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| **Monday, November 9, 2020**  **JOINT ISM/QA Session** | | |
| **EST Time** | **Topic** | **Presenter(s)** |
| 11:45 am – 12:00 pm | Login/Connect | See Connection Info on page 3 |
| 12:00 pm – 12:05 pm | Welcome / Logistics | Darlene Murdoch (SRS) |
| 12:05 pm – 12:20 pm | EFCOG Leadership Expectations and COVID-19 Lessons Learned | Trish Allen (SRS) |
| 12:20 pm – 12:40 pm | DOE Activities & Expectations for EFCOG ISM | Dr. Pat Worthington (DOE HQ) |
| 12:40 pm – 1:00 pm | Performance and reliability | Rizwan “Riz” Shah (DOE HQ) |
| 1:00 pm – 1:20 pm | Quality Assurance | Christian Palay (DOE HQ) |
| 1:20 pm – 1:30 pm | Break |  |
| 1:30 pm – 1:35 pm | Integrated Safety Management Overview | Darlene Murdoch (SRS) |
| 1:35 pm – 1:50 pm | Safety Culture Improvement Program Summary | Emily Millikin (NR&E) |
| 1:50 pm – 2:05 pm | Contractor Assurance System | Norm Barker (BGS) |
| 2:05 pm – 2:20 pm | Human Performance Improvement | Mike Petrowski (LANL) |
| 2:20 pm – 2:35 pm | Safety Culture Working Group | Emily Millikin (NR&E) |
| 2:35 pm – 2:50 pm | Work Planning and Control | James Byrd (SRS) |
| 2:50 pm – 3:00 pm | Break |  |
| 3:00 pm – 3:05 pm | Quality Assurance Overview | Vince Grosso (NNSS) |
| 3:05 pm – 3:20 pm | Supply Chain Quality | Bill Wingfield (LANL) |
| 3:20 pm – 3:35 pm | QA Policies and Procedures | Ben Arrigoni (Hanford) |
| 3:35 pm – 3:50 pm | Software QA | Vicki Pope (LLNL) |
| 3:50 pm – 4:05 pm | Procurement Engineering Quality | Spencer Daw (INL) |
| 4:05 pm – 4:15 pm | Closeout | Murdoch/Grosso |

**Software Quality Assurance AGENDA**

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| **Tuesday, November 10, 2020** | | |
| **EST Time** | **Topic** | **Presenter(s)** |
| 10:30 am – 10:45 am | Welcome, Sign-in, and Recap of Mission | Vicki Pope (LLNL) |
| 10:45 am – 11:00 am | Safety, Security, and Quality Moments | Safety: Cristy Renner (Fluor BWXT)  Security: Teri Vincent (CNS/Y-12) |
| 11:00 am – 12:00 pm | Supply Chain – Managing Risks During Software Acquisitions | Emily Lies (SNL)  Joint with Supply Chain |
| 12:00 pm – 1:00 pm | Toolbox Update and Ideas for the Future | Christian Palay  Group Discussion |
| 1:00 pm – 1:45 pm | Break/Lunch | Your choice |
| 1:45 pm – 3:30 pm | Sub-task Breakout Session #1 | See below for WebEx links |
| 3:30 pm – 3:40 pm | Break |  |
| 3:40 pm – 4:30 pm | Software Gone Wrong (England’s COVID Spreadsheet Mistake)  Discussion of testing spreadsheets | Teri Vincent (CNS/Y-12)  Group Discussion |
| 4:30 pm – 5:00 pm | Daily Wrap up | Vicki Pope (LLNL) |
| **Wednesday, November 11, 2020** | | |
| **EST Time** | **Time** | **Presenter(s)** |
| 10:30 am – 10:45 am | Welcome and Safety, Security, and Quality Moments | Safety: Marylou Apodaca (SNL) |
| 10:45 am – 1:00 pm | Sub-task Breakout Session #2 | See Below for WebEx links |
| 1:00 pm – 1:45 pm | Break/Lunch | Your choice |
| 1:45 pm – 2:45 pm | Assurance Standards for Defense Programs Mission Support SW | Angeline Lee (LLNL) |
| 2:45 pm – 3:40 pm | Sub-task Breakout Session #3 | See Below for WebEx links |
| 3:40 pm – 3:50 pm | Break |  |
| 3:50 pm – 4:20 pm | Sub-task updates   * Graded Approach for Software (Abbott/Turgeon) * Better Application to ALL (Auer) * Software Standards and Orders (Renner) * Cloud-based Hosted Software (Swannack) * Current 414 Pain Points (Hopper) | (see presenters under the “Topic” column) |
| 4:20 pm – 4:45 pm | Plan Future Monthly Calls and Spring Meeting | Group Discussion |
| 4:45 pm – 5:00 pm | Vote on meeting Thursday, Wrap up, and Dismiss | Vicki Pope (LLNL) |

