
Energy Facility Contractors Group Integrated Safety Management Working Group

**Annual Report
Fiscal Year 2005**



December 21, 2005



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**Energy Facility Contractor Group (EFCOG)
Integrated Safety Management (ISM) Working Group
Annual Report to the Directors
Fiscal Year 2005**

I. Vision and Purpose

The Vision of the Integrated Safety Management (ISM) Working Group (WG) is to be recognized by DOE, and within EFCOG, as a driving force for complex-wide performance improvement throughout the full spectrum of Integrated Safety Management activities.

The purpose of the ISM Working Group remains to promote excellence in the development, implementation and validation of ISM programs and processes by sharing information and lessons learned, and by facilitating the application of ISM information, techniques, and best practices at Department of Energy (DOE) sites.

II. Membership

During the majority of FY 2005, the ISM Working Group was composed of four Subgroups focusing on specific ISM topical areas. By the end of FY 2005, Radiation Protection was established as a fifth Subgroup and Tasks Groups had been formed to address Electrical Safety, Chemical Management, Human Performance Improvement and the Occurrence Reporting System. Membership on the Working Group and Subgroups includes representatives from the primary DOE sites and 30+ EFCOG Member Companies. Participation at the semi-annual Working Group meetings averaged 175 personnel and over 400 individuals attended topical workshops sponsored by the Working Group during FY05.

To ensure the Working Group continues to include a focus on industry best practices and lessons learned, liaison membership has been established with the Institute of Nuclear Power Operations (INPO), the Defense Nuclear Safety Board (DNFSB), and the National Laboratories Improvement Council (NLIC). The Working Group has also established effective horizontal communications with the other key EFCOG Working Groups.

III. Status, Objectives, Goals and Achievements

Objectives and Goals

The primary objectives of the Working Group are to:

- Promote, coordinate, and facilitate the active exchange of successful programs, practices, procedures, lessons learned and other pertinent information of common interest to ISM.



- Promote ISM awareness and understanding by sharing management and technical information.
- Facilitate integration of existing environment, safety, health and quality (ESH&Q) processes and work practices within the framework of ISM.
- Identify streamlined techniques and best practices that enable cost-effective and accelerated implementation of validated ISM processes and programs.
- Facilitate coordinated contractor input to DOE on ISM-related issues.
- Provide an efficient mechanism for DOE interface with senior contractor executives and subject matter experts responsible for development, implementation and continuous improvement of ISM.

Working Group Achievements in 2005

- Semi-Annual ISM Working Group meetings were held at the DOE HQ Germantown facilities from April 18-22, 2005 and at the DOE Energy Training Complex in Albuquerque from October 31-November 4, 2005. The meetings were conducted at DOE facilities to minimize costs. Key external customer and subject matter expert participation ensured the meetings were addressing current DOE and industry issues. Attendance at the semi-annual meetings averaged approximately 175 personnel.
- Periodic conference calls were held to discuss priority ISM issues and share lessons learned.
- Key EFCOG corporate objectives were supported to ensure that ISM was properly addressed as a critical focus area. Examples of this were:
- Supporting the development of 2004-1 implementation plan.
- Maintenance of an EFCOG “Best Practices” web site which provides a single reference point for all Contractors and the DOE.
- Sponsoring workshops on Environmental Management System (EMS) Implementation, Human Performance Improvement, Electrical Safety, and, an Executive Safety Summit on Subcontractor Safety. Over 400 personnel attended these workshops.
- Liaisons continued with the Institute of nuclear Power Operations (INPO), the Defense Nuclear Facility Safety Board (DNFSB), and the National Laboratory Improvement Council (NLIC).

To ensure all of the Working Group’s activities are managed in an effective manner, all authorized tasks or activities are tracked in an overall integrated project / activity schedule.



Subgroup Status and Achievements in FY 2005

A. Environmental

The Environmental Subgroup met on March 8-9, 2005 in Columbus, OH and at the fall Working Group meeting. In addition, the Subgroup held monthly conference calls to serve as a vital link between the meetings. Activities or accomplishments from the meetings and conference calls included:

- Coordinated the DOE/EFCOG Training Workshop on Environmental Management Systems Implementation, Lessons Learned, and Best Practices.
- Completed a review of the approaches used by member companies to institutionalize Pollution Prevention into business practices at the task level and issued a summary document of the findings titled 'Best Practice Report, A Survey of Pollution Prevention Programs'.
- Provided "facility level recommendation" on the President's Management Council Environmental Compliance Improvement
- Prepared communication notifying member companies of upcoming reviews and audits by the DOE HQ independent environmental group and summarized current DOE policies for material release.
- Revised the Environmental Subgroup Charter and made recommendations related to purpose, objectives, scope, organization (including leadership succession), and process.
- Presented several best practices at both the spring and fall meetings, and submitted several best practices for posting on the EFCOG web site bringing the total environmental best practices to six during FY05.

