Integrated Safety Management- Building Mission Success

Approximately 500 federal and contractor employees will arrive in Idaho Falls to participate in the 2008 Integrated Safety Management Workshop, beginning Aug. 25. Hosted by the U.S. Department of Energy's Idaho Operations Office, along with the prime contractors at the Idaho National Laboratory Site, the workshop will serve as a forum for sharing safety related practices and lessons learned, while emphasizing the importance of the use of the Integrated Safety Management System to safely accomplish the Department of Energy's mission.

What is Integrated Safety Management?

In 1996, the Department of Energy committed to the Integrated Safety Management System (ISMS) as a tool for DOE and its contractors to ensure that work is planned and accomplished safely and in a cost-effective manner. Viewed as the framework for all DOE safety programs, the objective of the system is to incorporate safety into management and work practices at all levels, using the five core functions of the Integrated Safety Management System to address all types of hazards, ensuring the safety of the workers, the public, and the environment, as well as ensuring cost-effectiveness.

The Integrated Safety Management System consists of five core functions. These functions provide the framework for all DOE work being planned and performed. The five core functions of the Integrated Safety Management System are:

- Define Work- Identify the task, and the expected outcome • Analyze Hazards- Identify hazards associated with the identified task
- Develop Controls- Identify and implement controls to reduce hazards associated with the identified task
- Perform Work- Perform the task utilizing identified hazard controls
- Provide Feedback- Identify opportunities for improved performance of the task, analyze identified controls to ensure they adequately reduced the related hazards

The ISMS provides a formal, organized process whereby employees plan, perform, assess, and improve the safe conduct of work. The Integrated Safety Management System is used by employees to analyze hazards associated with specific tasks during the planning phase to ensure that safety is integrated and institutionalized into all operations and procedures related to that task. Direct involvement of workers during the planning and implementation of work-related tasks is essential for their success.

What Will Happen at the ISMS Workshop?

As in any industry, success is best achieved when workers are of one mind with respect to the importance of their own safety in accomplishing Department goals. Achieving, sustaining, and then realigning, redefining, and achieving success again and again requires us to be willing to capitalize on others' as well as our own ideas, tools, systems, operating experience, successes and unintended consequences. As DOE's mission advances so must Integrated Safety Management. The ISMS workshop is intended to provide a venue for sharing advances and experiences in integrating the various aspects of safety, environmental protection, security, and other relevant management systems to ensure continued mission success.

How can ISMS benefit you?

Whether you work at a Department of Energy site, or are simply performing maintenance around your home, YOU are ultimately responsible for your own safety. The ISMS provides you with the tools needed to perform tasks safely everyday. By utilizing the five core functions of ISMS, you can plan work and perform a task safely by design, not because you happened to be lucky that day.

For example, let's mow the lawn using the five core functions of ISMS. First, we use the core function: define work to identify the task we will be performing. In this case we will be mowing the lawn. Second, we will use the core function "analyze hazards" to identify potential hazards associated with mowing the lawn. When analyzing hazards, it is important to consider all types of hazards, such as industrial and chemical hazards. In this case task-related hazards include: contacting the lawn mower blades, projectiles being thrown from the mower, high noise levels and hazards associated with the use of gasoline.

Now that the hazards have been identified, we will use the third core function -- develop controls -- to reduce hazards associated with our identified task. Wearing the proper clothing for the task will help protect against all of the hazards associated with lawn mowing. Close-fitting clothes are less likely to get caught on controls or moving parts. Long pants and sturdy leather shoes help to protect against injuries resulting from contact with the lawn mower blades or a gasoline spill, as well as flying sticks, stones, and other projectiles not caught by the rear guard of the mower. To further reduce the likelihood of contact with the lawn mower blades, disconnecting the spark plug if the mower requires service prevents the engine from accidentally being started, when the blade is turned by hand. We are also able to prevent the likelihood of objects being thrown from the mower due to contact with the blade by checking the lawn for items such as sticks, rocks, toys, and dog bones, making sure miscellaneous items are not hidden in tall grass, and never running the mower over gravel. The use of ear plugs or ear muffs will reduce the noise level, helping to prevent hearing loss due to prolonged exposure to high noise levels. Handling gasoline fuel with care, using extra caution when filling the tank, and never filling the tank of the mower when it has been operating and is hot will help prevent accidents resulting from gasoline related hazards.

We are now ready to implement the fourth core function: perform work. We will perform the task only after we have implemented the hazard controls we previously identified. By ensuring that we are properly dressed, that the mower tank is full before the mower is operated, and by conducting a walk through of the mowing area to remove any objects that could become a projectile, we have ensured that we are able to perform the task in a safe and responsible manner. Once the task has been performed, we will complete the fifth core function: provide feedback by taking a minute to analyze the hazards controls we used while performing the task, addressing any hazards we may have missed, and looking for ways to improve the process next time. By completing the fifth core function, we have thoroughly implemented the Integrated Safety Management System. Use of this system provides you with the tools you need to take chance out of the equation whether you're at work, at home, or at play.

Safety videos:

- Rubik's Cubicle of Pain
- A Flip of a Coin

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