**NOTE: Vote was to not meet on Thursday, November 12, 2020**

**Meeting Notes:**

*NOTE: All references to presentations and files can be found on the EFCOG SQA website under SQA Documents 🡪 Meeting Records 🡪 2020 FALL, Virtual*

**Monday, November 9, 2020 (Joint Session)**

FY2021 Goals

* Develop / revise existing EFCOG graded approach paper/presentation to include grading processes used across DOE and a consistent method of implementation for each QA Program element
* Develop a guide for consistent development, approval, release, and posting process for EFCOG White Papers
* Develop a set of effective QA metrics and methods including guidance on collection, use/trending, and applicability to improving performance
* Benchmark NRC/Nuclear Utility safety classification vs. DOE safety classification and where Commercial Grade Dedication applies to each
* Develop Commercial Grade Dedication Templates covering a variety of conditions and safety functions to assist in consistent selection of critical characteristics for dedication
* Create a Software Quality Assurance strategic plan and short-term goals for software control across the DOE complex
* Develop guidelines for management and control of cloud-hosted Software
* Develop a white paper on an alternate definition of software beyond just safety software for use in future DOE Order updates
* Develop a best practice for managing software for configurable devices, virtual machines, and networks
* Develop a White Paper on implementation strategies for DOE Order 414.1D related to software control
* Expand Nuclear Security Enterprise Supply Base to accommodate new projects and facility changes
* Develop a best practice for reduction of HEPA filter rejections at the Filter Test Facility and during receipt inspections at the sites

FY2020 Accomplishments

* All groups continued to work on their projects during the year. They maintained regular virtual meetings and always stepped up to meet and overcome challenges imposed by the global pandemic. They even transitioned to a virtual meeting in the fall, with a very short preparation window and pulled it off with great success.

Best Practices finalized in FY2020

* There were two software quality assurance white papers issued: SQA Audit Guidance (with Checklists) and Recommendations to Streamline Toolbox Code Qualifications
* These are on the EFCOG website – in the main Library and on the SQA-specific pages

Lessons Learned finalized in FY2020

* There were none issued

DOE Liaison/POCs

* Pat Worthington (will be retiring December 31, 2020)
* Garret Smith (AU-30)
* Christian Palay (AU-32)

**Tuesday, November 10, 2020**

Everyone seemed to be able to jump over to the Supply Chain WebEx for the joint presentation on Software Procurement Risk Evaluation. See presentation file “OUO\_SSC\_SoftwareAcquisition.pdf”. More importantly, we all made it back to our session once that was done.  😊

Christian gave us an update of SQA-related issues at headquarters, including a breakdown on the future of the Central Registry Toolbox.  HQ is thinking that it is time to give up maintenance of the Toolbox because they don’t have the manpower to support it.  We talked about kicking off a new Sub-task group to advance alternatives to the Toolbox and what would need to be done around that effort.  Key components include:

1. Survey all sites to see what software they are using for Designated Safety Analysis (DSA)/Technical Safety Requirements (TSR) documents and how they were using each.  From that information, we could develop a list of candidate applications to include in a Toolbox-like solution.  The vendors of each of those products would also need to be collected.
2. Work with Supply Chain to see what all they had to do to stand up the Master Supplier List (MSL) and the challenges with that.
3. Develop a recommendation or solution on how to vet each vendor and/or application to include:
   1. Who would be doing the assessments?
   2. Address liability concerns from sharing assessment information.
   3. Standing up a group to do the assessments and a site to host the information if HQ no longer willing to support Central Registry website.
   4. Address the issue of expanding the Toolbox list beyond DSA/TSR applications.
4. We would also want to involve the Accident Analysis Task Group under another branch of EFCOG (Nuclear Facility Safety).  They are the primary users of the Toolbox codes.

We ended up not having the Pain Points or Cloud-Hosted Software breakouts since neither Kamie nor Russell were on the call.  We discovered that the people who called in on a land line could not be placed in a breakout session.  The three groups who did meet were able to make good progress on their work products.  About 20 people participated in the breakouts.

Teri’s VPN crashed just as she was going to share on the UK Excel fail for COVID-19 counting.  However, since she had sent me the information ahead of time (see “BBC News Excel Issue withCovid-19 results\_shortened.pdf), I was able to give an overview of the problem and launch a discussion of testing spreadsheets.  We had a couple of members online with extensive experience testing Excel, so they were able to share their screen and walk everyone through some of the testing functionality built in Excel.

**Wednesday, November 11, 2020**

Angeline Lee, LLNL, gave a presentation on the PRIDE Program (see file “EFCOG Enterprise SQA.pptx”) and some of the SQA-related projects they are working on. PRIDE is a multi-site defense program falling under NAP 401.1. The PRIDE website is <https://dpbps.sandia.gov>. See their presentation for additional details. Some of their initiatives include:

* Standing up a classified cloud server to host common tools
* Mapping out guidance on Agile processes for software development efforts
* Creating a common SQA Program for all PRIDE teams to follow

The majority of Wednesday was devoted to subtask work. The following updates were given at the end of the day.