B. Feedback and Improvement

The Feedback and Improvement Subgroup met at both of the Working Group meetings. Activities or accomplishments during 2005 included:

- Supported presentations on a wide variety of topics to include:
 - Expectations of Assessment Programs – DOE Nuclear Safety
 - Role of DOE Office of Analytical Studies
 - DNFSB Recommendation 2004-2, Contractor Assurance System Elements and Implementation
 - DOE/EH Roles and Responsibilities
 - Reinvigorating ISM – DNFSB Recommendation 2004-1
 - Implementation of DOE Oversight Policy, DOE O 226.1
 - DOE Corporate Operating Experience, Draft Order 210.X
 - Occurrence Reporting System Overview and Tutorial
 - Extent of Condition Determinations



- Performance Assessment Guidance
- Human Performance Improvement, and,
- Independent Assessment
- Prepared the first EFCOG Contractor Guide on Effectiveness Reviews for distribution throughout the DOE contractor community
- Provided comments and coordinated contractor reviews on DOE draft Order 210.X, Operating Experience Program
- Made substantial progress on developing guidance for Performance Analysis and Extent of Condition Reviews.
- Revised the Charter for the Feedback and Improvement Subgroup.
- Added Task Groups for Occurrence Reporting, Independent Assessment and Human Performance Improvement

C. Human Performance Task Group

- Co-hosted with DOE HQ a Workshop on Human Performance Improvement (HPI) in Oak Ridge on September 14-15.
- Continued to support EH-2 DOE HPI by providing HPI instruction. Since 2002, over 2000 people have received HPI instruction.
- Conducted HPI Train-the-Trainer sessions in October 2004, February 2005 and May 2005.
- Developed standardized HPI lesson plans and provided them to HPI instructors within the DOE complex.
- Instructed two HPI orientation sessions for participants in the Nuclear Executive Leadership Training.

D. Occupational Safety and Health (OSH)

The Occupational Safety and Health Subgroup of the ISM Working Group met twice in 2005 with excellent participation by EFCOG member companies in both meetings. During FY 2005, the subgroup had three Task Groups; Occupational Medicine, Radiation Protection, and Industrial Hygiene/Industrial Safety. By the end of FY 2005, the Radiation Protection Task Group had become a separate Subgroup. The subgroup and task group's highlights are as follows:

Occupational Medicine

The Occupational Medicine task group provides a forum for occupational physicians and medical program directors to join together and address common complex-wide issues. The following are the highlights for 2005 for the Occupational Medicine Task Group:



- Worked closely with EH HQ throughout the first part of year concerning Rule 851.
- Assistant Secretary Shaw addressed the medical group in April indicating his emphasizes on Nanotech Safety, the President's EMR Initiative, Worker Productivity, and Terrorism for the medical directors.
- Dr. Fikry Isaac, Medical Director for Johnson and Johnson, also addressed the group with his presentation "Integrating Health, Safety, and Productivity Management".
- Dr. Pete Lichty, BNL, has continued to represent the medical directors to DOE on nanotechnology issues and safety.
- The medical directors have been instrumental in initiating a wellness and chronic disease management approach to the sites. Savannah River will be receiving funding for a pilot program.
- The task group has been leading an initiative working with Cindy Lawton, from LANL, in reducing glove box worker injuries.
- The medical directors are currently setting up a task force in HRP benchmarking for the sites.

Radiation Protection

The Radiation Protection Task Group assembled on two occasions during 2005 to discuss common issues. The discussion topics were extensive and member feedback has confirmed the value of meeting on a regular basis.

Items discussed of particular interest included:

- Guest attendees from DOE/EH provided the committee members with information pertinent to anticipated changes to 10 CFR 835. Additionally, they provided a status of the expected scheduling for when we may see the revision.
- An announcement was made to promote plans for an ALARA Workshop to be hosted in May 2005 by the Savannah River Site. When the workshop was held, the attendance was good and the presentations were of value to the complex.
- The Radiation Protection Task Group was asked and agreed to jointly sponsor a DOE Complex Radiation Protection Workshop to be held in Washington, D.C. November 1-3, 2005. This provides an opportunity to share issues with our clients in the constructive atmosphere of a workshop.



