



# ISMS/EWCP News..



## Introduction

At the Rocky Flats Environmental Technology Site, The Department of Energy Rocky Flats Field Office, Kaiser-Hill Company (K-H), Safe Sites of Colorado, LLC (SSOC), Rocky Mountain Remediation Services, LLC (RMRS), DynCorp of Colorado, Inc. (DCI), and Wackenhut Services (WSLLC) are continuing to advance the development and implementation of a more effective safety management system.

This newsletter summarizes the activities and progress towards implementation of an Integrated Safety Management System (ISMS) using the principles of Enhanced Work Planning (EWP)

Topics in this issue include:

- New IWCP Approved!
- Activity Screening Form
- Post Job Review Process
- ISMS Implementation Updates
- Trench T-1 Remediation

## New IWCP Approved!

The much awaited, new and improved Integrated Work Control Program (IWCP) Manual (MAN-071-IWCP) is now on the street. Kaiser-Hill approved the IWCP Manual on August 24, 1998, with an effective date of September 15, 1998. The IWCP establishes the planning requirements and process controls for ALL work conducted at the Site. It ensures that work is screened and planned consistently to uniform criteria and that hazards are appropriately analyzed and controlled. Accordingly, the IWCP was developed as the primary mechanism for institutionalizing Integrated Safety Management (ISM) into the work planning, management, execution, and control processes at RFETS. Figure 1-1 pictorially demonstrates the relationship between the ISMS and IWCP.

The IWCP contains all of the key elements of ISM and specifically:

- Describes the process to identify and document the nature of the work or activity
- Prescribes the methods to identify hazards and define specific activity controls for each type of work being planned

- Describes the process for identifying the proper level of planning associated with the respective job complexity and hazards (graded approach)
- Describes the process for establishing the appropriate work controls and documentation for the specific job hazards identified
- Provides detailed instructions for developing work packages and technical activity procedures
- Describes processes and controls for work closeout
- Provides a mechanism for feedback to ensure continuous improvement through the use of a Post Job Review Process, procedure reference library, and lessons learned database.

One of the principle benefits of the new IWCP is the consolidation of 15 separate work planning and control procedures into a single, "one-stop-shopping" work planning document. All Site contractors will now be using the same planning tool which provides the opportunity to institute an effective feedback process and continuous improvement to the Site's work planning and hazard control mechanisms.

Because of the breadth and depth of the new IWCP and its applicability to all Site contractors, Kaiser-Hill will be offering a number of overview and familiarization training sessions to the general Site population. Similarly, more detailed training will be offered, as needed, for individuals involved in work planning including planners, engineers, procedure writers, supervisors, and appropriate AECCM personnel.

One of the principal goals of the IWCP is to institutionalize ISM in the Site work control process, with all levels of line management and staff actively engaged in utilizing the IWCP where the planning, execution, and management of work is taking place.

## Activity Screening Form

The generation of an Activity Screening Form (ASF) facilitates the decision-making process which is essential to ISM. The ASF is included in Chapter 2 of the new IWCP Manual. Once work is identified, the ASF identifies the integrated work planning and control process to be used to plan a work activity. Specifically, identified work activities planned each fiscal year as part of the Site mission require an appropriate planning approach to ensure that work is performed safely.

The appropriate level of work planning is selected as a function of hazard, experience, uncertainty, and complexity. The ASF is designed to help Responsible Managers (RMs) characterize

activities, profile hazards, and identify infrastructure programs and level of planning that will be used to derive controls for preventing or mitigating the hazards posed by the work activity under consideration. Figure 2-1 summarizes the role of the ASF within the context of the overall work planning processes.

The ASF is divided into three main parts; each described in more detail below.

**Screen 1: Activity Prescreen** - Determines if the work activity to be performed needs further, more detailed screening per this process (for example, performing a prescreen per this process to establish whether the work activity requires assessment to support selecting a work planning process).

**Screen 2: Preliminary Hazard Profile** - Performing a profile assessment of the type of hazards associated with the activity (for example, occupational safety, radiological, or environmental hazards) and determining the number of hazard types to be addressed by the work planning process.