Graded Approach

* The biggest missing element in DOE O 414.1D is making the graded approach “risk-based”
* The team would like to capture how each site’s SQA Program implements the graded approach

DOE O 414 for “All” Software

* White Paper in draft; will be circulated for team review then EFCOG SQA group review
* Suggestions include:
  + Create a software-specific section in the Order (perhaps expand Attachment 4)
  + Clean up definitions so they are consistent with other Orders and standards
  + Name a consensus standard for all software (use a graded approach for Non-Safety Software)
  + Clarify requirements for sites that are not nuclear

Software Standards and Orders Matrix

* Capturing information in an Excel file
* Summary tab with list of all documents reviewed, versions, expirations, etc.
* Individual tabs for each document with detailed information on how software is impacted
* This will be an on-going, living document frequently updated as new information is gathered/added

The group voted to NOT meet on Thursday, November 12. This concluded the Fall 2020 Meeting.

**Attendance**

| First Name | Last Name | Company/Organization |
| --- | --- | --- |
| Lance | Abbott | Savannah River Nuclear Solutions |
| JEMILA | ADETUNJI | Fermi National Accelerator Laboratory |
| Marylou | Apodaca | Sandia National Laboratory/NTESS |
| Patrick | Auer | Lawrence Livermore National Laboratory |
| Al | Broch | Lawrence Livermore National Laboratory |
| Warren | Brown | Mission Support Alliance/Hanford |
| Thomas | Bundy | UT-Battelle |
| Veronica | Camarillo-Morris | Los Alamos National Laboratory |
| Colby | Carter | Nuclear Waste Partnership/WIPP Site |
| Ellen | Clark | FBP\_BWXT |
| Paul | Contreras | CHBWV |
| Jeffrey | Cook | Consolidated Nuclear Security/Y-12 |
| Annette | Coonfield | Washington River Protection Solutions (WRPS) |
| Yevonne | Deaton | DOE - Environmental Management (EM) |
| Ron | Dockery | Four Rivers Nuclear Partnership, LLC/Paducah |
| Randall | Erickson | Nevada National Security Site/MSTS |
| Patrick | Faulk | Bechtel National, Inc./Hanford Waste Treatment Plant |
| Dylan | Fish | DevonWay |
| Faith | Girolamo | Savannah River Nuclear Solutions |
| Emily | Gogel | National Renewable Energy Laboratory |
| Kamie | Hopper | Sandia National Laboratory |
| James | Hylko | Four Rivers Nuclear Partnership, LLC/Paducah |
| Gary | LaBruyere | Fluor Idaho LLC |
| Kathy | Lewis | Department of Energy |
| Daniel | Longpre | Portsmouth Mission Alliance LLC |
| John | McAllister | Savannah River Nuclear Solutions/Hukari |
| Alvin | McClerkin | NNSA/NFO/AMOS |
| Xavier | Mitchell | Consolidated Nuclear Security/Y-12 |
| Jenna | Montoya | Los Alamos National Laboratory |
| Amanda | Napier | Portsmouth Mission Alliance, LLC |
| Lynn | Nye | CHPRC/Hanford |
| Steve | O'Connor | Savannah River Remediation |
| Carolyn | Olijar | Argonne National Laboratory |
| Christian | Palay | Quality Assurance and Nuclear Safety Mgmt Programs |
| Vicki | Pope | Lawrence Livermore National Laboratory |
| Cristy | Renner | Fluor/BWXT Portsmouth |
| Amber | Romero | Sandia National Laboratories |
| Michael | Russell | Oak Ridge National Laboratory/Strata-G |
| Jackie | Salazar | Los Alamos National Laboratory/ALDX |
| Kevin | Shaw | Oak Ridge National Laboratory |
| Greg | Smith | Los Alamos National Laboratory/TRIAD |
| Bruce | Stuart | Savannah River Remediation |
| Dave | Thoman | Amentum |
| Michael | Tipps | Washington River Protection Solutions |
| Ashley | Toth | Mission Support Alliance/Hanford |
| Jennifer | Turgeon | Sandia National Laboratories |
| Jennifer | Turgeon | Sandia National Laboratories |
| Marsha | Vigil | Los Alamos National Laboratory/IQPA-ASO |
| Teri | Vincent | Consolidated Nuclear Security/Y-12 and Pantex |
| Carl | Wilkey | Oak Ridge National Laboratory/UCOR |

If you attended the SQA Meetings, but are not listed above, please contact Vicki Pope ([pope13@llnl.gov](mailto:pope13@llnl.gov)) or Marylou Apodaca ([marapod@snl.gov](mailto:marapod@snl.gov))