of information to assist the site. Further, from the HQ perspective, the charts are very subjective and programs of equivalent health at different sites may be rated as Blue at one site and Green at the other. As would be expected, the color rating for various areas can be difficult to defend when questioned. The Corporate Board has asked for an evaluation on the need and ability to enhance these annual QA metric submittals.

Scope:

This focus area was developed to determine how to enhance the current annual QA metrics reported to HQ. The effort is intended to consider both leading and lagging indicators that could be used to enhance and/or replace the existing stop light chart. As discussed in this focus area leading indicators result in actions taken to prevent a future occurrence likely to result in a Condition Adverse to Quality. The indicators help

identify issues before the CAQ has occurred. The leading indicators should be preventative and proactive to identify issues when costs are relatively low compared to trying to fix CAQ later. Lagging indicators are actions taken after recognition that a CAQ is either imminent or has occurred. These indicators occur after the fact and are reactive. The costs to repair the CAQ are typically higher when compared to correcting the issue prior to the CAQ.

This focus area will work to determine the best ways to make the annual declarations more definitive and remove some of the guesswork. Where possible, these enhancements will be quantifiable with an actual number, more easily defensible, with more consistency between sites. Any changes to the metrics will emphasize the use of existing reports and records to minimize resource allocation to the metric development. The focus area team will make a recommendation to the EM QA Corporate Board on the endorsement of a new set of metrics. Any new metrics will be evaluated on a trial basis to obtain site feedback prior to full endorsement by the Corporate Board.

Status:

This is a new Focus Area. Status updates will be provided at the EM Corporate QA Board meetings.

DOE Lead: Steven Ross, EM-43

EFCOG Lead: Mike Hassell/Robert Thompson, EFCOG

Support Team:

To be determined by the DOE and EFCOG leads

Focus Area #3 Project Milestones:

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
FA3-01	02/02/15	Review the existing annual QA declaration metrics and prepare project plan.	Project Plan	Yes
FA3-02	03/02/15	Develop a list of potential metrics to be used by the site offices with examples on how they will be reported.	Summary List	Yes
FA3-03	04/17/15	Implement a pilot study of the metrics at two (2) selected EM sites (including both federal and contractor data). Include a request for suggestions or comments by the sites.	Submitted Reports from the Pilot Study	Yes

Task #	Estimated Due Date	Task Description	Deliverable	Deliverable To Be Submitted to Project Managers
FA3-04	05/15/15	Develop the final QA metrics that are recommended by the sites (including disposition of the site comments from the pilot study.	Final QA Metrics Template	Yes
FA3-05	05/25/15	Present the final QA metrics to the EM QA Corporate Board for consideration and endorsement.	Presentation at EM QA Corporate Board Meeting	Yes
FA3-06	06/12/15	Prepare Guidance Document outlining indicators, their intended purpose, and the method of calculation.	Guidance Document	Yes