



QUALITY ASSURANCE IMPROVEMENT INITIATIVE



EM Centralized Training Platform Project Plan

APRIL 2009

OFFICE OF ENVIRONMENTAL MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON D. C. 20585

OFFICE OF ENVIRONMENTAL MANAGEMENT

QUALITY ASSURANCE IMPROVEMENT INITIATIVE

EM CENTRALIZED TRAINING PLATFORM PROJECT PLAN

Prepared by: _____

Date: _____

Approved by: _____

Date: _____

1.0 INTRODUCTION

The Department of Energy (DOE) expertise in quality assurance (QA) has degraded significantly over the last 10 years due to workforce attrition and the lack of emphasis on QA principles. Since the 2007 establishment and subsequent implementation of the Office of Environmental Management (EM) Quality Assurance Improvement Initiative, the need for trained QA specialists and personnel familiar with the role of QA in integrated safety management and project management is becoming critical. As EM Field Offices struggle to identify sufficient resources to properly implement the EM Quality Assurance Program (QAP) as promulgated in 2008, EM has to focus on training in-house personnel to perform these necessary functions. Accordingly, the EM Centralized Training Platform (also known as the Academy) was established in 2008 to offer basic QA training, audit training, and coaching and mentoring.

In addition, the Academy was established to support the EM QA Improvement Initiative to enhance QA awareness, functionality, capabilities, and oversight in the EM complex. The Academy, for example, in addition to providing basic QA training, will provide training to satisfy the need for Subject Matter Experts (SMEs) in the areas of Software Quality Assurance (SQA) and in Commercial Grade Dedication of Items and Services (CGD). The Academy will address the lack of a pipeline that produces SMEs for these areas; specific courses will be offered through the Academy to provide an entry-level working knowledge of SQA and CGD. These classes will be offered to both the EM federal and contractor (prime and lower tier) employees

EM prime contractor organizations also require a greater number of trained competent QA professionals and, subsequently, the EM Academy can be utilized by prime contractor organizations to fulfill this need. The EM Program vision, however, is to expand the Academy's training scope outside of the EM federal and prime contractor communities in order to positively impact existing and potential nuclear suppliers (lower tier subcontractors) in targeted geographic areas (e.g., the Hanford Reservation and the Savannah River Site). This is necessary to broaden the base of qualified nuclear suppliers available to compete for EM work.

Further, the Academy will provide DOE/EM interns (students) and practicing QA professionals with a learning experience that enhances their capability in the QA area and broadens their options for career development, especially in the EM Program.

In summary, this Project Plan provides the overarching strategy and approach for managing and marketing the Academy to federal and prime contractor employees as well as expanding to include nuclear suppliers and academic institutions. This will enhance the availability of QA resources for the EM Program. This plan supports EM's commitment to improve QA implementation across its operations with the goal of improving project performance and achieving operational excellence.

2.0 SCOPE AND OBJECTIVES

The scope of this Project Plan and its associated Task Plans, addresses three key communities which are crucial to improving project performance and, consequently, protecting EM's investment over the long-term: 1) DOE/EM Program Federal and Contractor Community; 2) Academic Institutions (DOE/EM Intern Program and Regional Universities and Colleges); and 3) Nuclear Suppliers (existing and potential small business interests).

There are five primary objectives of the Academy:

1. Develop a consistent and systematic approach to training personnel so that expertise is developed in the EM Program (federal and contractor staff) to adequately implement, maintain, and oversee implementation of compliant and effective QA programs.
2. Offer a consistent methodology for training EM and other personnel in basic QA competencies for successful qualification to the Technical Qualification Standards for QA personnel (as applied to DOE Defense Nuclear Facilities) and achievement of Lead Auditor certification in accordance with ASME NQA-1-2004 and Addenda through 2007 (NQA-1) requirements.
3. Develop training for SMEs with an entry-level knowledge of CGD and SQA to enhance the expertise available to EM Headquarters and Field elements in these areas.

4. Provide existing and potential nuclear suppliers with NQA-1 training to ensure that qualified nuclear suppliers to EM sites have an adequate understanding of DOE and EM QA requirements and expectations.
5. Provide DOE/EM interns, and practicing QA professionals with a learning experience that enhances their capability in the QA area and broadens their options for career development.

3.0 ACADEMY TRAINING APPROACHES

The approach of the Academy Training Program has been divided into three distinct communities:

- The DOE/EM Program Federal and Contractor Community (includes SME Community)
- The Academic Institution Community (i.e., DOE/EM Intern Program, Regional Universities and Colleges)
- The Nuclear Supplier Community (existing and potential small business suppliers)

3.1 DOE/EM PROGRAM FEDERAL AND CONTRACTOR COMMUNITY

For the DOE/EM Program federal and contractor community, the Academy offers training that enables the qualification and certification of personnel who perform QA oversight at their work sites. This training will also be available for those personnel who lead QA assessments that affect regulatory compliance and safety performance along with a focus on construction and operations within the EM Complex. An additional target audience for this training will be the federal and prime contractor employees who perform oversight of their contractors/subcontractors at nuclear facilities.

The approach for training this community is designed after an apprenticeship program and is divided into four phases. The lesson plans and training materials were developed using the Institute for Nuclear Power Operations (INPO) best practices.

- Phase I: Trainees complete the 40-hour QA training class. This class provides a minimum level of knowledge and understanding of quality assurance concepts, standards, regulations, and DOE Orders required by the DOE Qualification Standard DOE-STD-1150-2002. This class fulfills both the Auditor indoctrination requirements and the training and testing requirements for Lead Auditor certification of NQA-1-2004.

The classroom training will be performed at the EM Consolidated Business Center (EMCBC) in Cincinnati, Ohio, with a class size between 15 and 20 individuals. Instructors will be drawn from sources of qualified personnel (e.g., Carlsbad Field Office (CBFO), Carlsbad Technical Assistance Contractor (CTAC), Washington TRU Solutions (WTS), Sandia National Laboratories, Los Alamos National Laboratories, and other federal staff) as appropriate. The need for "satellite" campuses will be evaluated and locations selected when warranted.

Initial class cycles will be limited to EM federal personnel and support service contractor personnel. Later class cycles will be opened to site construction and operating contractor personnel based on a space available for a fee. Fees for contractor personnel will be determined before these later class cycles with sufficient lead time.

After sufficient dissemination of the lessons learned from the previous class cycles and the applicable refinement of the course materials and format, additional instructors from the Energy Facility Contractors Group (EFCOG) participants may be required to be indoctrinated so that they can return to their parent organizations and promulgate the training.

This 40-hour classroom course includes, but is not limited to, the subjects listed below. This content aligns with the DOE Quality Assurance Functional Area Qualification Standard DOE-STD-1150-2002 and NQA-1 requirements:

- Introduction to Quality Assurance
- Price-Anderson Amendments Act
- Elements of QA Programs, including 10 CFR 830.120, DOE Order 414.1C, NQA-1, ISO 9001, other national and international standards, and Software QA, and Sampling and Analysis

- Anatomy of Successful Quality Assurance Programs (e.g., M&O, laboratory, manufacturing)
 - Program and Procedure Development and Management
 - Dealing with People and Conflict Management Concepts
 - Techniques for Interfacing with DOE and M&O Contractor Operations and Technical Organizations
 - Regulatory and Other Agency Interfaces
 - Planning, Scheduling, and Performance of Audits and Other Forms of Oversight
 - Principles and Details of Audit Processes
 - Audit Survival
 - Corrective Action Oversight and Verification
- Phase II: Trainees will then participate in auditing at selected EM sites and receive on-the-job training, guidance, and counseling under the direct supervision of a Lead Auditor. Auditing activities will include a minimum participation in two audits as auditors-in-training with EM audit teams. During the on-the-job training, the trainees will be provided with the basic competencies that include typical field work, interfacing with audited personnel and regulators, and audit planning, performing, reporting, and follow-up actions, and includes preparing their input for the audit report. Documentation for the satisfactory completion of these two participations will be documented in the EMCBC Database. For trainees wishing to continue towards certification as a Lead Auditor, these two on-the-job audits can also be credited towards their Lead Auditor Certification in accordance with NQA-1 requirements.
 - Phase III: Trainees seeking certification as Lead Auditors in accordance with NQA-1-2004 requirements shall participate in three additional audits under the instruction and supervision of an experienced NQA-1 certified Lead Auditor. Documentation for the satisfactory completion of these three activities will be sent to the EMCBC Database Administrator. Certification as a Lead Auditor requires that five (5) quality assurance audits be completed within a three-year period prior to certification, one audit of which must be a nuclear quality assurance audit within the one year prior to certification.

