Mr. Chairman and Members of the Subcommittee:

I welcome the opportunity to discuss the results of our review of the Department of Energy's (DOE's) program for ensuring the safety and health of workers at the Nation's three uranium enrichment plants. This review was undertaken at your request, Mr. Chairman, and our report entitled "Department of Energy's Safety and Health Program for Enrichment Plant Workers Is Not Adequately Implemented," ½/ has been issued to you. My prepared statement summarizes the findings, conclusions, and recommendations contained in that report.

In passing the Occupational Safety and Health Act of 1970, the Congress authorized the Secretary of Labor to establish and enforce national occupational safety and health
standards. However, the act does not apply to other Federal agencies having statutory authority to prescribe or enforce standards or regulations affecting occupational safety and health. Under this exemption, DOE is responsible for establishing and enforcing occupational safety and health standards for DOE-owned, contractor-operated facilities, including the Nation's three uranium enrichment plants. DOE's safety and health program includes safety reviews of plant designs, construction reviews, preoperational reviews, and oversight of operating facilities. Oversight of the enrichment plants is the responsibility of DOE's Oak Ridge Operations Office.

At the outset, let me establish two frames of reference. First, the injury records for the three enrichment plants are better than injury statistics for similar types of operations, such as the chemical industry. To provide some perspective, the chemical industry, which has a history of taking a considerable interest in safety, has recordable injuries and lost work days due to injuries which are only about one-half the national average for all industries. In addition, radiation exposure records for the three enrichment plants indicate that employees are receiving less than maximum allowable doses.

On the other hand, the enrichment plants have experienced a number of potentially serious accidents and numerous releases of radioactive materials. Because the long-term
effects of radiation and its relation to various forms of cancer are not specifically known, exposures to radiation, in any dose, and radioactive releases to the environment are of particular concern. The hazards associated with exposure to radioactive materials, of course, underscore the importance of strong efforts to protect worker safety and health.

In summary, our review raises concerns that even the historical statistics regarding DOE's facilities may be somewhat misleading because current oversight of safety and health at the enrichment plants is not approaching the coverage required by the program. This is attributable, in part, to a shortage of safety and health staff at the Oak Ridge Operations Office over the past few years.

DOE's program to ensure the safety and health of workers at existing plants, such as the three enrichment plants, involves

--plant inspections,
--appraisals of the contractor's in-house safety and health program, and
--investigations of employee complaints.

DOE's Oak Ridge Operations Office has fallen short of program requirements in each of these areas. The Operations Office has not conducted inspections and appraisals as frequently as required. When employees have exhausted the potential for contractor resolution of safety and health complaints
and formally complained to DOE, the Operations Office has referred many complaints back to the contractor for resolution. Further, the Operations Office has not followed up on many recommended changes resulting from complaint investigations. We are also concerned that the Operations Office's safety and health group may not have sufficient enforcement tools nor the organizational independence needed to ensure worker safety and health.

**INSPECTIONS**

DOE's safety and health program requires annual physical inspections of working conditions at each of the three enrichment plants. However, at the time of our review, DOE had conducted a total of only five inspections at the three enrichment plants during the past 4 years. Without inspections, DOE cannot maintain full awareness of potential hazards and take prompt action to eliminate or mitigate the risk of accidents. We believe that a March 7, 1978, release of more than 10 tons of liquid uranium hexafluoride from a ruptured storage cylinder at the Portsmouth, Ohio, enrichment plant may have been avoided had DOE conducted on-site inspections and discussed safety and health concerns with employees.

**APPRAISALS**

We also found that DOE's Oak Ridge Operations Office was not conducting appraisals as often as needed. Appraisals are reviews of the operating contractors' safety and health
programs. DOE's Oak Ridge Operations Office has conducted appraisals more frequently than inspections, but not as often as necessary. For example, although Oak Ridge Operations Office officials believe health physics appraisals should be conducted annually, at the time of our review, the Oak Ridge and Paducah plants had not received such an appraisal since 1977 and 1978 respectively.

In addition, appraisals of contractors' safety and health programs have not focused on major problem areas, many of which had been identified in employee complaints. For example, more frequent appraisals or inspections might have avoided a contamination problem at the Portsmouth plant which existed for one and one-half years before corrective action was taken. In October 1978, the contractor's safety and health staff issued a report disclosing the problem. Subsequent appraisals of the contractor's program or on-site inspections conducted by the Oak Ridge Operations Office should have focused on this problem and revealed the lack of corrective action by the contractor. Instead, decontamination did not begin until after a January 1980 complaint by the Oil, Chemical, and Atomic Workers Union.

COMPLAINTS

Still another problem area concerned the investigation of employee complaints. Procedures for handling employee complaints encourage employees to seek resolution with the
operating contractor. If the complaint is not resolved at that level, the employee may file the complaint with the Operations Office. DOE has, in many cases, delegated to the contractor complete responsibility for handling complaints received by DOE. Referral to the contractor often reverts the employee back to a situation from which he did not obtain resolution. If DOE's program is to ensure employee safety and health protection, it is imperative the the employee be offered an objective, independent review and that the complaint not be recycled to the contractor.

In addition, although DOE's procedures do not require followup on recommended changes stemming from employee complaints, that practice would constitute good management and would be an effective safety and health tool. For example, 33 of the complaints filed by enrichment plant workers resulted in DOE citing safety and health violations or recommending changes. Yet, the Oak Ridge Operations Office did not follow up on 28 complaints. Several complaints involved similar circumstances at one plant which may have been avoided if the Operations Office had verified implementation of its initial recommendations.

The Department's procedures do require a written response to each contractor employee filing a complaint. The response is to provide the results of the investigation or state why no investigation was made. The Oak Ridge Operations Office
did not provide a written response to 27 of the 92 complaints we reviewed. In cases where the Operations Office is at least partially in agreement with the complaint, it is important that the employee be informed of the action taken. In cases where no suggestions are forwarded to the contractor, it is equally important that the employee be informed as to why no changes are being recommended and that the employee be informed of his right to appeal the decision made by the Operations Office's safety and health personnel.

ENFORCEMENT NEEDED

DOE's ability to enforce safety and health standards is also an area for concern. DOE does not have a system of penalties or fines for safety and health violations. Currently, the primary leverage the Oak Ridge Operations Office can use to bring about contractor compliance with safety and health standards is to threaten cancellation of the contract. The contracts for operating each of the enrichment plants stipulate that the contractor will operate the plant as directed, observing all DOE regulations and standards. If the contractor does not comply to the satisfaction of DOE, the contract may not be renewed or could be cancelled. We believe, however, that non-renewal or cancellation of the contract does not provide the contractor with an immediate incentive to correct safety or health violations. Moreover, DOE's concern with other factors such as production may override any proposal to terminate a contract for safety and health violations.
The cost plus award fee contract to operate the Portsmouth plant is somewhat unique and offers the Oak Ridge Operations Office the opportunity for more enforcement leverage than the cost plus fixed fee contract in effect for the Oak Ridge and Paducah plants. The cost plus award fee contract provides for the contractor to be reimbursed for all costs and paid a fee, or profit, based on its performance. The performance fee is based on various criteria, including production and safety criteria.

We believe the current use of the cost plus award fee contract for operation of the Portsmouth plant is limited, however, in its potential effectiveness as a penalty for non-compliance with safety and health standards. Only 6 percent of recent award fees were dependent on safety or health compliance. This was further diluted as the 6 percent was divided between the medical program, industrial safety, health physics, fire protection, transportation safety, etc. Thus, a safety violation or non-compliance with a recommendation in any specific safety or health area has little, if any, effect on the contractor's overall fee.

In comparison, the Occupational Safety and Health Act of 1970 provides that the Department of Labor may assess civil penalties of up to $10,000 per violation for willfully or repeatedly violating safety and health standards. Fines of up to $1,000 per violation may be assessed for individual
safety or health violations, and fines of up to $1,000 per day may be assessed for failure to correct a violation.

