



UPDATE...

A Word from the Chair...

EFCOG Chair, Billy Morrison
Veolia Nuclear Solutions

With record-high budgets in EM and NNSA, it's more important than ever for our industry to perform at the highest level. In this environment, EFCOG's role in sharing lessons learned and best practices across the DOE enterprise is a key part of that performance and I was heartened to see the high turnout at EFCOG's annual meeting in Washington, D.C. in early June.

During our general session on June 6, our members were able to hear directly from Department of Energy and Congressional leadership, including NNSA Administrator Lisa Gordon-Hagerty, Assistant Secretary for Environmental Management Anne White and House Energy and Commerce Committee Chairman Greg Walden (R-Ore.). In addition, the session featured a number of other important discussions, including lessons learned from the D&D of the Plutonium Finishing Plant at Hanford and the startup and commissioning of the Salt Waste Processing Facility at the Savannah River Site.

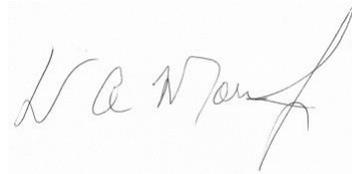
We also were able to join with Rep. Chuck Fleischmann (R-Tenn.) on the evening of June 7 on Capitol Hill for an event in support of the House Cleanup Caucus, which the Congressman chairs along with Rep. Ben Ray Lujan. EFCOG organized a discussion with Assistant Secretary White on her vision for the Office of Environmental Management and instilling a "bias for action" in the DOE cleanup program. In June, we concluded our election cycle and I would like to congratulate our newly elected Board member, Bob Miklos of Idaho National Laboratory. I would also like to congratulate Morgan Smith (Consolidated Nuclear Security, LLC), John Clymo (Sandia National Laboratories), Todd Wright (AECOM), Karen Wiemelt (Jacobs), Michael Graham (Bechtel National, Inc.) and Linda Kobel (Los Alamos Technical Associates, Inc.) on being re-elected to the board.

Congratulations to Michael Graham on being re-elected as Vice Chair and Sandra Fairchild on being elected Vice Chair-Elect. Thank you to the EFCOG membership for your confidence in me in electing me as Chair.

Finally, I also wanted to highlight a few important upcoming events to add to your calendar:

- EFCOG is continuing to join with the Nuclear Energy Institute and ETEBA to sponsor the House Cleanup Caucus Briefings on Capitol Hill this year. The first two events have been very successful, and the third event is scheduled for September 12 from 5:30 to 7 pm.
- The Department of Energy, in partnership with EFCOG and the Energy Communities Alliance, is holding its third annual National Cleanup Workshop Sept. 11-13, 2018 at the Hilton Mark Center in Alexandria, Va., just outside Washington, D.C. Please visit <http://www.cleanupworkshop.com> for a preliminary agenda and the latest conference information.

Thank you for your hard work.



Billy Morrison
Chair, EFCOG

WORKING GROUP REPORTS

Safety Working Group (SWG)

Chair – John McDonald, WRPS

Vice Chair – Jan Preston, Fluor

Secretary – Linda Collier, LANL

DOE Liaison – Pat Worthington

EFCOG Board of Directors Sponsor – Michael Lempke, Huntington Ingalls Industries (HII)

Recent Working Group Activities

- The SWG worked with DOE to address contractor concerns associated with implementation of the 10CFR 851 Technical Amendment. DOE responded with guidance describing options to be in full compliance.
- The SWG supported a senior contractor panel at the annual DOE Safety Culture Improvement Panel Meeting in May. The panel provided feedback to DOE on safety culture implementation.
- Six regulatory reform recommendations were presented to the EFCOG board and DOE in March with potential estimated complex wide savings of \$300M-600M per year.

- Contractor Assurance System (CAS) Effectiveness lines of inquiry and a CAS Effectiveness Assessment Plan template were developed and posted as follow-up to the recent CAS Effectiveness Validation Best Practice.
- The Work Management Task Group completed a scheduled Assist Visit to three INL facilities in April of this year to benchmark work planning & control activities. This visit was part of the WMTG 2018 Objectives/Goals and also yielded several Best Practices employed by INL which will be posted later this year.
- The QA Supply Chain Task Group continues to implement recommendations made in the 2017 Master Approved Supplier List Team report. Progress to date has allowed DOE to close the EM QA focus area related to this activity. This effort will require ongoing support from EFCOG and DOE to be effective.
- NNSA and DOE-AU Nuclear Safety Research and Development projects were reviewed and ranked by the Nuclear and Facility Safety Subgroup.
- The Nuclear and Facility Safety Subgroup established a Reactor Safety Focus Group.
- Subgroups and task groups continued ongoing efforts to maintain and update applicable SME Lists.
- A Radiation Protection (RP) Partnership Survey was completed which identified educational, mentoring & individual site initiatives to address the loss of senior, experienced staff and to ready younger staff for succession.
- Conducted extensive RP technical and programmatic benchmarking initiatives with results posted online.
- Completed release of a new General Employee Radiological Training (GERT) for complex-wide use and reciprocity.