- Phase IV: Follow-up mentoring will be provided to all trainees on an as-requested basis. When requested by a Field Element, a mentor or a mentor team can visit the trainee home office to evaluate the trainee performance and provide additional coaching or training as needed. These visits are expected to be normally conducted about one year from the completion of training or the last mentoring visit, but these visits are at the discretion of the Field Element and subject to mentor team availability. Mentoring is available in any of the areas contained in the DOE qualification Standard, DOE-STD-1150-2002. Phase IV mentoring does not satisfy the NQA-1 required annual review and assessment of employee qualifications or provide requalification in the event of a two-year or greater lapse in audit activities.

3.2 ACADEMIC INSTITUTION COMMUNITY

The lack of a publicly available training pipeline for QA resources can hamper businesses as they seek to work with the Department. As such, expansion into academia is vital to ensuring that adequate populations of qualified nuclear vendors are available for EM work. Development of this pipeline should also minimize the “poaching” of qualified candidates from the existing qualified suppliers.

To establish this pipeline, EM will focus on the most available sources and partner with local colleges and universities near major EM sites. These local colleges and universities can then drive these programs into general academia and expand the pipeline further. The local colleges and universities and DOE/EM intern programs being targeted by this effort are:

- Columbia Basin College (CBC), Pasco, Washington (Professional Development Program)
- Washington State University Tri-Cities Campus, Richland, Washington
- Aiken Technical College, Aiken, South Carolina
- Savannah River Site Community Reuse Organization, Aiken SC – August GA Economic Development Zone

- DOE Professional Development Corps (PDC)
- Florida International University (FIU) Intern Program

The initial goal for these interfaces is to create a minimum program that offers training in QA principles, coupled with real-world QA experiences at local DOE sites. Completion of this minimum program will result in a Quality Assurance Certificate. The long-term goal is to build a broader two-year program resulting in a Quality Assurance Associates Degree. The final goal is to gain accreditation for this Quality Assurance Associates Degree program at the local level.

3.3 THE NUCLEAR SUPPLIER COMMUNITY

To enhance the availability of QA resources to nuclear suppliers, the Academy will work through the EM sites and business development centers or other community based organizations pursuing economic development in a given geographical area. In addition, the Academy will directly provide QA training to interested area businesses. By partnering with these organizations, EM will increase the QA training available to compliment existing jobs programs or to create a stand-alone training program for businesses. DOE/National Nuclear Security Agency (NNSA) Nuclear Supplier Outreach events will be used to allow businesses to self-identify their interest in this available QA training. The initial effort and approach will be limited at this time to the following:

- Regional Business Development Centers: This effort is initially limited to the Washington State Small Business Development Center in Pasco, Washington with plans to expand to include the Aiken, South Carolina – Augusta, Georgia Economic Development Zone later.
- DOE/NNSA Nuclear Suppliers Outreach Events and follow-ups to expressions of interest.
- Nuclear Energy Institute (NEI) Manufacturing Outreach Workshops (4/year): DOE/EM is co-sponsoring these workshops.

At this time, a 4-hour *Introduction to Quality Assurance* has been prepared for use at DOE/NNSA and NEI Nuclear Suppliers Outreach Events. This introduction module was piloted at the DOE/NNSA Regional Nuclear Suppliers Outreach event in Augusta, Georgia, in March 2009 and was well received, resulting in over 80 expressions of interest for a 40-hour in-depth instruction on QA by businesses

attending this event. Dialogue was initiated also with E2 Consulting, a company providing free job training to people in the Aiken, South Carolina – Augusta, Georgia area under a grant from the Environmental Protection Agency. The addition of a QA component to E2 Consulting’s training was seen as advantageous in creating marketable job skills. These discussions are continuing with E2 Consulting.

3.4 SME COMMUNITY

The EM Complex has a critical need for SMEs in two vital areas: Software Quality Assurance (SQA) and Commercial Grade Dedication of Items and Services (CGD). These are both areas where improvement is necessary to meet the EM goal of project performance improvement. To facilitate improvement in SQA and CGD, the Academy will develop and implement training courses that will lead to the creation of more SMEs. The target audiences for these training courses are the Federal Project Directors and Integrated Project Team members, DOE Facility Representatives, DOE oversight resources, and DOE contractors.

The Academy will develop a 4-hour entry level training course covering the highlights of both SQA and CGD for most DOE personnel. More in-depth training would be required to attain a SME knowledge level. Potential SMEs for either SQA or CGD will be required to take the more in-depth training, which would last between one and three days for each area.

The Academy must ensure sufficient flexibility in its training programs to determine the audience size and emergent needs when warranted. The Director of Office of Standards and Quality Assurance (EM-64) will be the approving authority for new training added to the Academy.

4.0 PROJECT ORGANIZATION

The Senior Executive for this initiative is Ms. Sandra Waisley, the Director of the Office of Standards and Quality Assurance (EM-64). The Project Manager is Mr. David Faulkner who reports to EM-64. Logistical support is provided by Mr. Timothy J. Jackson, the Director of the Office of Logistics Management, EMCBC. These individuals are expected to interface with each other in order to coordinate the completion of this Project Plan’s milestones for 2009 - 2010.

5.0 KEY PROJECT PERSONNEL ROLES AND RESPONSIBILITIES

5.1 The EM Office of Standards and Quality Assurance is responsible for management and oversight:

- Maintains primary contact with internal and external organizations.
- Supports internal EM review of project deliverables.
- Identifies a suite of courses that will be included in the Academy and provides the following to EMCBC:
 - Requirements and course content for CGD training
 - Requirements and course content for SQA training
 - Requirements and course content for suppliers QA training, including the 4-hr QA Introductory Course and a 40-hr NQA-1 Course
 - Requirements and course content for a 4-hr QA Introductory Course to Federal Project Directors and Integrated Project Teams
 - Identify SMEs and instructors for the needed subject areas (SMEs are not required to be from EM-64)
 - Qualification requirements for Phase IV Mentors
 - Qualifying Officials for Phase IV Mentors
- Works with the academic community to develop the following:
 - Requirements and course content for a QA Certificate Program
 - Requirements and course content for an Associates Degree in QA
 - Required EM commitment level along with a Memorandum of Understanding (MOU) with the academic community, subject to EM internal review
 - SMEs and instructors to assist in the implementation of QA Certificate or Associates Degree Programs - these may be the same individuals as those identified for training internal to DOE