**Lack of Program Independence**

The Oak Ridge Operations Office is organized so that the responsibility for safety and health, and production are combined to interface with the contractors as one entity. The Operations Office's ability to independently and objectively administer a safety and health program at the enrichment plants is questionable because the responsibility for safety and health could be subjugated to the responsibility for producing enriched uranium. Although conscious trade-offs of safety and health concerns for production goals have not been detected, the structure of the organization detracts from the status and perceived authority of the safety and health program. The closeness of the safety and health program to all phases of contractor relations may have also led to the situation where the Operations Office relies on the contractor to carry out the safety and health program without adequate Operations Office oversight or monitoring.

Various alternatives exist to more clearly separate the roles of safety and health, and production. As a minimum, the Oak Ridge Operations Office's safety and health organization could become directly responsible to the Oak Ridge Operations Office manager. While this would be an improvement, the manager would, however, still be responsible for
production. Further independence could be provided by removing the safety and health program from Oak Ridge and placing it under a DOE headquarters organization.

A much more drastic alternative would be to allow an outside agency, such as the Nuclear Regulatory Commission or the Department of Labor, to administer the program. Such outside administration could better ensure independence and since both agencies already have a system of penalties and fines, could increase enforcement ability.

To transfer this responsibility to the Nuclear Regulatory Commission would require legislative changes. The Congress would have to rescind DOE's present authority and establish new authority with the Nuclear Regulatory Commission. Before the Department of Labor could administer the safety and health program, either DOE would have to agree not to exercise its present authority or the Congress would have to rescind DOE's present authority.

RECOMMENDATIONS

The problems facing DOE's safety and health program at enrichment plants raise concern about the adequacy and independence of the Department's entire safety and health program. We will soon be initiating a review of DOE's safety and health program at all its nuclear facilities. In the interim, however, we believe that several improvements should be made to improve DOE's oversight of workers' safety and health conditions at the enrichment plants.
Because the safety and health program at the Oak Ridge Operations Office is not being adequately implemented, we recommend that the Secretary of Energy take action to ensure that plant inspections and appraisals are performed as DOE's procedures require, and that all employee complaints from these facilities are investigated and followed up by DOE's Oak Ridge Operations Office. We also recommend that the Secretary of Energy take action to provide increased independence and objectivity in the Oak Ridge Operations Office's safety and health program. Such action could be in the form of an organizational change to provide insulation between safety and health concerns, and production goals and objectives.

DOE's program would be strengthened if it had the authority to impose non-reimbursable fines and penalties for safety and health violations. DOE currently lacks such authority, and we believe that the Congress should authorize the Secretary of Energy to institute a program of fines and penalties similar to that contained in the Occupational Safety and Health Act of 1970.

The Department of Energy, in commenting on a draft of this report, expressed some concern that we focused on their oversight activities without reviewing their efforts to include safety as a factor in the design and construction of new facilities. The Department was also concerned that the
contractor's safety and health program mitigates the need for extensive DOE oversight. Nevertheless, we are pleased to note that DOE informed us that immediate action was being taken to correct the staffing inadequacies at the Oak Ridge Operations Office and to improve the followup on employee complaints. In addition, DOE indicated that the organizational location of the Oak Ridge safety and health staff is under review.

---

Mr. Chairman, in your letter inviting us to testify here today, you requested that I address any differences noted between our assessment of the situation at the Portsmouth plant and that contained in DOE's September 18, 1979 and April 22, 1980, reports entitled "Investigations of Health and Safety Conditions at Portsmouth Gaseous Diffusion Plant." These reports responded to worker allegations of unsafe conditions. As you know, our review focused on the adequacy of DOE's program to ensure safety and health at all three enrichment plants, rather than on efforts to survey actual safety and health conditions on a plant by plant basis. In examining the DOE reports, however, we are concerned that DOE relied on contractor supplied data to refute a number of allegations regarding radioactive contamination. Many of the allegations are quite serious and
involve potentially dangerous situations. We believe DOE's investigation should have certainly involved independent measurements and data collection.

That concludes my prepared statement. I would be happy to respond to any questions.