- The Integrated Safety Management Working Group Chairman announced his plan to move the Radiation Protection Task Group into a full Subgroup status.

Industrial Hygiene/Industrial Safety (IH/IS)

During FY05, the IH/IS task group met at both semi-annual Working Group meetings and discussed key issues of concern to member participants. Technical presentations were made in multiple areas with a focus on new IH/IS issues being created as a result of emerging science (i.e., Nano technology) or new DOE initiatives such as the upgrading of Security in response to new threats to on-going operations.

At the close of FY05, the Task Group was actively engaged with DOE in addressing the needed performance improvements in Electrical Safety. This was a follow up activity to the Electrical Safety Workshop hosted by the OSH Subgroup in July at the Albuquerque Training Center. During FY06, this activity will be managed as a separate EFCOG project under the leadership of Mr. Tony Umek, Vice President Safety & Health, Fluor Hanford.

E. Quality Assurance

The QA Subgroup is comprised of four task groups. These task groups are the QA Policy and Requirements group, the Training, Development and Communications group, the Supply Chain Quality group, and the Quality Engineering group. Collectively the QA Subgroup was able initiate, develop and complete a variety of activities itemized below. The Subgroup met two times during the course of the year once in April in Germantown, MD. and a second time in October-November in Albuquerque, NM.

QA Policy and Requirements Task Group

- Completed the draft of their paper ‘Attributes of an Effective Quality Improvement Program’.
- Continued the effort of identifying those attributes of a QA program that are valid and add value. This effort will include a matrix for each of the criteria identified in CFR 830.122 and 414.1.

Training, Development and Communications Task Group

- Coordinated training workshops during both meetings.
- In April 2005 attendees had the opportunity to participate in discussions and presentations related to Senior Management’s commitment to Quality Improvement and understanding their responsibility for QA and the model for a Contractor Assurance system.



- In October 2005 attendees had the opportunity to participate in discussions and presentations related to the new DOE Software requirements identified in 414.IC; examples of how sites are addressing these new requirements; R2A2 for Managers and the road map associated with achieving these roles and responsibilities; a view of the NNSA Safety Professional Training program; and a Best Practices presentations related to Supply Chain Quality.

Supply Chain Quality Task Group

- Developed and presented a Best Practices presentation to the entire QA Subgroup.
- Participated in development a draft paper on Criteria for Procurement Processes Governing the Acquisition of Services and Items for Nuclear Facility Safety Systems (NNSA~Road Map Initiative — Mile Marker 8).
- Developed a presentation on “Supplier Evaluation/Qualification Initiative” that was presented to the EFOOG Executive Committee.
- Worked on establishing ties with the EFCOG Acquisition Management Working Group.
- Conducted a feasibility study to determine the need for an EFCOG/DOE complex-wide Supplier Evaluation program.

Quality Engineering Task Group

- Working on establishing ties with the EFCOG Engineering Practices Working Group.
- Developed first Contactor Alert on “Welding” that was distributed to the entire DOE complex.
- Working on a draft paper which will assist in defining the integration process between QA and Engineering.

IV. Expected Achievements for 2006

Working Group Expected Achievements for 2006

- Conduct two annual working meetings in the spring and fall to coordinate and facilitate Subgroup interaction and involvement.
- Support ISM related tasks and the EFCOG Critical Few in areas such as:
 - Working with DOE and member companies in the implementation of Line Oversight and Contractor Assurance Systems



- Development of a recommended set of criteria to assess supplier evaluation and qualification processes
- Implementing recommendations / actions focused on electrical safety for voluntary contractor implementation
- Supporting EFCOG productivity initiatives
- Supporting the final development and implementation of the DOE ISM Manual.
- Supporting the DOE Human Performance Initiatives, and,
- Hosting Workshops in support of key DOE and Contractor areas of concern.