5.2 The EM Consolidated Business Center (EMCBC) is responsible for implementation of training:

- Supports internal EM review of project deliverables.
- Assists EM-64 in developing requirements and course content for:
 - QA Certificate and Associates Degree Programs
 - CGD training
 - SQA training
 - Suppliers QA training. This includes a 4-hr QA Introductory Course and a 40-hr QA Course
 - 4-hr QA Introductory Course to Federal Project Directors and Integrated Project Team members
 - Qualification of Phase IV Mentors
- Assists in providing SMEs and instructors to assist regional academic institutions in implementing QA Certificate or Associates Programs.
- Develops and maintains a database to track all Academy Trainees at the following points:
 - Satisfactory completion of Phase I classroom training
 - Completion of two (2) Phase II on-the-job audits
 - Completion of three (3) additional audits as the Lead Auditor-under instruction (may not be the same as audits used to satisfy Phase II requirements)
 - Total elapsed time for the five (5) audits used to certify Lead Auditors.
 - Certifications of Lead Auditors

- Mentor visits as they are requested and completed
- Develops and maintains a database of certified NQA-1 Lead Auditors within EM including periodic recertification.
- Provides logistical support to track any audits certified Lead Auditors perform on as either an auditor or Lead Auditor.
- Provides an annual assessment of Lead Auditor proficiency and extend the Lead Auditor certification for an additional year, or indicate if retraining or recertification is required.
- Provides logistical support in the scheduling and tracking for Phase II audit participation and Phase III audit participation.
- Develops and maintains a database of certified Phase IV Mentors.
- Maintains all Academy training courses and coordinate periodic updates with SMEs.
- Provides logistical support in the planning, notification, sign-up, and delivery of all Academy training.

5.3 EM Centralized Training Platform Trainees are responsible for notifying EMCBC when training or certifications are completed.

6.0 PROJECT EXECUTION AND PERFORMANCE MANAGEMENT

To execute the various training programs for DOE/EM federal and contractor personnel it will be necessary to determine the size of the target audience for each training initiative. In this manner, an estimate of the number of sessions required to reach that group can be made. The following table provides this information.

| Audience | Course | EM Wide Audience Size | Maximum Class Size | Sessions Needed | Instructors Needed/Session | Remarks |
|------------------------------|------------------------------------|-------------------------------|--------------------|------------------------------------|----------------------------|--|
| SME Candidates | SQA-3 day | 50 - 70 | 25 | 4 | 2 | Develop SME |
| SME Candidates | CGD-1 day | 50 - 70 | 25 | 4 | 2 | Develop SME |
| QA Oversight | 40-hr QA Training | 400 | 25 | 25 | 2 | Develop Auditors and Lead Auditors |
| FPD/IPT | SQA-2 hr Introduction | 500 - 700 | Limited by Venue | 3/Site | 1* | Seminar Style |
| FPD/IPT | CGD-2 hr Introduction | 500 - 700 | Limited by Venue | 3/Site | 1* | Seminar Style |
| FPD/IPT | QA Intro-4 hr | 500 - 700 | Limited by Venue | 3/Site | 2* | Seminar Style |
| Interested Nuclear Suppliers | 4-hr QA Introduction for Suppliers | 100 – 300 per Geographic Area | Limited by Venue | 1 Session/ Supplier Outreach Event | 2 | Seminar Style Offered at DOE/NNSA Supplier Outreach Events |
| Interested Nuclear Suppliers | 40-hr QA for Suppliers | 80 – 100 per Geographic Area | 25 | 5 Sessions/ Geographic Area | 2-3** | Offered as follow up to DOE/NNSA Supplier Outreach Events |

* If all 3 classes are scheduled for the same day only 2 instructors total are needed.

** It is estimated that 4 or 5 concurrent classes would be offered at a single location. The need is 10 instructors for 4 classes and 12 instructors for 5 classes being run concurrently.

7.0 SCHEDULE AND LOCATION

Course schedules and locations are deliverables under the attached Task Plans.

8.0 FUNDING PROFILE

EM Centralized Training Platform funds are provided in the Headquarters Non-Labor Resources annual budget for the Office of Safety Management and Operations (EM-60). The approved funding covers cost of instructors, training materials, and other logistics.

9.0 MARKETING AND COMMUNICATIONS

These activities will target the following organizations or entities:

- DOE/EM Headquarters (including Small Business, Procurement)
- DOE/EM Professional Development Corps
- DOE/EM Intern Programs
- EM Field Sites
- EM Prime Contractors
- EM Nuclear Suppliers and Sub-Tier Contractors
- Potential Nuclear Suppliers
- Regional Universities and Colleges (communities surrounding sites)
- Regional Economic Development Organizations
- Regional Small Business (DOE/NNSA Nuclear Supplier Outreach Events and/or Regional Economic Development Organizations)

There are a variety of options available for how to communicate with these diverse groups. EM will use widespread notification to ensure the maximum coverage to relevant parties. The primary mechanisms to be used are:

- EM FEDCAST
- Email distribution to Field Element Managers, Federal Project Directors, and DOE QA Managers
- Email distribution to DOE prime contractor QA Managers

- Email distribution to nuclear suppliers who attended DOE/NNSA Nuclear Supplier Outreach Events
- Email distribution to DOE/EM Professional Development Corps and DOE/EM Interns
- Publication on Energy Facilities Contractor Owners Group (EFCOG) website
- Email distribution to members of the EM/EFCOG QA Corporate Board
- Publication on DOE/EM website
- Publication on DOE/EM Portal
- Publication on DOE/NNSA Nuclear Supplier Outreach Event registration websites
- Publication and distribution of flyers at DOE/NNSA Nuclear Supplier Outreach Events, local colleges, and universities
- Publication and distribution of flyers to DOE prime contractor training groups via Field Element Managers
- Publication of upcoming classes in EM QA Newsletter, a quarterly publication
- Publication in the EFCOG newsletter, a quarterly publication

EM PROGRAM QUALITY ASSURANCE CENTRALIZED TRAINING PLATFORM

TASK PLAN #1 – EM FEDERAL AND CONTRACTOR COMMUNITY

Purpose:

The purpose of the centralized training platform is to provide training across the EM Complex and provide consistency regarding quality assurance principles, requirements, implementation, and EM expectations to the various EM organizations. This will also provide a cadre of personnel capable of performing the various quality assurance audits and assessments necessary to ensure proper implementation of approved quality assurance standards. This will include expansion of the training pipeline into local area academic institutions to improve the availability of qualified QA personnel to DOE contractors.

Project Background:

The DOE expertise in quality assurance has degraded significantly over the last 10 years due to workforce attrition and lack of emphasis on the principles. With the implementation of the Office of Environmental Management Quality Improvement Initiative the need for trained quality assurance specialists and personnel familiar with role of quality assurance in integrated safety management and project management is becoming critical as DOE field offices struggle to identify sufficient resources to properly implement the EM Quality Assurance Program (QAP) as recently promulgated. DOE needs to focus on developing in-house personnel to perform these necessary functions.

The lack of a public training pipeline for QA resources will hamper small businesses as they seek work with the Department so expansion into local academia is vital to meeting the goals of the Department for small business contracting. This will also minimize the poaching of qualified candidates from other companies currently providing services to the Department.

Project Objectives:

Provide a pipeline for personnel entering the Quality Assurance field with an opportunity to receive training and mentoring sufficient to support qualification in accordance with DOE-STD-1150, Quality Assurance Functional Area Qualification Standard.

