Office of Oversight
Environment, Safety and Health

Independent Oversight Review of Department of Energy Contractor Occupational Medicine Programs from June 1998 to December 1999

August 2000

Executive Summary

The Department of Energy (DOE) Office of Oversight performed a two-phased review of eight Departmental contractor occupational medicine programs. The first phase of the review was completed in September 1998 and the second phase in December 1999. To conduct the review, Oversight teamed with the Accreditation Association for Ambulatory Health Care (AAAHC), a non-profit accreditation organization for health-care facilities.

The Office of Oversight's interim report on the three sites covered in the initial phase revealed that some contractor occupational medicine programs were not implementing several important DOE policies and requirements. The most significant issue concerned the comprehensiveness of medical surveillance programs. Other issues included poorly defined and marginally implemented quality management and continuous feedback systems; deficient interfaces between line management and site environment, safety, and health (ES&H) and occupational medicine personnel; and inadequate storage and retrieval practices for worker medical records.

The results of the second-phase review reflected many of those addressed in the interim report. Upon completion of the two-phased review, six of the eight programs were found to share three common issues: the exclusion of medical personnel involvement in site ES&H initiatives; inadequate occupational health and medical practices for subcontractor employees; and the absence of medical program requirements in site-assessment and feedback activities. One significant difference between the second-phase review and the first was that three occupational medicine programs achieved AAAHC accreditation in the second phase, where none was awarded in the first.

The Office of Oversight is tracking these individual issues that require management attention in accordance with DOE Order 414.1A, *Quality Assurance*. Site contractor management and the respective DOE offices have already submitted corrective action plans addressing the identified issues.

1.0 Introduction

The purpose of this Office of Oversight review was to assess the quality of Department of Energy (DOE) contractor occupational medicine programs by identifying positive attributes, issues, and opportunities for improvement. The review focused on the issues identified in past Oversight evaluations and the quality of site occupational medicine programs. Information from the review's first phase provided a baseline for evaluating additional medical programs in the second phase. This report provides feedback on the results of the second-phase review for DOE field and contractor line management's consideration in improving occupational medicine programs.

Oversight teamed with the Accreditation Association for Ambulatory Health Care (AAAHC) in reviewing the DOE contractor occupational medicine programs. The AAAHC is committed to improving the quality of health care by performing peer-based reviews of medical facilities and the services they provide. AAAHC uses nationally recognized standards for occupational medicine as a template to evaluate program performance; licensed occupational medicine physicians conducted the review. Oversight analyzed and incorporated the AAAHC evaluation results with its own to determine the overall effectiveness of the medical programs that were reviewed.

The Fernald Environmental Management Project, Nevada Test Site, and Oak Ridge National Laboratory were reviewed in the first phase. Brookhaven National Laboratory (BNL), the Y-12 Plant, Savannah River Site, the Pantex Plant, and Sandia National Laboratories-New Mexico (SNL-NM) were reviewed in the second phase. Oversight provided a formal report conveying the results of each site occupational medicine program review to the appropriate DOE office and contractor management. Where needed, DOE and contractor line management submitted corrective action plans addressing the identified issues.

Oversight performed the two-phased review as a result of its independent assessment of safety-related data and the impact of this information on contractor occupational medicine programs. For example, the 1998 Oversight evaluation of emergency management across the DOE complex noted that several facilities lacked integration among the occupational medicine, emergency management, and site ES&H activities. This lack of integration could negatively affect some required functions of the site occupational medicine program, such as timely treatment of injured workers, proper coordination and communication between site medical personnel and community health care facilities, and readiness to respond to mass casualty incidents. Oversight encourages DOE field and contractor line management to use the information provided in this report to assess the performance of their occupational medicine programs according to DOE, Federal, and contractor management requirements.

The results of the second-phase review are detailed under three categories: positive attributes, issues, and opportunities for improvement. The issues and opportunities are not identified by site, but are related to the roles and responsibilities of DOE field site management, contractor line management, or the medical program. The opportunities for improvement are not intended to be prescriptive. Rather, they are suggested courses of action for DOE and individual contractor management to evaluate and modify as appropriate in accordance with site-specific environment, safety, and health (ES&H) objectives.