Subgroup Expected Achievements for 2006

A. Environmental

- Determine the need for contractor guides for the environmental disciplines that would be of complex wide benefit. Determine if there is a need for standard training for environmental professionals related to environmental management systems, then, if applicable develop or help develop training material.
- Provide comments on DOE's Compliance Management Improvement Initiative Questionnaire; the subgroup will provide comments and recommendation from responses, and develop further actions and recommendation as requested.
- Work with ISM WG Chair and Subgroup Chairs to facilitate interchange between subgroup at biannual meetings and throughout the year. Consider reappointing liaison with other ISM WG Subgroups. In conjunction with this effort, the subgroup will work to develop ways to expand site participation in EFCOG meetings.
- Define and evaluate barriers related to environmental awareness, formalize a list of barriers and share with DOE and other site contractors. In addition, encourage sharing best practices of how sites raise awareness to overcome barriers.
- Develop a guide or book of examples, based on experience from participating sites, on how to develop environmental goals, objectives, and targets (as part of an EMS). If possible, categorize those examples by site mission – such as Science, EM, DP, NNSA, etc. In addition, include a set of 'indicators' to measure targets.
- Continue to encourage the sharing of best practices at biannual meetings and meet goal of publishing two environmental best practices each year.



- Develop an online ‘Resource Center’ with links from the subgroup website to important and timely information on a variety of environmental issue and topics.

B. Feedback and Improvement

- Conduct two annual meetings and continue to share good practices among the participating organizations and with DOE-HQ.
- Support DOE HQ Occurrence Reporting Program Manager through the establishment of an Occurrence Reporting Task Group.
- Issue Contractor Guides on Performance Analysis and Extent of Condition Reviews.
- Support DOE in the implementation of DNFSB Recommendation 2004-1.

C. Human Performance Task Group

- Co-host with DOE HQ the 2nd Annual Human Performance Workshop
- Integrate INPO and Navy’s approach for HPI and develop an integrated training lesson plan
- Deliver HPI fundamentals and tools training, including EFCOG’s Working Group leadership, and the Executive Board of Directors
- Develop a plan to integrate HPI principles and tools with the behavior-based safety/accident prevention process
- Review current DOE ORPS training for adequacy in addressing HPI, and, review current ORPS guidance for possible use to bin events, worker concerns, reported errors, causal analysis & accident investigation results
- Review EFCOG best practices on Performance Metrics to assess opportunities to add process/leading indicators to track HPI implementation

D. Occupational Safety and Health (OSH)

- Completion of new planned objectives and actions for each task team.
- Occupational Medicine Task Group will continue to work with the Assistant Secretary in enhancing the quality of medical care throughout the DOE complex .

E. Quality Assurance

- Identify common suppliers of safety class, safety significant commodities.



- Establish a pilot program for sharing supplier information.
- Complete the matrix of DOE Order 414.1 B and CFR 830.122.
- Enhance the training forum of the EFCOG meetings to include other ISM Subgroups in passing on operating experiences and best practices.

F. Radiation Protection

- Jointly sponsor a DOE complex-wide Radiation Protection Workshop.

(Note: This area intentionally left blank.)



V. Estimated Duration (Sunset Clause)

The role of the ISM Working Group is projected to continue to expand during 2006 and beyond. The Working Group will become the institutional group that promotes and sponsors ISM, including the related processes, across the DOE complex and among EFCOG Member Companies.

VI. Cost/Benefit Determination

During this year, the positive impact of the Working Group to the customer was continued through the various participating contractor operations. Sharing of ISM processes and practices, which were made available for implementation at the various DOE locations resulted in cost savings to all Member Companies. Activities are focused around two central meetings where all members of the Subgroups can assemble at one place at one time. Use of DOE facilities has minimized meeting costs. Focused workshops will also continue to be held at locations and in facilities convenient to the business and in a cost effective manner to the customer in accordance with EFCOG operational requirements.

Individual subgroup activities and sharing of Operating Experiences and Best Practices which filter back to each member company continues to be seen as a “cost savings.”

VII. Issues

Succession planning for the Working Group Chair/Vice Chair positions and other leadership roles within the Subgroups will need to be managed such that the relationships with our DOE sponsors / customers, as well as Critical Few items being worked under the ISM WG, do not suffer from any 2006 leadership transitions.

VIII. Lessons Learned / Operating Experience

Continued coordination of Sub-group meetings at the same location and concurrent with the Working Group meetings is better for member company representatives who participate on more than one task team or subgroup. In the future, more attention will be placed on scheduling workgroup and subgroup meetings that better accommodate fewer member company representatives needing to attend meetings at multiple locations if possible. The only on-going limitation is related to available meeting space at central DOE facilities. Additional locations are currently being evaluated by the Working Group’s leadership.

IX. Recommendations

The ISM Working Group and Subgroups as currently organized should continue during FY 2006.



Integrated Safety Management (ISM) Energy Facility Contractors Group (EFCOG)

All information relative to the operation and on-going activities of the ISM Working Group are accessible through the EFCOG Website at the following address:

www.efcog.org