Project Schedule:

| Tasks | Due Dates | Deliverables |
|--|---------------------------------|---|
| A. Revise NQA-1 Basic Course modules (22) based on lessons learned from October 2008 initial course | 01/15/09 | A1. Revised Modules (Completed) |
| B. Meet with EMCBC staff to discuss management and logistics of EM Centralized Training Platform | 05/23/09 | B1. Memorandum of Agreement between EM-64 and EMCBC detailing their Roles and Responsibilities for the EM Centralized Training Platform. |
| C. Determine if next FY 2009 NQA-1 Basic Course should be opened to DOE contractor community | N/A | C1. Course open to EM Federal employees, Professional Development Corps, Florida International University Interns, and DOE Support Service Contractors, and DOE Prime Contractors (Completed) |
| D. Schedule next FY 2009 NQA-1 Basic Course and issue notice to EM-complex. | 05/23/09 | D1. Coordinate with EMCBC and select date in July 09 for course offering. (Completed – scheduled July 20 – 24 Carlsbad, NM) |
| | 05/23/09 | D2. Coordinate with instructors and select date in September 09 for course offering. (Completed – scheduled Sept. 21 - 25 Denver CO) |
| | 05/29/09 | D3. Training notice ready for FEDCAST broadcast for federal personnel. |
| | 05/29/09 | D4. Training notice ready to transmit to DOE prime contractors. |
| E. Develop database of course attendees and strategy for tracking and monitoring of attendees through Phases II – IV (working w/ EM-40) | 09/30/09 | E1. Complete database development and load information collected to date. |
| | 09/30/09 | E2. EMCBC designated contact person to receive updates from Lead Instructors and Audit Team Leaders. |
| F. Review course comments from the FY 2009 NQA-1 Basic Course and revise course modules if necessary based on the feedback. | 10 days after course completion | F1. Determine if course revision is necessary based on course feedback. Document by memo to Project File. |
| | 60 days after course completion | F2. Complete course revision prior to the next scheduled presentation of the course, if needed. |
| G. Schedule 2010 NQA-1 Basic Courses and issue notice to EM-complex. | 08/30/09 | G1. Coordinate with EMCBC and select dates for course offerings (courses to complete NLT 09/30/10). |
| | 08/30/09 | G2. Training notice ready for EMFEDCAST broadcast for federal personnel. |
| | 08/30/09 | G3. Training notice ready to transmit to DOE prime contractors. |
| H. Define Phase II requirements and promulgate to the DOE-EM Complex. | 04/30/09 | H1. Memo from EM-60 to Field Elements containing the Phase II requirements. |
| I. Designation of certifying officials for QA Specialists (to give checkouts and sign off practical factors on qualification cards during audit participation). These are in addition to Field Element certifying officials. | 05/29/09 | I1. Memo from EM-60 to Field Elements and Phase II participants specifying the certifying officials. |
| J. Define Phase III requirements, including the method to achieve certification as a Lead Auditor. | 07/30/09 | J1. Memo from EM-60 to Field Elements containing the Phase III requirements. |

| Tasks | Due Dates | Deliverables |
|--|---------------------------------|---|
| K. Define Phase IV expectations and process to request mentoring. | 09/30/09 | K1. Memo from EM-60 to Field Elements and Phase II and III participants identifying the process to request Mentor. |
| | 11/30/09 | K2. Memo from EM-60 to prospective Phase IV Mentors identifying Phase IV Mentor expectations and certification process. |
| | 04/30/10 | K3. Phase IV Mentors complete certification. |
| L. Review course comments from every presentation in FY 2010 of the NQA-1 Basic Course and revise course modules if necessary based on the feedback. | 10 days after course completion | L1. Determine if course revision is necessary based on course feedback. Document by memo to Project File. |
| | 60 days after course completion | L2. Complete course revision prior to the next scheduled presentation of the course, if needed. |

| ID | Task Name | Duration | Start | Finish | Apr '09 | May '09 | Jun '09 | Jul '09 | Aug '09 | Sep '09 | Oct '09 | Nov '09 | Dec '09 | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | | |
|----|---|----------|--------------|--------------|------------|---------|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|
| 1 | Revised Modules based on lessons learned from Oct. 2008 course | 67 days | Wed 4/22/09 | Thu 7/23/09 | [Task Bar] | | | | | | | | | | | | | | | | | |
| 2 | MOA between EM-64 and EMCBC on roles and responsibilities for the EM Centralized Training Platform | 23 days | Wed 4/22/09 | Fri 5/22/09 | [Task Bar] | | | | | | | | | | | | | | | | | |
| 3 | Course open to EM Federal employees, EMPDC, FIU interns, DOE support-service contractors, and DOE prime contractors | 1 day | Wed 4/22/09 | Wed 4/22/09 | [Task Bar] | | | | | | | | | | | | | | | | | |
| 4 | Coordinate with EMCBC and select date in July 09 for course offering | 23 days | Wed 4/22/09 | Fri 5/22/09 | [Task Bar] | | | | | | | | | | | | | | | | | |
| 5 | Coordinate with instructors and select date in September 09 for course offering. | 23 days | Wed 4/22/09 | Fri 5/22/09 | [Task Bar] | | | | | | | | | | | | | | | | | |
| 6 | Training notice ready for FEDCAST | 1 day | Wed 9/30/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | |
| 7 | Training notice ready for DOE prime contractors | 1 day | Thu 10/1/09 | Thu 10/1/09 | | | | | | | | | | | | | | | | | | |
| 8 | Complete database development and load information collected to date | 93 days | Mon 5/25/09 | Wed 9/30/09 | | | [Task Bar] | | | | | | | | | | | | | | | |
| 9 | EMCBC designated contact person to receive updates from Lead Instructors and Audit Team Leaders | 93 days | Mon 5/25/09 | Wed 9/30/09 | | | [Task Bar] | | | | | | | | | | | | | | | |
| 10 | Determine if course revision is necessary based on feedback. Document by memo to Project file. | 73 days | Mon 6/22/09 | Wed 9/30/09 | | | [Task Bar] | | | | | | | | | | | | | | | |
| 11 | Revise course before next scheduled presentation | 50 days | Mon 10/12/09 | Fri 12/18/09 | | | | | | | | | | | | | | | | | | |
| 12 | Coordinate with EMCBC and select dates for course offerings | 44 days | Wed 7/1/09 | Mon 8/31/09 | | | [Task Bar] | | | | | | | | | | | | | | | |
| 13 | Training notice ready for EM FEDCAST | 44 days | Tue 9/1/09 | Fri 10/30/09 | | | | | | | | | | | | | | | | | | |
| 14 | Training notice for EM prime contractors | 44 days | Mon 11/2/09 | Thu 12/31/09 | | | | | | | | | | | | | | | | | | |
| 15 | Memo from EM-60 to field elements containing Phase II requirements | 7 days | Wed 9/30/09 | Thu 10/8/09 | | | | | | | | | | | | | | | | | | |
| 16 | Memo from EM-60 to field elements and Phase II participants specifying the certifying officials | 1 day | Fri 5/29/09 | Fri 5/29/09 | | | | | | | | | | | | | | | | | | |
| 17 | Memo from EM-60 to field elements containing Phase III requirements | 1 day | Thu 7/30/09 | Thu 7/30/09 | | | | | | | | | | | | | | | | | | |
| 18 | Memo from EM-60 to field elements and Phase II and III participants identifying the process for requesting a mentor | 1 day | Wed 9/30/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | |
| 19 | Memo from EM-60 to prospective Phase IV mentors identifying Phase IV mentor expectations and certification process | 44 days | Thu 10/1/09 | Tue 12/1/09 | | | | | | | | | | | | | | | | | | |
| 20 | Phase IV mentors complete certification | 110 days | Wed 12/2/09 | Tue 5/4/10 | | | | | | | | | | | | | | | | | | |
| 21 | Determine if course revision is necessary; document in Project file | 66 days | Thu 10/1/09 | Thu 12/31/09 | | | | | | | | | | | | | | | | | | |
| 22 | Complete course revisions | 130 days | Fri 1/1/10 | Thu 7/1/10 | | | | | | | | | | | | | | | | | | |

EM PROGRAM QUALITY ASSURANCE CENTRALIZED TRAINING PLATFORM

ACADEMIC INSTITUTIONS

TASK PLAN #2a – WASHINGTON STATE ACADEMIC COMMUNITY

Purpose:

The purpose of interfacing with community academic institutions is to provide a pipeline external to DOE that can provide a cadre of qualified personnel for area businesses seeking to implement or maintain quality assurance standards to perform nuclear work for the EM Complex.