RECENTLY ISSUED BEST PRACTICES (Titles hyperlinked to documents online)

Electrical Contact Release Training (210)

Coming into contact with an energized conductor or circuit part may cause muscle contractions which can lead to a person being unable to let go. Persons responding to incidents involving electrical contact must have training in order to act quickly and safely. This best practice was developed based on an NFPA 70E -2015 requirement to provide training in contact release. This best practice provides information sufficient to meet the training requirements specified in NFPA 70E for potential responders which enables them to act quickly and safely during a shock incident.

Repurposing and Downgrading of Existing Hazard Category 1, 2, and 3 Nuclear Facilities (209)

This best practice involves the repurposing and downgrading of existing Hazard Category 1, 2, and 3 DOE nuclear facilities (hereafter referred to as 'nuclear facilities') to either radiological or non-nuclear facilities (hereafter referred to as 'non-nuclear facilities') in an effort to manage facility operations with a rigor appropriate for its inherent hazards. This best practice describes the process by which Sandia National Laboratories repurposed and downgraded two nuclear facilities to radiological facilities, and by which is reducing the nuclear boundary of an existing nuclear facility to allow a non-nuclear operation. The process helps ensure an efficient transition from a nuclear operation to a radiological or non-nuclear operation with minimal operational impacts during the transition. The process also ensures that the appropriate level of hazards analyses, hazard control, and operational readiness is identified and achieved and

identifies the roles for the NNSA and local contractor Safety Basis Approval Authority (SBAA).

Request for Consent Order/Settlement Agreement (208)

This document provides guidance on the process for requesting a Consent Order / Settlement Agreement from the DOE Office of Enforcement. Members of the Regulatory and Enforcement Subgroup and the DOE Office of Enforcement developed it collaboratively. The Office of Enforcement is receptive to the use of Consent Orders / Settlement Agreements to the Contractor Community to resolve safety and security investigations in lieu of enforcement actions when the situation warrants. This best practice will provide the Contractor Community, specifically those who are unfamiliar with the Consent Order / Settlement Agreement process, with guidance and information to consider in determining whether to request a Consent Order / Settlement Agreement and in making such a request.

Identification of Look-Alike Electrical Equipment (207)

NFPA 70E-2015 Section 130.7(E)(4) addresses the need to alert workers when multiple units of electrical equipment in the same work area are similar in size, shape and construction. Such “look-alike” equipment can be a source of confusion for workers who may inadvertently enter energized electrical equipment instead of the intended electrical equipment that has been placed into an electrically safe work condition. This Best Practice provides recommendations for implementing the NFPA 70E-2015 Section 130.7(E)(4) requirement and to be consistent with the “Flagging” section of DOE-HDBK-1028-2009, *Human Performance Improvement Handbook*, Vol. 2. Serious accidents have occurred at multiple DOE sites in recent years because workers inadvertently entered energized equipment instead of the de-energized equipment they were intended to maintain or repair. NFPA 70E-2009 and later editions have included a requirement to protect workers against this type of hazard. Development of a Best Practice was identified by the EFCOG Electrical Safety Task Group as the best method to assist DOE contractors with implementing this NFPA 70E requirement through their electrical safety programs.

Adoption of NFPA 70E® 2018 in place of NFPA 70E® 2015 (206)

NFPA 70E® – 2018 is recommended for approval across the DOE Complex as an upgrade to NFPA 70E® – 2015 in 10 CFR 851 Worker Safety and Health Plans (WSHP). Previously, EFCOG BP#193 determined that the use of the 2015 edition of NFPA 70E® is at least as protective as the 2012 edition, and even more protective in some areas, such that the new edition should be considered for DOE Complex wide acceptance. 10 CFR 851 lists safety and health consensus standards with which the contractor must comply when applicable with site hazards (851.23). Contractors may include successor versions of the consensus standards that provide equal or greater worker protection if included in their DOE-approved worker safety and health program. The use of the 2018 edition of NFPA 70E® is at least as protective as the 2015 edition, and even more protective in some areas, such that the new edition should be considered for DOE Complex wide acceptance. NFPA 70E® – 2018 is recommended for approval across the DOE Complex as an upgrade to NFPA 70E® – 2015.

Combustible Loading Limit Restricts Fire Size to the SSC Capability within the Fire Protection Area (204)

Best practices were observed for the use of an administrative control that limits the amount of combustible loading for an applicable fire area. The Combustible Loading Limit (CLL) restricts fire growth to an amount that will cause the fire to be fuel and oxygen limited and suppressed/controlled and to remain within its fire area.

