FOCUS ON: The HSS Message

Office of Health, Safety and Security

Office of Independent Oversight

Enhance Workplace Monitoring for Non-Radiological Hazards to Ensure Workers are Protected Against Health Hazards and Avoid Civil Penalties

Workers at Department of Energy sites have a fundamental right to a safe and healthy workplace. Furthermore, DOE owes it to its workers to control and monitor hazardous materials in the various workspaces across each of its sites to ensure that workers are not being exposed to health hazards such as toxic chemicals, excessive noise, and ergonomic stressors. While these rights and responsibilities have been established in DOE orders for some time, they are further emphasized and codified in the provisions of 10 CFR 851, *Worker Safety and Health Program.* As of May 25, 2007, all sites must have an approved safety and health program that demonstrates full compliance with 10 CFR 851.

A workplace monitoring program that examines non-radiological hazards is an essential element of the overall Worker Safety and Health Program and needs to include a systematic assessment of potential worker exposures to chemical, physical, biological, or ergonomic hazards through such techniques as personal, area, wipe, and bulk sampling, biological monitoring, and observations. Sites that do not have effective programs may be subject to civil penalties and, more importantly, need to ensure that they are protecting the health and safety of our workforce.

Because of common concerns identified in past inspections, the HSS Office of Independent Oversight identified workplace monitoring for non-radiological hazards as a focus area in its environment, safety, and health inspection program. Focus areas are aspects of environment, safety, and health programs that warrant increased management attention because of performance problems at several sites, and are typically closely evaluated on inspections over a period of one to two years. Independent Oversight uses the results of the review of the focus areas to gain DOE-wide perspectives on the effectiveness of DOE policy and programs, and to provide constructive recommendations to DOE program offices, sites, and policy organizations.

HSS recently completed a series of inspections of workplace monitoring at about ten sites over the past two years. The inspections identified a number of positive aspects and noteworthy practices such as extensive exposure assessment electronic databases at two sites that allow the tracking, trending, and analyzing worker exposures for a wide variety of chemical and physical stressors as defined in 10 CFR 851. Many sites have placed a significant effort on workplace sampling and monitoring, although at some sites such efforts have been mostly limited to a few stressors such as beryllium and asbestos. A number of sites are also in the process of enhancing their workplace monitoring programs to ensure that their subcontractor's workplace monitoring programs meet regulatory requirements, and to improve the exposure assessment and monitoring interfaces with site medical organizations.

However, the results of the inspections confirm that workplace monitoring needs increased management attention at all DOE sites. The Independent Oversight review shows that a number of sites have not developed adequate processes for performing exposure assessments or have not implemented required baseline surveys and periodic resurveys and/or exposure monitoring of all work areas and operations to identify and evaluate potential worker health risks. The results or exposure assessments, monitoring and sampling cannot always be easily retrieved, or tied to the work activity in which the exposure occurred. In some cases, there are delays in documenting the exposure assessments and in communicating the results of exposure assessments, monitoring or sampling to line managers, workers, and site medical. At every site reviewed, the Independent Oversight review has identified examples of workplace exposures that have not been identified, analyzed and/or documented. The most common area for this to occur is in a variety of welding, plating, machining, construction, and research and development-related shops in which workplace exposures to cutting, grinding, drilling, brazing, welding, and chemical usage are commonplace.

HSS will be issuing a report on its results prior to the end of 2007 that provides more detailed results and a set of recommendations for consideration by line management. DOE and site management should examine the upcoming report as part of their lessons leaned program and determine what actions are needed to ensure that their workplace monitoring program meets the regulatory requirements and adequately protects workers from the hazards inherent to DOE operations.