Project Background:

At this time, there are no academic institutions offering quality assurance degree or certificate programs near two of the largest EM sites (Hanford and Savannah River Site). Businesses seeking contracts with the EM Complex to perform nuclear work either have to hire qualified QA personnel away from other businesses, many times government contractors themselves, or take on the burden of training and qualification of personnel by the company. This typically makes performing nuclear work for the EM Complex difficult and expensive for many small businesses and even some larger companies.

Project Objectives:

Partner with Columbia Basin College to develop a college level curriculum addressing the basic knowledge of quality assurance principles, methods of implementation, and required auditing as well as provide a means for personnel to gain experience in auditing existing quality assurance programs. Expand the training in partnership with Washington State University Engineering Programs as a component of an established engineering degree curriculum.

Project Schedule:

| Tasks | Due Dates | Deliverables |
|---|-----------|---|
| A. Meet with Columbia Basin College to explore partnering for either a QA certificate program or a longer-term Associates Degree in QA. | 01/15/09 | A1. Determine willingness of Columbia Basin College to partner/participate in this type of approach (Completed) |

| Tasks | Due Dates | Deliverables |
|---|--|--|
| <p>B. Define requirements for a QA Certificate Program using DOE-STD-1150-2002 as a guide working with EMCBC and Columbia Basin College to establish a QA Certificate Program. This includes course revision and development, as well as a MOU regarding roles and responsibilities. Enrollment to start in the Fall 2010</p> | <p>06/30/09 06/30/09 12/30/09 05/31/10</p> | <p>B1. Define QA Certificate Program requirements. B2. Memorandum of Understanding between EM-HQ and Columbia Basin College for roles and responsibilities in offering a QA Certificate Program. The MOU will guide further implementation of this track. B3. Develop QA Certificate Courses to Columbia Basin College requirements. B4. Notice of formal approval of the QA Certificate Program as a course of study to be offered by Columbia Basin College.</p> |
| <p>C. Define requirements for an Associates Program in QA working with EMCBC, Columbia Basin College, and Washington State University (WSU) that would mesh with a 4-yr university Engineering program. This includes course revision and development, as well as a MOU regarding roles and responsibilities. Enrollment to start in the Fall 2010.</p> | <p>06/30/09 12/30/09 05/26/10 06/01/10 06/18/10</p> | <p>C1. Determine willingness of WSU to partner/participate in this type of approach. C2. Define QA Associates Degree Program requirements. C3. Develop QA Associates Degree Courses to Columbia Basin College requirements. C4. Notice of formal approval of the QA Associates Degree as a course of study meeting core requirements of a WSU engineering program. C5. MOUs between EM-HQ and Columbia Basin College and EM-HQ and WSU for roles and responsibilities in offering a QA Associates Degree as part of a WSU engineering program. The MOUs will guide further implementation of this track.</p> |

| ID | Task Name | Duration | Start | Finish | Apr '09 | May '09 | Jun '09 | Jul '09 | Aug '09 | Sep '09 | Oct '09 | Nov '09 | Dec '09 | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 |
|----|--|----------|-------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | Determine willingness of Columbia Basin College to participate in this approach | 1 day | Wed 4/22/09 | Wed 4/22/09 | i | | | | | | | | | | | | | | | |
| 2 | Define QA Certificate Program requirements | 50 days | Wed 4/22/09 | Tue 6/30/09 | | | | | | | | | | | | | | | | |
| 3 | MOU between EM HQ and Columbia Basin College | 50 days | Wed 7/1/09 | Tue 9/8/09 | | | | | | | | | | | | | | | | |
| 4 | Develop QA Certificate Courses to meet Columbia Basin College requirements | 181 days | Wed 9/9/09 | Wed 5/19/10 | | | | | | | | | | | | | | | | |
| 5 | Notice of formal approval of the QA Certificate Program as a course of study to be offered by Columbia Basin College | 1 day | Thu 5/20/10 | Thu 5/20/10 | | | | | | | | | | | | | | | | |
| 6 | Determine willingness of WSU to participate in this approach | 50 days | Wed 4/22/09 | Tue 6/30/09 | | | | | | | | | | | | | | | | |
| 7 | Define QA Associates Degree Program requirements | 132 days | Wed 7/1/09 | Thu 12/31/09 | | | | | | | | | | | | | | | | |
| 8 | Develop QA Associates Degree Courses to meet Columbia Basin College requirements | 106 days | Fri 1/1/10 | Fri 5/28/10 | | | | | | | | | | | | | | | | |
| 9 | Notice of formal approval of the QA Associates Degree as a course of study that meets the requirements of a WSU engineering program | 5 days | Mon 5/31/10 | Fri 6/4/10 | | | | | | | | | | | | | | | | |
| 10 | MOUs between EM HQ and Columbia Basin College and between EM HQ and WSU defining roles and responsibilities in offering a QA Associates Degree as part of a WSU engineering program. | 14 days | Mon 6/7/10 | Thu 6/24/10 | | | | | | | | | | | | | | | | |

EM PROGRAM QUALITY ASSURANCE CENTRALIZED TRAINING PLATFORM

ACADEMIC INSTITUTIONS

TASK PLAN #2b – OTHER ACADEMIC INSTITUTIONS

Purpose:

The purpose of interfacing with community academic institutions is to provide a pipeline external to DOE that can provide a cadre of qualified personnel for area businesses seeking to implement or maintain quality assurance standards to perform nuclear work for the EM Complex.

Project Background:

At this time, there are no academic institutions offering quality assurance degree or certificate programs near two of the largest EM sites (Hanford and Savannah River Site). Businesses seeking contracts with the EM Complex to perform nuclear work either have to hire qualified QA personnel away from other businesses, many times government contractors themselves, or take on the burden of training and qualification of personnel by the company. This typically makes performing nuclear work for the EM Complex difficult and expensive for many small businesses and even some larger companies.

Project Objectives:

1. Partner with Aiken Technical College (ATC) and Florida International University (FIU) to develop and provide a college level curriculum addressing the basic knowledge of quality assurance principles, methods of implementation, and required auditing as well as provide a means for personnel to gain experience in auditing existing quality assurance programs. Expand the training in partnership with University Engineering Programs as a component of an established engineering degree curriculum.
2. Identify and develop other opportunities to include Quality Assurance indoctrination as part of existing training to jobs programs in order to better leverage the success rate of the existing jobs program. Likely targets are those programs operating under grants for job creation from the Nuclear Regulatory Commission and the Environmental Protection Agency.

