

GAO

Testimony

Before the Subcommittee on Energy,
Committee on Science, Space, and Technology,
House of Representatives

For Release on Delivery
Expected at
1:30 p.m. DST
Thursday
Oct. 21, 1993

SAFETY AND HEALTH

**Worker Safety and Health
Oversight Issues Facing DOE**

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058351/150130

Madam Chairman and Members of the Subcommittee:

We are pleased to participate in this hearing on the Department of Energy's (DOE) efforts to protect the safety and health of its workers. The Department conducts a wide variety of activities that can place workers in potentially unsafe situations and expose them to radiation and toxic chemicals. Over the last decade, we have identified safety and health problems throughout the complex and called for improvements in DOE's safety and health oversight. On the basis of our work, I would like to discuss the following areas.

- Ensuring workers' safety and health continues to be a major challenge for DOE. Problems with occupational safety have become increasingly apparent in the Department's accident record over the past few years, with 15 fatalities suffered in 1992--the Department's worst fatality record in over 20 years. Since 1980, GAO and other external reviewers, including the National Research Council and the Occupational Safety and Health Administration (OSHA), have repeatedly recommended that DOE strengthen its independent internal oversight of activities affecting safety and health at DOE's facilities. In response, Secretary Watkins initiated a number of reforms and issued directives aimed at improving safety and health programs at DOE's facilities.
- Secretary O'Leary has introduced a number of initiatives aimed at addressing safety and health problems. Specifically, in April 1993, the Secretary announced a major restructuring of DOE, which included consolidating headquarters' safety and health policy and oversight functions within the Office of Environment, Safety and Health (ES&H) and elevating the position of the Assistant Secretary for ES&H to report directly to the Secretary. Furthermore, in May 1993, the Secretary announced a set of safety and health initiatives that included (1) issuing a safety and health policy statement that defines the principles the Department will use, (2) strengthening the authority of the ES&H Office, and (3) endorsing publicly OSHA regulation of worker safety and health at DOE facilities.
- While these are important initiatives, which signal DOE's continued commitment to worker safety and health, several major issues remain. If left unresolved, these issues could constrain DOE's ability to adequately protect the safety and health of its workers. Key among these issues are (1) the development of a safety policy that moves beyond broad principles to a better definition of what is expected of contractors and their workers; (2) ensuring that the ES&H Office has adequate authority, independence, and resources to do its job; and (3) planning an effective transition to OSHA regulation.

I would now like to address each area in greater detail.

SAFETY CONCERNS CONTINUE TO BE
A MAJOR CHALLENGE FOR DOE

Ensuring a safe and healthy work environment will continue to be one of the major challenges facing DOE. Safety concerns led to the closure of much of the nuclear weapons complex, and safety issues are an important reason why key weapons production facilities remain closed. More importantly, as DOE increases its cleanup efforts, a new workforce will be facing danger from construction hazards, toxic chemicals, and radiation.

For example, a major component of the cleanup will be the decommissioning and decontamination of as many as 7,000 inactive facilities throughout the complex.¹ Many of the Department's inactive facilities are in poor physical condition and present serious risks to individuals who work in and around them. For instance, at the Hanford site, in Washington, years of inadequate maintenance and deteriorating conditions contributed to an April 1992 fatality at an inactive reactor building when a worker fell through the roof.

In addition to the safety problems posed by their poor physical condition, inactive facilities can contain known and unknown contaminants that increase the dangers to workers. For example, in August 1992, during decontamination and decommissioning, nuclear research equipment at Hanford exploded, spreading caustic lithium acetate throughout the building. DOE's contractors contributed to the explosion by eliminating an interim work step designed to remove any remaining lithium without determining how much lithium was still in the equipment. According to DOE's accident report, because the work had been postponed repeatedly, the contractors were eager to complete it before the fiscal year ended.

Ensuring an Adequate Safety
Culture Remains Difficult

Over the last several years, we have issued reports and testified that DOE's facilities--such as the Savannah River site, in South Carolina, the Pantex site, in Texas, and the Hanford site--continue to experience problems that indicate that DOE needs to do more to establish a sound, consistent safety culture

¹See Department of Energy: Cleaning Up Inactive Facilities Will Be Difficult (GAO/RCED-93-149, June 25, 1993).

at its facilities.² The Department and its predecessor agencies have historically embodied an institutional culture that valued weapons production over the protection of safety and the environment. The lithium explosion at Hanford, as well as other recent incidents at DOE sites, suggests that the problems DOE has faced in developing and maintaining an adequate safety culture at its production facilities continue to exist as DOE transitions into the cleanup.

To change this culture, Secretary Watkins initiated a number of reforms and issued directives aimed at improving safety and health programs at DOE's facilities. In particular, line management responsibility for worker safety and health was reemphasized and the programs of the ES&H Office were restructured. Despite these actions, persistent problems remain. In its February 1993 report, the Office of Technology Assessment (OTA) stated that DOE still had not established a culture that honored protection of safety and health as a fundamental priority.³ As Secretary O'Leary recognized in her July 22, 1993, testimony before the Subcommittee on Energy and Power, House Committee on Energy and Commerce, deficiencies in occupational safety have become increasingly manifest in the Department's accident record over the past few years, with 15 fatalities suffered in 1992--the Department's worst fatality record in over 20 years.

Independent Internal Oversight Is Key to Ensuring a Safe Work Environment

In response to persistent safety and health problems at DOE facilities, GAO and various external reviewers have recommended that DOE have strong independent internal oversight of its safety and health performance. At the same time, however, we and these reviewers have found serious weaknesses in how well DOE's ES&H Office conducts independent oversight.

Beginning in the early 1980s, we repeatedly recommended that DOE increase the authority, independence, and visibility of its

²See, for example, Nuclear Safety: Concerns About Reactor Restart and Implications for DOE's Safety Culture (GAO/RCED-90-104, Apr. 12, 1990); Nuclear Health and Safety: More Attention to Health and Safety Needed at Pantex (GAO/RCED-91-103, Apr. 15, 1991); Nuclear Weapons Complex: Major Safety, Environmental, and Reconfiguration Issues Facing DOE (GAO/T-RCED-92-31, Feb. 25, 1992); Nuclear Health and Safety: Corrective Actions on Tiger Teams' Findings Progressing Slower Than Planned (GAO/RCED-93-66, Mar. 25, 1993).

³HAZARDS AHEAD: Managing Cleanup Worker Health and Safety at the Nuclear Weapons Complex, OTA, (Feb. 1993).

internal organization charged with overseeing activities affecting safety and health at the agency's facilities.⁴ In response, DOE established the ES&H Office in 1985 and undertook other initiatives aimed at strengthening oversight.

Four years later, in a December 1989 report, the National Research Council emphasized the importance of independent internal oversight in monitoring line management's performance.⁵ The Council's report stressed that although the Secretary of Energy had made line management responsible for compliance with safety and health standards, independent internal oversight was still essential to "provide a second set of eyes" to monitor compliance and ensure that problems are resolved before an adverse effect occurs.

In its December 1990 report, OSHA recommended that line management's responsibility for safety and health be strengthened.⁶ However, OSHA also emphasized that strong independent internal oversight was necessary because DOE line management is hampered by a conflict of interest in assessing contractors' performance, since in doing so line management also is reporting on its ability to manage the contractors. OSHA concluded that the ES&H Office was not adequately staffed or empowered to conduct independent oversight. In addition, OSHA found that many of the findings made by the ES&H Office's site representatives--the office's on-site inspectors--had been ignored. OSHA recommended that DOE develop and implement a more vigorous oversight system carried out by a cadre of well-trained inspectors.

In its February 1993 report, OTA emphasized that the ES&H Office did not have the field staff necessary to oversee worker safety and health. OTA also expressed concern that the office did not have sufficient authority to enforce safety and health policy and orders among DOE line managers and contractors.

⁴See, for example, Better Oversight Needed for Safety and Health Activities at DOE's Nuclear Facilities (EMD-82-36, Jan. 27, 1982); DOE's Safety and Health Oversight Program at Nuclear Facilities Could Be Strengthened (GAO/RCED-84-50, Nov. 30, 1983); Nuclear Health and Safety: Oversight of DOE's Nuclear Facilities Can Be Strengthened (GAO/RCED-88-137, July 8, 1988).

⁵The Nuclear Weapons Complex: Management for Health, Safety, and the Environment, National Research Council (National Academy Press, Dec. 1989).

⁶Evaluation of the U.S. Department of Energy's Occupational Safety and Health Program for its Government-Owned Contractor-Operated Facilities, OSHA (Dec. 1990).

Most recently, in our May 1993 report on the ES&H Office's Site Representative Program, we found that the office had not provided the vigorous independent oversight envisioned by the National Research Council and OSHA.⁷ We noted that despite the fact that DOE had made a number of improvements, fundamental problems persisted in the areas of staffing, training, program coverage, measuring site safety and health performance, and ensuring that identified problems were corrected.

SECRETARY HAS INTRODUCED SAFETY AND HEALTH INITIATIVES

Since taking office, Secretary O'Leary has made a number of changes in DOE's structure and approach for overseeing safety and health performance at DOE sites. In April 1993, she announced a major restructuring of DOE that included a consolidation of all headquarters' safety and health policy and oversight functions within the ES&H Office. In addition, she elevated the position of the Assistant Secretary for ES&H to report directly to the Secretary rather than to the Under Secretary. Furthermore, in May 1993, to emphasize the Department's commitment to safety and health issues, Secretary O'Leary announced a set of nuclear and occupational safety and health initiatives. These initiatives included (1) developing a comprehensive safety and health policy; (2) giving the ES&H Office authority to stop unsafe operations, conduct assessments without advance notice, and lead investigations of serious accidents; (3) beginning a review of DOE's safety and health institutions to determine how DOE can improve its performance; and (4) initiating consultation with OSHA with the aim of establishing OSHA regulation of all DOE facilities.

These changes have the potential to improve DOE's safety and health performance. For example, through her reorganization and safety initiatives, the Secretary has increased the authority of the ES&H Office to assess DOE and contractor performance and ensure that they operate facilities safely. In addition, the Secretary's decision to bring DOE facilities under OSHA will end concerns about the lack of external independent oversight of DOE occupational safety and health performance. The threat of financial penalties for noncompliance with OSHA standards, as faced by the private sector, could motivate DOE contractors to place greater priority on protecting workers' safety and health.

Finally, in response to our May 1993 report, the ES&H Office has made some improvements in its Site Representative Program. Specifically, the office has (1) reinstated the program's coverage of occupational health; (2) begun developing a training

⁷Safety And Health: Key Independent Oversight Program at DOE Needs Strengthening (GAO/RCED-93-85, May 17, 1993).

program, including minimum training requirements, for the site representatives; and (3) instructed the site representatives to spend at least 20 percent of their time monitoring workplace practices.

The above efforts signal DOE's commitment to improving occupational safety and health practices at its facilities. However, several major issues remain that, if left unresolved, could constrain DOE's ability to improve its safety and health performance. Specifically, (1) DOE still lacks a clear safety and health policy and specific goals; (2) certain problems, such as the lack of adequate staff, could limit the ability of the ES&H Office to conduct vigorous oversight; and (3) the process DOE and OSHA will follow to transition to OSHA regulation has not yet been well defined.

Clear Safety Policy Is Needed

As early as July 1988, we recommended that DOE issue a meaningful safety policy. We found that unclear safety policy and guidance led to inconsistent application of important safety standards. In December 1990, OSHA also recommended that DOE clearly articulate national safety and health goals.

In September 1991, DOE issued a Nuclear Safety Policy. However, DOE's Advisory Committee on Nuclear Facility Safety, in its November 1991 final report, criticized this policy for substituting nebulous language such as "continuous improvement" for measurable standards, neglecting risks to workers, and not providing sufficient guidance to those who must make the day-to-day decisions to resolve the "inevitable" conflicts between safety and production. The Advisory Committee recommended that DOE develop a clear and precise safety policy, with explicit and objectively measurable goals. In response, DOE defended the broad scope of its policy and noted that it was developing specific safety requirements to implement the policy. DOE also stated that it recognized the need for safety goals for workers and was working to define these.

The Secretary's new environment, safety, and health policy consists of various "guiding principles" such as open communications, mutual respect, and consistency across the DOE complex. However, the only principle related specifically to safety and health performance states simply that DOE will continue to improve its performance. While a worthwhile goal, this statement provides little guidance to management and workers about how much priority to place on complying with safety and health standards versus accomplishing their research, weapons production, or environmental cleanup missions.

The Secretary has also stated the Department's intention to develop specific goals and performance measures to determine the

extent to which DOE is fulfilling this policy. In response, the ES&H Office has begun developing performance measures and a system for evaluating line management's performance against these measures. This effort holds promise. However, the ES&H Office has made such efforts in the past and did not complete them, in part because of staffing problems and concerns about line management's resistance. DOE needs a sustained effort to develop and establish a clear safety policy, specific goals, and methods for measuring the extent to which goals have been met. Only by sending a clear persistent message that ensuring safety and health is a top priority and by holding managers accountable for their safety and health performance can DOE improve its safety culture.

Certain Issues Could Impair the ES&H Office's Effectiveness

Until OSHA takes responsibility for regulating DOE facilities, at least 3 to 5 years from now, the ES&H Office will continue to have overall responsibility for independent oversight of occupational safety and health performance at these facilities. Therefore, it is imperative that the office be able to effectively fulfill this important function. However, the ability of the ES&H Office to conduct vigorous oversight could be impaired by certain issues. These include (1) the office's lack of authority to ensure that line management corrects the safety and health problems that it identifies, (2) the potential effect on the office's independence of its new emphasis on helping line management solve safety and health problems, and (3) the office's lack of adequate qualified staff.

Although Secretary O'Leary has increased the authority of the ES&H Office, the office still has a very limited ability to ensure that line management corrects the safety and health problems that it identifies. According to the National Research Council's December 1989 report, if responsible line managers do not take appropriate actions to correct identified safety and health problems, the ES&H Office should have the authority to raise concerns up the chain of command in DOE, and ultimately to the Secretary. In our May 1993 report, we found that DOE lacked formal requirements specifying how line management should respond to site representative findings, as well as a formal process for elevating concerns about line management responsiveness to the Secretary. Program managers explained to us that they never developed such formal requirements because line management was resistant to the program and obtaining line management's agreement on specific requirements would have been difficult. In response to our report, DOE has said that it will develop such formal requirements by March 1994, after a restructuring of the program. We will monitor DOE's actions in this regard.

Past reviews by GAO, the National Research Council, and OSHA have stressed the importance of vigorous independent internal oversight in helping to ensure safe operations. The Secretary has indicated that she wants the ES&H Office not only to perform strong independent oversight but also to provide expert advice and assistance to line management in an atmosphere of mutual trust and cooperation. In response, the ES&H Office is placing more emphasis on helping line management to solve safety and health problems. ES&H Office officials have told us that they plan to reorganize the office to streamline their operations but have not yet decided how to organize their functions of providing oversight and assistance. While the ES&H Office's new emphasis on assistance may help to improve line management performance, it is important that the office separate its assistance and oversight functions organizationally so that the independence of its oversight efforts is not compromised.

Recently, OSHA, OTA, and GAO have found that the ES&H Office lacks an adequate number of qualified staff to monitor occupational safety and health performance at DOE facilities. In particular, OTA found that the office lacks the field staff necessary to oversee cleanup worker health and safety. In response to our report, the ES&H Office has taken steps to improve the training of its site representatives and ensure that they are qualified to perform their duties. However, it is not yet clear whether DOE will ensure that it has an adequate number of site representatives to cover occupational safety and health.

DOE's Transition to OSHA Regulation Not Well Defined

The Department's eventual transition to regulation of its facilities by OSHA may help achieve compliance with OSHA standards by DOE contractors. Under the present system, the pace of progress in this area has been slow. However, OSHA regulation is not a panacea that will automatically improve the safety and health performance of DOE contractors. Because OSHA has other significant responsibilities, the transition needs to be planned carefully to ensure that the existing level of oversight of DOE facilities will be maintained or strengthened after OSHA takes over.

Currently, milestones to guide this transition and the exact roles to be played by OSHA, the ES&H Office, and DOE line management have not been defined. Furthermore, ES&H Office officials have told us that the transition period will probably take longer than the 3 to 5 years noted by the Secretary in her May 1993 announcement. A detailed plan, with specific and realistic milestones, could provide better assurance that this transition will proceed smoothly and produce the desired outcome of improved protection of workers' safety and health.

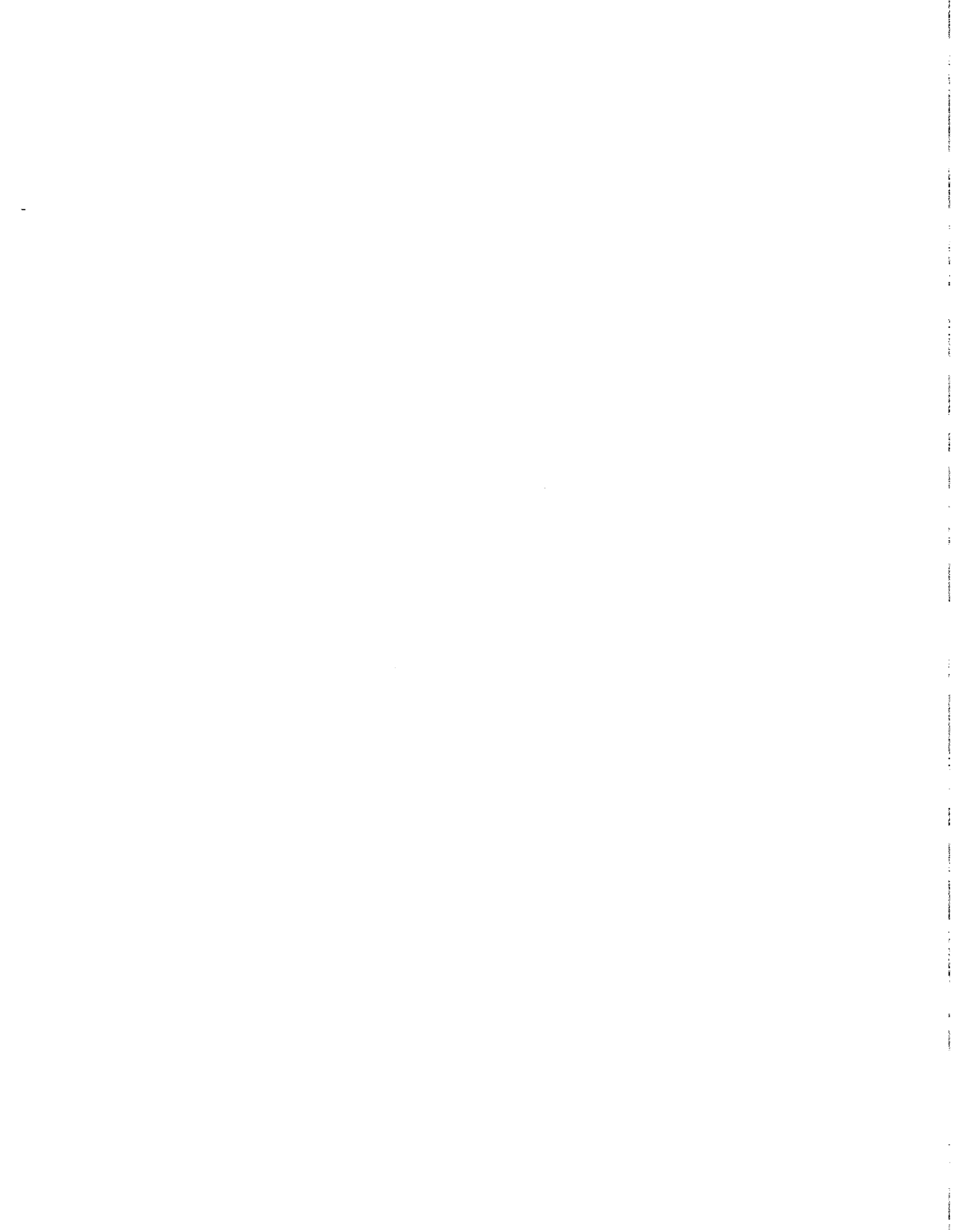
SUMMARY

In summary, Madam Chairman, ensuring the safety and health of DOE's workers will continue to be a vital concern of the Department, particularly as it embarks on its cleanup mission. The Secretary's recent initiatives represent an important step in the right direction for improving DOE's safety culture and performance. However, as we have noted in past reports and testimony, to be successful, the Department must develop a clear safety policy. Such a policy, along with specific goals and performance measures, can help DOE progress in improving its safety culture and performance. In addition, we continue to believe that the ES&H Office needs adequate authority, independence, and resources to perform vigorous independent internal oversight. Finally, a detailed plan could help to ensure a smooth, successful transition to OSHA regulation.

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Madam Chairman, this concludes my prepared statement. I will be glad to respond to any questions.

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