The NNSC nuclear, radiological, and non-nuclear high hazard facilities achieved significant successes in the areas of managing combustible materials. Limiting the amount of combustible materials contributes to limiting the fire size within a given area, precluding the potential to overwhelm the ability of the automatic fire suppression system (FSS). The systems employed, and the approaches used, as well as the lessons learned, are best practices suitable for U.S. Department of Energy

(DOE) Complex-wide application. The EFCOG Nuclear and Facility Safety Subgroup believes that the recommendations establish a quantitative basis for determining an acceptable CLL in relation to structure, system, and component (SSC) capabilities.

Risk Assessment/Operation of Overcurrent Protection Devices (203)

The EFCOG Electrical Safety Task Group has developed tools for use in completing a risk assessment to support operation of Overcurrent Protection Devices as described in NFPA 70E 2015. NFPA 70E recognizes arc flash hazards may exist even when equipment is in an enclosed condition. This includes operators whose only interaction is with the equipment in an enclosed condition. There are situations where opening or closing a switch or breaker has been a contributing factor to an arc flash event. This best practice provides guidance to establish the minimum level of PPE for those who operate OCPD's based on assessment of risk. Tools are provided to help the DOE complex assess risk associated with verification of proper installation, proper maintenance and evidence of impending failure which are the primary factors for consideration in the risk assessment.

Lines of Inquiry for Flow down of Requirements and Subcontractor Implementation of 10 CFR 851 (202)

The Regulatory & Enforcement Technical Subgroup has developed lines of inquiry to guide contractors as they evaluate the flow down of requirements to subcontractors and subcontractor implementation of 10 CFR 851. Subcontractors are required to meet the requirements of 10 CFR 851. The lines of inquiry will assist contractors in assuring clear communication of the requirements and evaluating subcontractor implementation. Each site can customize implementation of 10 CFR 851. These lines of inquiry will assist contractors in assuring that the approach selected will result in clear communication of the requirements and adequate oversight of subcontractor implementation.

DOE ORDER OR STANDARD REVIEWS

The SWG assisted with issuance of DOE Chemical Management Handbook (DOE-HDBK-1139), Vol. 3/3.

The SWG assisted with gaining approval to revise the DOE Electrical Safety Handbook.

The Nuclear and Facility Safety (N&FS) Subgroup assisted with issuance of DOE Technical Standard, DOE-STD-3007-2017, Preparing Criticality Safety Evaluations at Department of Energy Nonreactor Nuclear Facilities.

The criticality safety task group working with the ANS Nuclear Criticality Safety Division has been providing reviews of ANS 8 series standards.

The Nuclear and Facility Safety (N&FS) Subgroup assisted in the development of, comment resolution and gaining approval of the DOE Hazard and Accident Analysis Handbook (DOE-HDBK-1224).

RECENT SUBGROUP OR TASK GROUP MEETINGS

- The 12th Department of Energy Laser Safety Officer Workshop was held at the University of Rochester with tours of the Laboratory for Laser Energetics, NY from May 8-10. The workshop has become “the source” for individuals seeking practical laser safety information. This year’s attendance was capped at 154 persons due to venue limitations. Attendees ranged from DOE, other government agencies, academia, and industry. Approximately 75% of the attendees were first timers. Along with the workshop the EFCOG Laser Safety Task Group held its annual meeting on the afternoon of the 10th.



- Welding Task Team Meeting
 - April 17-19, 2018
- Idaho National Laboratory, Idaho Falls, ID
- Engineering Practices Subgroup Meeting
 - May 1-2, 2018
 - Washington, DC
- Fire Protection Task Team Meeting (in conjunction with NFSP-18 Meeting)
 - May 21-25, 2018
 - Las Vegas, NV
- ISM & QA Joint Subgroup Meeting
 - April 23-26, 2018
 - Aiken, SC

- Worker Safety and Health Subgroup Meeting
 - March 20-22
 - SRS, Aiken, SC
- Nuclear and Facility Safety Subgroup Meeting
 - February 26-March 02, 2018
 - Albuquerque, NM
- Regulatory and Enforcement Subgroup Meeting
 - May 1-3, 2018
 - Las Vegas, NV

UPCOMING SUBGROUP OR TASK GROUP MEETINGS

- Electrical Safety Workshop
 - July 23-27, 2018
 - Golden, CO
- Nuclear and Facility Safety & Engineering Practices Joint Subgroup Meeting
 - August 11-17, 2018
 - PNNL, Richland, WA
- ISM & QA Joint Subgroup Meeting
 - October 15-18, 2018
 - PNNL, Richland, WA
- Worker Safety & Health Subgroup Operational Meeting
 - October 23-25, 2018
 - Washington, D.C.
- Regulatory and Enforcement Subgroup
 - October 23-24, 2018
 - Las Vegas, NV

UPCOMING EVENTS

National Cleanup Workshop	September 11 - 13, 2018
House Nuclear Cleanup Caucus	September 12, 2018 5:30 – 7 PM