Project Schedule:

| Tasks | Due Dates | Deliverables |
|--|------------------|--|
| A. Meet with Aiken Technical College (ATC) to explore partnering for either a QA certificate program or a longer-term Associates Program in QA. | 04/10/09 | A1. Determine willingness of ATC to partner/participate in this type of approach. |
| B. Define requirements for a QA Certificate Program using DOE-STD-1150-2002 as a guide working with EMCBC, and ATC to establish a QA Certificate Program. This includes course development and revision, as well as Memorandum of Understanding (MOU) regarding roles and responsibilities. Enrollment to start in the Fall 2010 | 06/30/09 | B1. Review and revise the Task Plan 2a QA Certificate Program requirements for ATC use. |
| | 03/31/10 | B2. Development QA Certificate Courses to ATC requirements. |
| | 04/30/10 | B3. Memorandum of Understanding between EM-HQ and ATC for roles and responsibilities in offering a QA Certificate Program. The MOU will guide further implementation of this track. |
| | 07/31/10 | B4. Approval of QA Certificate curriculum for use at ATC. |
| C. Meet with Florida International University (FIU) to explore partnering. | 06/30/09 | C1. Determine willingness of FIU to partner/participate in this type of approach to provide either a QA Certificate or as part of the approved engineering curriculum. |
| | 06/30/09 | C2. Determine if FIU can host a 4 hr Introduction to QA or 40 hr NQA-1 Basics course for prospective DOE Interns from FIU and other schools, and for DOE Professional Development Corps. |
| | 09/30/09 | C3. Based on C2, schedule a course for spring 2009 (4 hr) and/or 2010 (4 hr or 40 hr) to be held at FIU. |
| D. Define requirements for a QA Certificate Program using DOE-STD-1150-2002 as a guide working with EMCBC and FIU to establish a QA Certificate Program. This includes course development and revision, as well as a MOU regarding roles and responsibilities. Enrollment to start in the Fall 2010 | 11/30/09 | D1. Define QA Certificate or Associates Degree Program requirements. |
| | 03/31/10 | D2. Development of QA Certificate or Associates Degree Courses to FIU requirements. |
| | 06/30/10 | D3. Notice of formal approval of the QA Certificate or Associates Degree courses as meeting requirements of a FIU engineering program. |
| | 07/31/10 | D4. MOUs between EM-HQ and FIU for roles and responsibilities in offering a QA Certificate or Associates Degree as part of a FIU engineering program. The MOUs will guide further implementation of this track. |
| E. Meet with E2 Consulting to explore partnering for a QA module as part of its career training offered under an Environmental Protection Agency grant program. | 05/22/09 | E1. Determine willingness of E2 Consulting to partner/participate in this type of approach. E2. Revise Project Plan if required to accommodate this partner's needs if existing courses are not adequate. |
| F. Meet with NNSA MOX contractor and determine if there is an opportunity to leverage the training it is providing to the NNSA workforce through ATC. | 05/22/09 | F1. Determine the training already being provided through ATC and if there is opportunity to partner/participate. F2. Revise Project Plan if required to accommodate this partner's needs if existing courses are not adequate. |

| ID | Task Name | Duration | Start | Finish | Apr '09 | May '09 | Jun '09 | Jul '09 | Aug '09 | Sep '09 | Oct '09 | Nov '09 | Dec '09 | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 |
|----|---|----------|--------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | Determine willingness of ATC to participate in this approach | 8 days | Mon 9/21/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | |
| 2 | Review and revise the Task Plan 2a QA Certificate Program requirements for ATC use | 58 days | Fri 4/10/09 | Tue 6/30/09 | █ | █ | █ | | | | | | | | | | | | | |
| 3 | Develop QA Certificate Courses to meet ATC requirements | 197 days | Wed 7/1/09 | Thu 4/1/10 | | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| 4 | MOU between EM HQ and ATC for roles and responsibilities in offering a QA Certificate Program | 22 days | Fri 4/2/10 | Mon 5/3/10 | | | | | | | | | | | | | █ | █ | | |
| 5 | Approval of QA Certificate curriculum for use at ATC | 66 days | Tue 5/4/10 | Tue 8/3/10 | | | | | | | | | | | | | | █ | █ | █ |
| 6 | Determine willingness of FIU to participate in the approach to provide a QA Certificate or be part of the approved engineering curriculum | 65 days | Wed 4/22/09 | Tue 7/21/09 | █ | █ | █ | | | | | | | | | | | | | |
| 7 | Determine whether FIU can host a 4-hour Introduction to QA or 40-hour NQA-1 Basics course for prospective DOE interns from FIU and other schools, and for EMPDC | 65 days | Wed 7/22/09 | Tue 10/20/09 | | | | █ | █ | █ | | | | | | | | | | |
| 8 | Schedule a 4-hour course for Spring 2009 or a 40-hour course for 2010 to be held at FIU | 67 days | Wed 10/21/09 | Thu 1/21/10 | | | | | | | █ | █ | | | | | | | | |
| 9 | Define QA Certificate or Associates Degree Program requirements | 110 days | Thu 4/30/09 | Wed 9/30/09 | █ | █ | █ | █ | █ | █ | | | | | | | | | | |
| 10 | Develop QA Certificate or Associates Degree courses to meet FIU req'ts. | 88 days | Mon 11/30/09 | Wed 3/31/10 | | | | | | | | | █ | █ | █ | █ | █ | █ | █ | █ |
| 11 | Notice of formal approval of the QA Certificate or Associates Degree courses as meeting requirements of the FIU engineering program | 65 days | Thu 4/1/10 | Wed 6/30/10 | | | | | | | | | | | | | █ | █ | █ | █ |
| 12 | MOUs between EM HQ and FIU for roles and responsibilities in offering a QA Certificate or Associates Degree as part of the FIU engineering program | 22 days | Thu 7/1/10 | Fri 7/30/10 | | | | | | | | | | | | | | | | █ |
| 13 | Determine willingness of E2 Consulting to participate in this approach | 38 days | Wed 4/22/09 | Fri 6/12/09 | █ | █ | | | | | | | | | | | | | | |
| 14 | Revise Project Plan if required to accommodate this partner's needs if existing courses are not adequate | 38 days | Mon 8/10/09 | Wed 9/30/09 | | | | | █ | █ | | | | | | | | | | |
| 15 | Determine the training already being provided through ATC and whether there is an opportunity to partner or participate | 38 days | Wed 4/1/09 | Fri 5/22/09 | █ | █ | | | | | | | | | | | | | | |
| 16 | Revise Project Plan if required to accommodate this partner's needs if existing courses are not adequate | 38 days | Mon 5/25/09 | Wed 7/15/09 | | | █ | █ | | | | | | | | | | | | |

EM PROGRAM QUALITY ASSURANCE CENTRALIZED TRAINING PLATFORM

TASK PLAN #3 – NUCLEAR SUPPLIERS COMMUNITY

Purpose:

Increase awareness amongst businesses doing or wishing to do work for DOE-EM of the quality assurance (QA) requirements applied to EM work.

Project Background:






Over the last 2 decades the number of businesses meeting the strict quality assurance requirements to provide nuclear grade components and services has diminished significantly in the United States. This impacts both the commercial nuclear industry and the DOE in terms of competition for work and in some cases, even the presence of a qualified supplier for specific applications. In order to increase the pool of potential nuclear suppliers it is critical that sufficient knowledge of quality assurance requirements and how to meet them be made available to interested suppliers.

Project Objectives:

Provide a means for businesses to obtain information on EM Complex QA requirements and information on how to implement those requirements.