The Preliminary Hazard Profile is used to determine the types of hazards involved with the work activity by answering questions relevant to the number of potential hazards present in the work activity. The overall number of hazards of the work activity is used as data input for the scoring and answering the Planning Process Screen. In addition, the recommended SMPs and relevant SMEs that are identified in Screen 2 can assist the RM in completing the screens and in implementation of the selected level of planning.

**Screen 3: Planning Process Screen** - Selecting the appropriate level of planning to be used for the activity.

The Planning Process Screen is used to select the required level of planning to be performed, which is graded to the hazards, uncertainty, and complexity of the work activity so that the appropriate hazards assessment and controls development tools and techniques are selected. The expectation is that implementation of those controls will result in the work activity being performed safely. After the appropriate level of planning has been selected using the ASF, the RM and a selected team of SMEs conduct the work activity planning.

### *Post Job Review Process*

One addition to the new IWCP Manual is the Post Job Review (PJR) process included as Chapter 11. The PJR process provides an avenue whereby personnel can provide input to help identify strengths and weaknesses in order to improve the work control processes. Identification and elimination of performance weaknesses through effective PJRs lead to an upward spiral in performance that increases overall safety and health of workers and the public, protection of the environment, while also improving efficiency and mission performance. The feedback obtained from the PJRs is not concerned with right or wrong, but with gaining information to improve the processes under discussion.

The PJRs also feed into the Site's Lessons Learned program. Lessons Learned are a good practice or innovative approach that is captured and shared to promote repeat application, or an adverse work practice or experience that is captured and shared to avoid recurrence. To determine if Lessons Learned should be shared, ask if there is the potential for this deficiency, event, adverse condition or safety issue to exist in, or to affect other buildings, operations, activities or organizations. If the answer is "yes", the lessons should be shared.

The PJR checklist is included in all planned work packages, technical procedures, and engineering design packages to allow the worker to provide feedback at any given opportunity. The following is a list of criteria which will require a formal PJR:

- ASF Screen, score in the "HIGH" category
- When new/special technology or techniques were used
- If the job tasks resulted in a recordable, or other significant incident
- If a worker was injured during the performance of work
- Work defined as Emergency Work in accordance with Chapter 3
- When requested by anyone involved in the performance of work

The Job Supervisor performs the PJR for the planning and performance of the work. This is performed with the Work Team when practical. This PJR is then submitted to the Responsible Manager (RM)

The RM reviews the PJR Checklist and evaluates if any lessons-learned or areas for improvement were identified. If lessons-learned, recurring issues or areas for improvement were identified, then the RM submits this information for inclusion into the Site's Lessons Learned program.

If the comments identified during the PJR can be corrected immediately, then the RM ensures the comments are corrected in a timely manner and provides feedback back to the work team.

### *ISMS Implementation Updates*

The Site has been actively working on achieving full implementation of ISMS by September 30, 1998. The Site went through a DOE Phase 1 Verification process in January, which identified many areas for improvement, which has been the main focus of the ISMS implementation efforts. Many of these verification findings have been completed and the subcontractors are now beginning to self-assess their implementation of ISMS.

DCI was the first subcontractor to complete an ISMS self-assessment. To conduct this assessment, DCI formed an assessment team comprised of DCI Quality Assurance, K-H Independent Oversight and Strategic Management Initiatives (SMI) independent consultants. This team identified noteworthy practices, opportunities for improvement and weaknesses. Assessments focused on "Summary Compliance Reports" (put together by each directorate), interviews,

work document reviews and observations of work in progress. DCI is using this assessment to put together corrective action plans for all of its organizations assessed to improve their ISMS compliance posture. Example noteworthy practices of each directorate were as follows:

- Identifying and analyzing hazards (Facilities Maintenance and Management (FM&M) and the Fire Department)
- Implementing controls (Contracts and Procurement)
- Feedback (Fire Department)
- Line Management Responsibility (Metrology)
- Competence Commensurate with Responsibilities (Metrology)
- Identifying Safety Hazards (Contracts and Procurement)

SSOC has also begun the ISMS self-assessment process. SSOC has developed a Criteria Review and Approach Document (CRAD) for ISMS implementation that will be used by all SSOC organizations to ensure a consistent self-assessment approach is used. Building 371 just recently went through a Management Review (MR) for the start-up of a significant risk reduction project. The criteria included the SSOC ISMS CRAD. This MR focused on the same areas noted in the DCI assessment and found significant strengths in the hourly employees' knowledge and practice of ISMS and EWP.