2.0 Results

2.1 Positive Attributes

Most of the DOE contractor occupational medicine programs that were reviewed perform effectively in the area of clinical services. Most noteworthy is the three-year AAAHC accreditation attained by the BNL, Pantex, and SNL-NM occupational medicine programs. Both DOE and contractor management are supportive of these programs and ensure that the efforts of those implementing them are well coordinated with other line management activities. The medical surveillance programs at these three sites are well executed and effective.

With few exceptions, medical program personnel were found to be knowledgeable of program requirements, have considerable expertise in occupational health, and are well qualified for their positions. In addition, medical personnel exhibited a strong commitment to providing quality health care services and to improving their programs. During a time of resource reductions, medical personnel remain proactive in their activities and willing to embrace new challenges.

2.2 Issues

Issues identified by Oversight during the second-phase review are listed below. Pantex and SNL-NM are not represented in the listing since no issues were identified at these sites. Many of these issues may result from a failure to adopt initiatives, such as integrated safety management (ISM), that elevate ES&H requirements to the management level. To prevent recurrence of these issues, Oversight encourages all DOE field sites and their contractor management to routinely evaluate their medical program through performance assessment and feedback.

- Implementing procedures, which describe the hazards assessment process, do not clearly reference the types of work that require employee medical surveillance. As a result, supervisors who conduct hazards assessments may be unaware of the mandatory medical surveillance requirements associated with certain worker exposures and, as a result, fail to notify industrial hygiene or the medical director of the situation.

- DOE and contractor management have not clearly defined and communicated their roles and responsibilities concerning the integration of the occupational medicine program requirements into site performance assessment and feedback activities. Although such activities may occur internally within medical departments, corporate self-assessments and audits do not adequately assess the overall performance of the medical program as it relates to DOE and contractor ES&H requirements.

- Contractor management does not consult with the medical staff when determining what potential health effects may occur as a result of new or changed work processes and activities. The medical staff is excluded in practice as well as in the documented contractor management roles and responsibilities pertinent to this issue. As a result, employees may be at risk of negative health effects and may not be provided the required medical surveillance and other protective measures.

- Occupational medicine personnel do not routinely participate in emergency management drill and exercise activities at the site or community level, nor is the medical response element of the site emergency plan included in the drills and exercises. The medical staff's success in responding to mass casualty incidents, conducting triage, and communicating and coordinating with local medical facilities is highly correlated with how often the clinic's role is practiced.

- Some required elements of the occupational medicine program are not clearly

documented or referenced in site ISM documents. Site documents omit such requirements as management's role in communicating information on hazards and worker exposures to the occupational medicine staff. Current practices rely on the initiative of individual worker protection teams rather than clearly documented policies and procedures that would formalize the hazard communication process.

- The site worker protection program for subcontractor employees does not adequately define DOE requirements or include provisions to monitor the quality of the occupational medicine services provided. Without a clearly defined authority or mechanism to routinely evaluate the medical services provided to subcontractor employees, non-compliance is evident in such requirements as fitness-for-duty determination, assessment of occupationally related injury/illness, and implementation of medical surveillance.

2.3 Opportunities for Improvement

Opportunities to improve occupational medicine program performance were identified in all eight of the DOE contractor occupational medicine programs reviewed. Effective program performance was found to be highly dependent on site management's support of the occupational medicine program and the extent of its integration into facility ES&H activities. The following opportunities for improvement address a broad range of functions. These may be applicable to other occupational medicine programs and should be considered throughout DOE and contractor line management.

- Ensure that site directives, specifically ISM requirements and implementing procedures, include the roles and responsibilities of the occupational medicine program. These documents should clearly detail and enforce the practices of communicating hazards assessments and worker exposure information to medical personnel, evaluating new and existing work processes and their related health effects by medical and site ES&H personnel, coordinating health and medical surveillance activities, including the medical program in site performance assessment and feedback initiatives, and involving medical personnel on site worker protection teams. Management should support and communicate site directives and implementing procedures affecting the occupational medicine program and should routinely assess their effectiveness.

- Site performance assessment and feedback programs need to fully address all elements of the occupational medicine program and the roles and responsibilities of line management and supervisors. In short, all program elements detailed in DOE Order 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees,* Section 19, Occupational Medical, should be included in site-assessment and feedback activities. Due to the influence of management roles and responsibilities on the effective implementation of such elements as program integration, maintenance of a healthful work environment, employee health examinations, and emergency and disaster preparedness, they must be routinely evaluated as well.

  Where site ES&H performance assessment programs for hazard identification and control exist, the process should be expanded to include methods that evaluate the participation of affected workers in site medical surveillance activities.

  In addition, Facility Representative or other internal oversight programs that are designed to monitor site ES&H program performance should include the representation of occupational medicine personnel. Their inclusion would help ensure that worker health and medical issues are addressed during awareness activities.

- System descriptions, developed by management concerning the occupational medicine program, should emphasize the integrating roles of industrial hygiene, safety, other ES&H disciplines, and the medical program. For example, system descriptions should detail how the effectiveness of the site's medical surveillance program is dependent on hazard analysis, industrial hygiene surveillance, and the reporting of this information to medical personnel.

- The occupational medicine services provided by subcontractors to their employees must reflect the requirements for DOE contractor employees.

Fitness-for-duty examinations, the emergency treatment and follow-up of occupationally related illness and injury, hazards assessment, health and medical surveillance, and accessible medical records should all be addressed, documented, and effectively implemented. To ensure an adequate program, DOE field management, contractor line management, and site medical, ES&H, and procurement personnel must routinely evaluate subcontractor policies and practices that detail the occupational medicine services they provide.

3.0 Conclusions

The Office of Oversight, assisted by the AAAHC, evaluated five DOE contractor occupational medicine programs in the second phase of its two-phased review. As in the first phase, each program was evaluated on its overall performance with respect to established DOE policy and its conformance with nationally recognized ambulatory health care standards.

During the review, Oversight identified positive attributes, issues, and opportunities for improvement. Positive attributes noted were effective clinical services, the external accreditation of three sites, and well-qualified medical professionals. The most common issue identified among three of the five sites concerned the exclusion of medical personnel in site ES&H initiatives. Other identified issues included inadequate occupational health and medical practices for subcontractor employees, and incomplete medical program participation in site performance assessment and feedback activities.

The Office of Oversight has determined that many of the identified issues result from DOE and contractor line management operating the occupational medicine program as a stand-alone program rather than an integral part of safety management. As a result, the occupational medicine programs do not have an adequate opportunity to routinely interface with site management concerning existing and emerging ES&H issues. Consequently, the medical program is not well positioned to fulfill its roles, responsibilities, and required functions.

In contrast, the contractor occupational medicine programs for which no issues were identified were openly supported by DOE and contractor line management and were fully integrated into site ES&H activities. This integration existed not only formally, as in policies and other documentation, but in actual practice as well. At these sites the occupational medicine program was so firmly incorporated into safety management practices that its inclusion in ES&H and other associated activities was considered routine or the "normal way of doing business."

DOE Headquarters, program secretarial offices, and contractor line management need to demonstrate a strong advocacy for comprehensive occupational medicine programs that will meet the current and long-term interests of DOE. Through formal policy and action, they need to ensure that occupational medicine programs are not isolated, but are considered an integral part of the overall management of a safe and healthful workplace. Increased guidance, direction, and self-assessment activities would help reduce the number of omitted and/or poorly implemented elements. Also, the inclusion of occupational medicine programs into initiatives like ISM would help improve program performance by clearly identifying requirements, roles, and responsibilities.

Finally, an increasing number of DOE contractor occupational medicine programs have successfully achieved external accreditation. BNL, Hanford, Los Alamos, Pantex, and SNL-NM have excellent programs in both design and implementation that could be emulated by other DOE contractor occupational medicine programs. These programs are assets to the Department and have confirmed their commitment to employee safety and health.

APPENDIX A
TEAM COMPOSITION

Team Composition

The team membership, composition, and responsibilities are as follows:

Office of Oversight Management Team

Deputy Assistant Secretary for Oversight

S. David Stadler, Ph.D.

Associate Deputy Assistant Secretary

Ray Hardwick-Operations

Director, Office of ES&H Evaluations

Patricia Worthington, Acting Director
Tom Staker, Acting Deputy Director

Office of Oversight Review Team for the Headquarters Occupational Medicine Program

Marvin Mielke, R.N., M.S.N, Team Leader
Connie Eimer, R.N, B.S.N.

This page intentionally left blank.