Project Schedule:

| Tasks | Due Dates | Deliverables |
|--|----------------------|--|
| A. Hold 4-Hr. NQA-1 training course at the 2-day DOE/NNSA Regional Nuclear Suppliers Outreach Event for small businesses to be held in Augusta, GA, in March 2009. | N/A | A1. Completed |
| B. Determine interest from regional business community for a DOE/EM offered 40-Hr. NQA-1 Basics Course later in 2009 | 04/10/09 | B1. 40-hr NQA-1 Class signup sheet from the Augusta, GA, Regional Nuclear Suppliers Outreach held in March 2009. Eight-Six (86) suppliers expressed interest in the 40 hr class (Completed) |
| C. Determine location and date for the 40-hr NQA-1 Class. | 05/10/09 | C1. Memo to Project File documenting determination |
| D. Issue notice to interested participants of date and location. | 05/17/09 05/24/09 | D1. E-mail to interested vendors. D2. E-mail to all suppliers that attended the March 2009 Nuclear Suppliers Outreach Event in Augusta, GA. |
| E. Perform A through D above for other Nuclear Suppliers Outreach Events held in 2009. | N/A | N/A |

| ID | Task Name | Duration | Start | Finish | March | April | May |
|----|--|----------|-------------|-------------|---|---|---|
| 1 | Hold 4-hour NQA-1 training at the 2-day DOE/NNSA Regional Nuclear Suppliers' Event in Augusta, GA | 22 days | Wed 4/22/09 | Thu 5/21/09 | |  | |
| 2 | Determine interest in the 40-hour NQA-1 class based on the attendees of the Regional Nuclear Suppliers' Outreach; develop signup sheet | 9 days | Tue 3/31/09 | Fri 4/10/09 |  | | |
| 3 | Memo to Project file documenting determination | 21 days | Fri 4/10/09 | Fri 5/8/09 | |  | |
| 4 | E-mail interested vendors about training dates and locations | 6 days | Fri 5/8/09 | Fri 5/15/09 | | |  |
| 5 | E-mail all suppliers that attended the Regional Nuclear Suppliers' Outreach in March regarding training dates and locations | 6 days | Mon 5/18/09 | Mon 5/25/09 | | |  |

EM PROGRAM QUALITY ASSURANCE CENTRALIZED TRAINING PLATFORM

TASK PLAN #4 – OTHER TECHNICAL TRAINING

Purpose:

There are typically two purposes for technical training. First it is to provide an overview of a technical area of which a large number of people need an awareness or sensitivity to. The second is the need for in-depth coverage of the topical area to develop a level of knowledge equivalent to an entry-level subject matter expert in the subject area.

Overview type training is typically only a few hours of classroom time and provides only an awareness of the subject area. The in-depth courses are a foundation upon which DOE builds in developing subject matter experts in areas where there is a lack or severe shortage of expertise. The in-depth courses are expected to last from 1 day up to 3 weeks each depending on the scope and breadth of material to be addressed. The need for these types of training courses is both immediate and continuing.

Background:

EM needs a responsive system to develop and administer technical training on critical subjects on an as-needed basis. The system must be flexible enough to conduct training addressing emergent needs in a short time. A short time is used here meaning months rather than a year or longer. Course development will dictate the lead time to start the training.

Project Objectives:

Develop a process to allow development and delivery of technical training in a relatively short time (months) to address emergent needs. This will be done by piloting the development and roll-out of training on Software Quality Assurance (SQA) and Commercial Grade Dedication of Items and Services (CGD). This training is needed at this time.

Project Schedule:

| Tasks | Due Dates | Deliverables |
|--|--|--|
| A. For Commercial Grade Dedication of Items and Services deliver the already developed training to EM Federal Project Directors (FPD), Integrated Project Teams (IPT), and DOE prime contractor personnel. Training to be conducted at Hanford, Idaho, Oak Ridge, Savannah River Site, Carlsbad Field Office, Portsmouth / Paducah Project Office and small sites. | 06/30/09 05/31/09 06/07/09 08/31/09 | A1. Complete course development. A2. Determine course dates at each location – need minimum of 4 sessions, except Small Sites needs 2 sessions. A3. Notify Field Elements by EMFEDCAST and to EM Site Managers, notify DOE prime contractors through contractor QA managers. A4. Complete training. |
| B. For Software Quality Assurance (SQA) develop and deliver an awareness level briefing to EM FPD and IPT of EM FPD and IPT at Hanford, Idaho, Oak Ridge, Savannah River Site, Carlsbad Field Office, Portsmouth / Paducah Project Office and small sites. | 06/15/09 05/31/09 06/07/09 08/31/09 | B1. Complete course development. Target length is 2 to 4 hours duration. B2. Determine course dates at each location – need minimum of 4 sessions, except small sites needs 2 sessions B3. Notify Field Elements by EMFEDCAST and to EM Site Managers. B4. Complete training. |
| C. Determine location and date for the 3-day SQA Class to develop SME level knowledge. Training is to be conducted at Hanford, Idaho, Oak Ridge, Savannah River Site, Carlsbad Field Office, Portsmouth / Paducah Project Office and small sites. | N/A 05/31/09 06/07/09 08/31/09 | C1. Complete course development (Completed) C2. Determine course dates at each location – need minimum of 4 sessions, except small sites needs 2 sessions. C3. Notify Field Elements by EMFEDCAST and to EM Site Managers, notify DOE prime contractors through contractor QA managers. C4. Complete training. |
| D. Review course comments from every 3 day SQA course and revise if necessary based on the feedback. | 10 days after course completion 60 days after course completion | D1. Determine if course revision is necessary based on feedback. Document by memo to Project File. D2. Complete course revision prior to the next scheduled presentation but within 60 days, if needed. |
| E. Develop database of courses and strategy for tracking attendees. | 09/30/09 09/30/09 | E1. Complete database development and load information collected to date. E2. EMCBC designated contact person to receive updates from instructors. |

| ID | Task Name | Duration | Start | Finish | Apr '09 | May '09 | Jun '09 | Jul '09 | Aug '09 | Sep '09 | Oct '09 | Nov '09 | Dec '09 | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | Aug '10 | Sep '10 | Oct '10 | | | | |
|----|---|-----------------|--------------------|--------------------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|--|--|
| 1 | EM Fed-Contractor Community | 312 days | Wed 4/22/09 | Thu 7/1/10 | [Gantt bar for EM Fed-Contractor Community] | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Revised Modules based on lessons learned from Oct. 2008 course | 67 days | Wed 4/22/09 | Thu 7/23/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 2 | MOA between EM-64 and EMCBC on roles and responsibilities for the EM Centralized Training Platform | 23 days | Wed 4/22/09 | Fri 5/22/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Course open to EM Federal employees, EMPDC, FIU interns, DOE support-service contractors, and DOE prime contractors | 1 day | Wed 4/22/09 | Wed 4/22/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Coordinate with EMCBC and select date in July 09 for course offering | 23 days | Wed 4/22/09 | Fri 5/22/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Coordinate with instructors and select date in September 09 for course offering. | 23 days | Wed 4/22/09 | Fri 5/22/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Training notice ready for FEDCAST | 1 day | Wed 9/30/09 | Wed 9/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Training notice ready for DOE prime contractors | 1 day | Thu 10/1/09 | Thu 10/1/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Complete database development and load information collected to date | 93 days | Mon 5/25/09 | Wed 9/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 9 | EMCBC designated contact person to receive updates from Lead Instructors and Audit Team Leaders | 93 days | Mon 5/25/09 | Wed 9/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Determine if course revision is necessary based on feedback. Document by memo to Project file. | 73 days | Mon 6/22/09 | Wed 9/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Revise course before next scheduled presentation | 50 days | Mon 10/12/09 | Fri 12/18/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Coordinate with EMCBC and select dates for course offerings | 44 days | Wed 7/1/09 | Mon 8/31/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Training notice ready for EM FEDCAST | 44 days | Tue 9/1/09 | Fri 10/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Training notice for EM prime contractors | 44 days | Mon 11/2/09 | Thu 12/31/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Memo from EM-60 to field elements containing Phase II requirements | 7 days | Wed 9/30/09 | Thu 10/8/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Memo from EM-60 to field elements and Phase II participants specifying the certifying officials | 1 day | Fri 5/29/09 | Fri 5/29/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Memo from EM-60 to field elements containing Phase III requirements | 1 day | Thu 7/30/09 | Thu 7/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Memo from EM-60 to field elements and Phase II and III participants identifying the process for requesting a mentor | 1 day | Wed 9/30/09 | Wed 9/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 19 | Memo from EM-60 to prospective Phase IV mentors identifying Phase IV mentor expectations and certification process | 44 days | Thu 10/1/09 | Tue 12/1/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Phase IV mentors complete certification | 110 days | Wed 12/2/09 | Tue 5/4/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Determine if course revision is necessary; document in Project file | 66 days | Thu 10/1/09 | Thu 12/31/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Complete course revisions | 130 days | Fri 1/1/10 | Thu 7/1/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 2 | WA Academic Community | 307 days | Wed 4/22/09 | Thu 6/24/10 | [Gantt bar for WA Academic Community] | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Determine willingness of Columbia Basin College to participate in this approach | 1 day | Fri 5/29/09 | Fri 5/29/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Define QA Certificate Program requirements | 50 days | Wed 4/22/09 | Tue 6/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 3 | MOU between EM HQ and Columbia Basin College | 50 days | Wed 7/1/09 | Tue 9/8/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Develop QA Certificate Courses to meet Columbia Basin College requirements | 181 days | Wed 9/9/09 | Wed 5/19/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Notice of formal approval of the QA Certificate Program as a course of study to be offered by Columbia Basin | 1 day | Thu 5/20/10 | Thu 5/20/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Determine willingness of WSU to participate in this approach | 50 days | Wed 4/22/09 | Tue 6/30/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Define QA Associates Degree Program requirements | 132 days | Wed 7/1/09 | Thu 12/31/09 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Develop QA Associates Degree Courses to meet Columbia Basin College requirements | 106 days | Fri 1/1/10 | Fri 5/28/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Notice of formal approval of the QA Associates Degree as a course of study that meets the requirements of a | 5 days | Mon 5/31/10 | Fri 6/4/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |
| 10 | MOUs between EM HQ and Columbia Basin College and between EM HQ and WSU defining roles and | 14 days | Mon 6/7/10 | Thu 6/24/10 | [Gantt bar] | | | | | | | | | | | | | | | | | | | | | | |