RMRS is planning to perform ISMS self-assessments (SA) during the last quarter of FY98. Individual RMRS facilities and projects have been preparing for and will perform SA's of their specific operations prior to the independent SA by RMRS and KH oversight organizations. The preparations have included preparing GAP analyses, addressing ISMS as part of meetings agendas, giving briefings and holding group discussions development of ISMS postings and bulletin boards, and establishing Safety First record keeping systems. Additionally, each RMRS direct, matrixed and subcontracted employee received a letter from RMRS President A.C. Crawford reiterating his commitment to ISMS and the safety of RMRS personnel. This letter

also included a reminder card with the ISMS "wheel" and the "five core functions."

### Trench T-1 Remediation

The Site has recently completed the successful excavation of Trench T-1, a top priority outdoor environmental cleanup site. Trench T-1 contained approximately 170 drums of pyrophoric depleted uranium chips, cemented cyanide and



miscellaneous pyrophoric uranium lab wastes that were buried from 1954 to 1962. The original trench was 230 feet long, 15 feet wide, and 10 feet deep. It contained more than 26 tons of depleted uranium, making it the largest single source of radioactive material in the environment at Rocky Flats. The project successfully completed more than 90,000 hours of work without a single injury or environmental concern. The project team attributes this success, in part, to the application of the functions and principles of ISM. The integrated work planning team included personnel from each field of expertise utilized to perform the work. This included both salaried and craft personnel. During the planning phase, the hazards associated with the buried materials were identified through extensive review of historical data and interviews with retirees. Planning was conducted to thoroughly define each activity, identify the related hazards, and implement the controls needed to safely perform the work. This included the development of contingency plans and controls for unanticipated hazards and abnormal conditions.

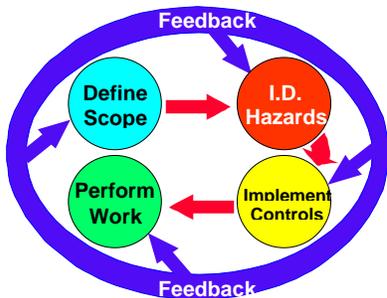


Figure 1-1

## IWCP/ISMS Process Overview

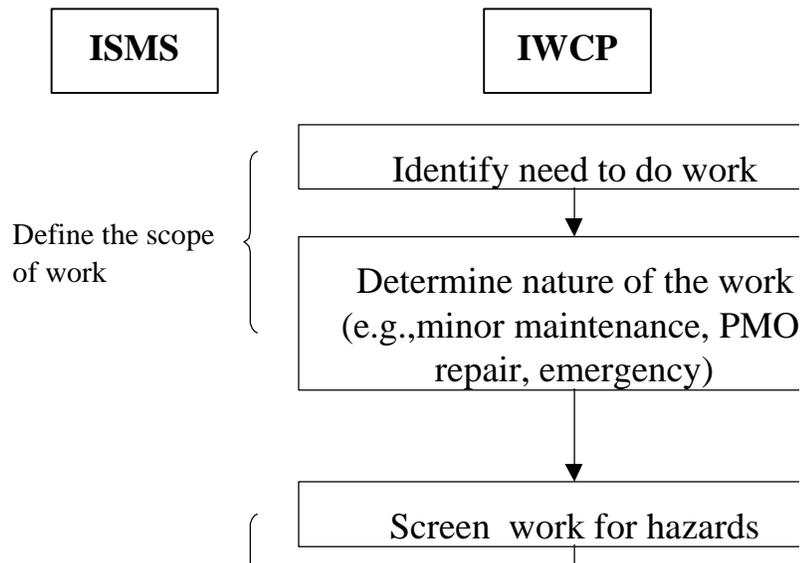


Figure 2-1