| ID | Task Name | Duration | Start | Finish | Apr '09 | May '09 | Jun '09 | Jul '09 | Aug '09 | Sep '09 | Oct '09 | Nov '09 | Dec '09 | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | Aug '10 | Sep '10 | Oct '10 | Nov '10 | Dec '10 | Jan '11 | Feb '11 | Mar '11 | Apr '11 | May '11 | |
|----|---|-----------------|--------------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| 3 | Other Technical Training | 272 days | Wed 4/22/09 | Thu 5/6/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Determine course dates at each location | 28 days | Wed 4/22/09 | Fri 5/29/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Notify field elements by EM FEDCAST; notify EM Site Managers; notify DOE prime contractors through the | 43 days | Mon 6/1/09 | Fri 12/25/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Complete course development of Commercial-Grade Dedication of terms and Services | 50 days | Mon 12/28/09 | Fri 3/5/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Complete training | 44 days | Mon 3/8/10 | Thu 5/6/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Determine course dates at each location | 28 days | Wed 4/22/09 | Fri 5/29/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Notify field elements by EM FEDCAST; notify EM Site Managers | 33 days | Mon 6/1/09 | Wed 7/15/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Complete course development for SQA training | 32 days | Thu 7/16/09 | Fri 8/28/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Complete training | 44 days | Mon 8/31/09 | Thu 10/29/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Complete development of 3-day SQA class | 1 day | Wed 4/22/09 | Wed 4/22/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Determine course dates at each location | 1 day | Fri 5/29/09 | Fri 5/29/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Notify field elements by EM FEDCAST; notify EM Site Managers; notify DOE prime contractors through their | 33 days | Mon 6/1/09 | Wed 7/15/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Complete training | 44 days | Thu 7/16/09 | Tue 9/15/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Determine if courses need to be revised based on feedback; document by memo to Project file | 10 days | Mon 8/31/09 | Fri 9/11/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Complete course revisions prior to next scheduled presentation | 45 days | Mon 9/14/09 | Fri 11/13/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Complete database development and load information collected to date | 116 days | Wed 4/22/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | EMCBC-designated contact person to receive updates from instructors | 116 days | Wed 4/22/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Other Academic Institutions | 350 days | Wed 4/1/09 | Tue 8/3/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Determine willingness of ATC to participate in this approach | 8 days | Mon 9/21/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Review and revise the Task Plan 2a QA Certificate Program requirements for ATC use | 58 days | Fri 4/10/09 | Tue 6/30/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Develop QA Certificate Courses to meet ATC requirements | 197 days | Wed 7/1/09 | Thu 4/1/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | MOU between EM HQ and ATC for roles and responsibilities in offering a QA Certificate Program | 22 days | Fri 4/2/10 | Mon 5/3/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Approval of QA Certificate curriculum for use at ATC | 66 days | Tue 5/4/10 | Tue 8/3/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Determine willingness of FIU to participate in the approach to provide a QA Certificate or be part of the approved engineering curriculum | 65 days | Wed 4/22/09 | Tue 7/21/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Determine whether FIU can host a 4-hour Introduction to QA or 40-hour NQA-1 Basics course for prospective DOE interns from FIU and other schools, and for EMPDC | 65 days | Wed 7/22/09 | Tue 10/20/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Schedule a 4-hour course for Spring 2009 or a 40-hour course for 2010 to be held at FIU | 67 days | Wed 10/21/09 | Thu 1/21/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Define QA Certificate or Associates Degree Program requirements | 110 days | Thu 4/30/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Develop QA Certificate or Associates Degree courses to meet FIU req's. | 88 days | Mon 11/30/09 | Wed 3/31/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Notice of formal approval of the QA Certificate or Associates Degree courses as meeting requirements of the FIU engineering program | 65 days | Thu 4/1/10 | Wed 6/30/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | MOUs between EM HQ and FIU for roles and responsibilities in offering a QA Certificate or Associates Degree as part of the FIU engineering program | 22 days | Thu 7/1/10 | Fri 7/30/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Determine willingness of E2 Consulting to participate in this approach | 38 days | Wed 4/22/09 | Fri 6/12/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Revise Project Plan if required to accommodate this partner's needs if existing courses are not adequate | 38 days | Mon 8/10/09 | Wed 9/30/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Determine the training already being provided through ATC and whether there is an opportunity to partner or participate | 38 days | Wed 4/1/09 | Fri 5/22/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Revise Project Plan if required to accommodate this partner's needs if existing courses are not adequate | 38 days | Mon 5/25/09 | Wed 7/15/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Nuclear Suppliers Community | 40 days | Tue 3/31/09 | Mon 5/25/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Hold 4-hour NQA-1 training at the 2-day DOE/NNSA Regional Nuclear Suppliers' Event in Augusta, GA | 22 days | Wed 4/22/09 | Thu 5/21/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Determine interest in the 40-hour NQA-1 class based on the attendees of the Regional Nuclear Suppliers' | 9 days | Tue 3/31/09 | Fri 4/10/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Memo to Project file documenting determination | 21 days | Fri 4/10/09 | Fri 5/8/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | E-mail interested vendors about training dates and locations | 6 days | Fri 5/8/09 | Fri 5/15/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | E-mail all suppliers that attended the Regional Nuclear Suppliers' Outreach in March regarding training dates | 6 days | Mon 5/18/09 | Mon 5/25/09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |