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United States Government

Department of Energy

MEMORANDUM

DATE: March 10, 1997

REPLY TO
ATTN OF: IG-1

SUBJECT: INFORMATION: Report on "Inspection of the Performance Based
Incentive Program at the Richland Operations Office"

TO: The Acting Secretary

BACKGROUND:

The subject final report is provided for your information. While conducting other inspection work at the Richland Operations Office (Richland), the Office of Inspector General identified the Fiscal Year 1995 Richland Performance Based Incentive (PBI) Program as an area of concern. Specifically, we were unable to identify any written policies describing implementation procedures or program controls for this \$14.22 million program. As a result, we initiated an inspection to review (1) the Department's policies and guidance for the establishment and implementation of PBI Programs at the Department's Operations Offices, (2) the guidance developed by the Richland Operations Office for the administration of the Fiscal Year 1995 PBI Program, (3) the process used by Richland to nominate and select projects for the PBI Program, and (4) the establishment of PBI objectives at Richland and the justification for specific PBI award amounts.

DISCUSSION:

The Richland PBI Program for Fiscal Year 1995 was comprised of 34 PBIs with 86 separate Performance Objectives that totaled \$14.22 million in potential incentive fees that could be earned by the Management and Operating (M&O) Contractor. This program was established by Richland as one part of the Department's Contract Reform Initiative implemented at the Hanford Site in Fiscal Year 1995. A July 5, 1994, "DECISION MEMORANDUM," prepared by the Contract Reform Executive Committee and signed by the former Secretary of Energy, required that the Richland Operations Office and the M&O Contractor at that time, the Westinghouse Hanford Company, incorporate the full range of applicable contract reform provisions into the existing M&O contract at Richland by the beginning of October 1994.

We found that the Fiscal Year 1995 Performance Based Incentive Program at Richland has not always made the best use of incentive dollars paid to the M&O Contractor. For example, we found: (1) an instance where the fee paid was excessive when compared with the cost of labor and material to perform the PBI work; (2) instances where PBI fees were paid for work that was accomplished prior to the establishment of the PBI Program at Richland; (3) instances where PBI fees were paid for work that was not completed; (4) instances where PBI fees were paid for work that was easily achieved by the M&O Contractor; and, (5) an instance where quality and safety were compromised by the M&O Contractor in order to achieve a PBI fee. Specific examples include the payment of \$225,000 to the M&O Contractor to procure and install a ventilation fan with a total Fiscal Year 1995 project cost of only \$24,766; the payment of \$225,000 to the M&O Contractor to complete the installation of alarm panels in seven tank farms when all the work was not completed prior to the PBI completion date as claimed by the contractor; the payment of \$185,870 to the M&O Contractor for the replacement of compressed air systems in 10 tank farms when all the work was not completed prior to the PBI completion date as claimed by the contractor; and, the payment of a \$100,000 PBI incentive fee to the M&O Contractor for the implementation of laboratory software when, in fact, the software installation was completed prior to the establishment of the incentive agreement. We also identified \$950,000 in penalties that should be assessed against the M&O Contractor for incomplete work. We have recommended that action be taken to recover fees paid for incomplete work and associated penalties, and to recover fees paid for work that was performed prior to the establishment of the PBI Program.

In addition, we found numerous PBI Program weaknesses in the implementation of the Fiscal Year 1995 PBI Program at Richland. For example, this program was established without any specific written policies or procedures for the management and administration of an incentive fee program. As a result, the rationale for the selection of PBI Performance Objectives was unclear, the justification for specific PBI fee amounts could not be determined, the scope of the PBI work and the criteria for acceptance was not always clearly defined, and the expected financial and operational benefits from individual projects selected under the PBI Program were undefined in most cases. In addition, an audit trail did not exist for the Richland PBI process which identified who authored specific PBIs, who reviewed specific PBIs prior to issuance, or who approved the establishment of specific PBI fees.

In commenting on this report, Departmental managers from the Office of Environmental Management and the Richland Operations Office concurred with all 19 recommendations to improve the PBI Program.

(Signed)

John C. Layton

Inspector General

Attachment

cc: Deputy Secretary
Under Secretary
Assistant Secretary for Environmental Management
Acting Associate Deputy Secretary for Field Management
Manager, Richland Operations Office

U.S. DEPARTMENT OF ENERGY

OFFICE OF INSPECTOR GENERAL

REPORT ON INSPECTION OF

THE PERFORMANCE BASED INCENTIVE PROGRAM

AT THE RICHLAND OPERATIONS OFFICE

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Your comments would be appreciated and can be provided on the Customer Response Form attached to the report.

This report can be obtained from the
U.S. Department of Energy
Office of Scientific and Technical Information
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REPORT ON INSPECTION OF
THE PERFORMANCE BASED INCENTIVE PROGRAM
AT THE RICHLAND OPERATIONS OFFICE

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Appendix A: Fiscal Year 1995 Richland Operations Office
Performance Based Incentives

Attachments: Copies of Management Comments

1. December 23, 1996, Memorandum from the Assistant Secretary for Environmental Management
2. December 23, 1996, Memorandum from the Manager, Richland Operations Office
3. February 19, 1997, Memorandum from the Assistant Secretary for Environmental Management
4. February 24, 1997, Memorandum from the Manager, Richland Operations Office

OFFICE OF INSPECTOR GENERAL
OFFICE OF INSPECTIONS
WASHINGTON, D.C. 20585

REPORT ON
INSPECTION OF THE PERFORMANCE BASED INCENTIVE
PROGRAM AT THE RICHLAND OPERATIONS OFFICE

I. INTRODUCTION AND PURPOSE

The Fiscal Year (FY) 1995 Performance Based Incentive (PBI) Program at the Department of Energy's (DOE) Richland Operations Office (Richland) was initiated by Richland as one part of the broader DOE Contract Reform Initiative being implemented at the Hanford Site in FY 1995. This program was identified as an area of concern by the Office of Inspections as a result of previous inspection work. Specifically, during a limited review of the construction of an Effluent Treatment Facility at the Hanford Site, we were unable to identify any written policies describing PBI Program controls or implementation procedures. We were told that Richland Operations Office Program Management personnel were not directly involved in the selection of the Effluent Treatment Facility project for the PBI Program, or in the determination that this particular PBI would be established with a potential fee of \$1 million.

The PBI Program at Richland implemented certain elements of the Department's Contract Reform Initiative and allowed the Management and Operating (M&O) Contractor to earn (or forfeit) fee from a Performance Based Incentive Fee Pool for work performed under the Management and Operating Contract. This fee was payable to the M&O Contractor upon the completion of certain PBI objectives, and after approval of payment by the Contracting Officer. The Richland PBI Program for FY 1995 was comprised of 34 separate PBI projects that totaled more than \$14 million in potential incentive fees.

The purpose of this inspection was to review the processes used by the Department of Energy's Richland Operations Office in implementing and administering a Performance Based Incentives Program at the Hanford Site. In reviewing the PBI Program at Richland, we evaluated:

1. The Department of Energy's policies and guidance on the establishment and implementation of PBI Programs at the Department's Operations Offices.
2. The guidance developed by the Richland Operations Office for the administration of the Richland PBI Program.

3. The process used by Richland to nominate and select projects for the PBI Program.
4. The PBI objectives established for specific projects and the justification for specific PBI award amounts.

II. SCOPE AND METHODOLOGY

This inspection included a general review of 34 Performance Based Incentives with 86 separate Performance Objectives issued to the Westinghouse Hanford Company in FY 1995. As part of our inspection, we reviewed: (1) the PBI contract files for the 34 Performance Based Incentives issued in FY 1995; (2) the "PERFORMANCE BASED INCENTIVES" provisions of the Management and Operating Contract with the Westinghouse Hanford Company under Modification M-111 dated January 25, 1995; (3) the "PERFORMANCE, OBJECTIVES, MEASURES, EXPECTATIONS AND FEE DISTRIBUTION" provisions of the follow-on Fluor Daniel Hanford Contract dated October 1, 1996; (4) selected portions of the Multi-Year Program Plan for the Hanford Site; (5) selected Milestone Description Sheets for projects that were selected under the Performance Based Incentive Program; and, (6) DOE Acquisition Letter 94-14 on performance based management contracts.

In addition, this inspection also included a review of two reports prepared by the Richland Operations Office which discussed the results of two Richland Operations Office reviews of seven FY 1995 PBI performance objectives. The first of these reviews resulted in a report dated August 5, 1996, titled "Special Assessment Report" for the "241-A-701 Air compressor Upgrade." This review was initiated by the DOE Richland Tank Waste Remediation System (TWRS) organization after a June 10, 1996, "near miss" incident involving work that had been certified as complete by the Management and Operating Contractor under a FY 1995 PBI for the replacement of compressed air systems in 10 tank farms. The second of these reviews resulted in a report dated September 24, 1996, titled "REVIEW OF TANK WASTE REMEDIATION SYSTEM (TWRS) FISCAL YEAR 1995 PERFORMANCE BASED INCENTIVES." This review was also initiated by the TWRS organization in order to identify any systematic and program weaknesses associated with the award of TWRS PBIs in FY 1995.

As part of our review, the Office of Inspections obtained information at the Richland Operations Office and the Westinghouse Hanford Company. We also interviewed Department of Energy Headquarters officials, Richland Operations Office officials, and Westinghouse Hanford Company personnel. This inspection was conducted between September 1995 and December 1996.

This inspection was conducted in accordance with the

"Quality Standards for Inspections" issued by the President's Council on Integrity and Efficiency.

III. SUMMARY RESULTS OF INSPECTION

Our inspection found that the Performance Based Incentive Program at Richland has not always made the best use of incentive dollars paid to the Management and Operating Contractor. For example, we found: (1) an instance where the fee paid was excessive when compared with the cost of labor and material to perform the PBI work; (2) instances where PBI fees were paid for work that was accomplished prior to the establishment of the PBI Program at Richland; (3) instances where PBI fees were paid for work that was not completed; (4) instances where PBI fees were paid for work that was easily achieved by the Management and Operating Contractor; and, (5) an instance where quality and safety were compromised by the Management and Operating Contractor in order to achieve a PBI fee.

We also found numerous PBI Program weaknesses in the implementation of the FY 1995 PBI Program at Richland. For example, this program was established without any specific written policies or procedures for the management and administration of an incentive fee program. As a result, the rationale for the selection of PBI performance objectives was unclear, the justification for specific PBI fee amounts could not be determined, the scope of the PBI work and the criteria for acceptance was not always clearly defined, and the expected financial and operational benefits from individual projects selected under the PBI Program were undefined in most cases. In addition, since the PBI document did not contain an audit trail, we could not determine who authored specific PBIs, who reviewed specific PBIs prior to issuance, or who approved the establishment of specific PBI fees. We attempted to obtain this information through discussions with Richland Operations Office personnel responsible for monitoring the contractor's PBI performance. However, these individuals could not provide the information in many cases.

We believe that the FY 1995 PBI Program at Richland did not always provide incentives to the Management and Operating Contractor in an efficient manner to accomplish tasks at the Hanford Site. Some examples include the payment of \$225,000 to the M&O Contractor to procure and install a ventilation fan with a total FY 1995 project cost of only \$24,766; the payment of \$225,000 to the M&O Contractor to complete the upgrade of alarm panels in seven tank farms, when the contractor's Milestone Description Sheet indicated that the upgrade requirement for six of the seven alarm panels were completed prior to the PBI being established, and a Richland Review Team found that all the work was not completed prior to the PBI completion date as claimed by the contractor; the payment

of \$185,870 to the M&O Contractor for the replacement of compressed air systems in 10 tank farms, when the contractor's Milestone Description Sheet indicated that seven of the 10 systems were completed prior to the establishment of the PBI Program, and a Richland Review Team found that all the work was not completed prior to the PBI completion date as claimed by the contractor; and, the payment of a \$100,000 PBI incentive fee to the M&O Contractor for the implementation of laboratory software, when in fact the software installation was completed prior to the incentive fee being offered. We believe that the use of PBI dollars as described above had the impact of reducing the effectiveness of the PBI Program and reduced the dollars available for other potential PBI activities at the Hanford Site.

As shown in the "BACKGROUND" section of this report, the Management and Operating Contractor earned almost as much in PBI fees in FY 1995 as was earned in award fees in the three previous fiscal years combined, when no similar incentive program was in effect. In those previous three fiscal years, the Management and Operating Contractor earned a total of \$13.7 million in award fees compared with an available award fee pool of \$62.4 million. In FY 1995, the Management and Operating Contractor earned \$11.5 million in incentive fees compared with an available incentive fee pool of \$14.22 million. Under the FY 1995 PBI Program, the percentage of available fee earned increased significantly when compared with prior year award fee programs, from an average of 22 percent under the award fee structure in FYs 1992, 1993, and 1994, to 80.9 percent under the PBI structure in FY 1995.

This increase in the percentage of available fee earned was due in part to several FY 1995 PBI fee payments that were inappropriate or questionable. As discussed in this report, we found through discussions with Richland officials and through the review of Richland documentation that \$910,870 in PBI fees was paid for incomplete work. This documentation included the results of the two Richland Operations Office reviews of seven FY 1995 PBI Performance Objectives as described in the "Special Assessment Report" for the "241-A-701 Air compressor Upgrade" dated August 5, 1996, and the "REVIEW OF TANK WASTE REMEDIATION SYSTEM (TWRS) FISCAL YEAR 1995 PERFORMANCE BASED INCENTIVES" dated September 24, 1996. The TWRS review teams reported that work required under three of seven FY 1995 PBI Performance Objectives was not completed by the Management and Operating Contractor, even though the contractor had certified that the work was completed and had been paid \$910,870 in PBI fees associated with that work.

We also found that \$950,000 in penalties was not assessed against the contractor for the PBI work that was not completed. Each PBI contained a penalty provision where the contractor would forfeit fee if the PBI task was not

completed. In the case of the PBIs discussed in this report where work was not completed, the contractor would have been subject to the forfeiture of the maximum available fee, or \$950,000. We believe that the \$910,870 in PBI fees paid for incomplete work should be recovered from the contractor, and that \$950,000 in penalties should be assessed against the contractor consistent with the fee terms of the PBIs involved. This action has been proposed by the Richland Office of Tank Waste Remediation System in a September 26, 1996, letter to the Richland Director of the Procurement Services Division.

In addition, we have identified \$111,000 in PBI fees paid for PBI work that was completed prior to the establishment of the PBI Program at Richland. We are recommending that the Richland Operations Office recover this amount since the PBI work was accomplished without an approved performance incentive in place. We are also recommending that the DOE Richland Contracting Officer review the circumstances surrounding the modification of a PBI after the work was completed to ascertain if a \$843,333 payment made by Richland to the M&O Contractor was appropriate.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, stated that:

"We were aware of deficiencies in our FY 1995 Performance-based Incentive (PBI) program, and had begun to take preliminary steps to address deficiencies prior to the receipt of your report. Your report has clearly confirmed some of the same problems we found in earlier reviews of the Tank Waste Remediation System safety initiatives.

"Based on our review of your draft report, the cumulative amount of incentive fees that have been questioned is seven percent of the total fee available to the contractor. We plan to review FY 1995 and FY 1996 incentives and work aggressively to recover incentive fees that were inappropriately paid."

In comments to the Official Draft Report, the Manager stated that:

"Since our December 23, 1996, response to the initial draft report, we have initiated actions to implement your recommendations and resolve concerns about DOE Richland Operations Office (RL) performance based incentives (PBIs). Westinghouse Hanford Company (WHC) was directed on January 17, 1997, to reimburse \$410,870 for the fee paid to WHC in error and the penalty due to RL for PBI 95-011(d). In addition, a Contract Incentive Review Team, co-chaired by the

Directors of the Procurement and Contract Finance and Review Divisions, was established to review each of WHCms FY 1995 and FY 1996 PBIs.

"The purpose of the Contract Incentive Review is to: 1) ensure that each contract incentive was adequately and appropriately validated and documented, 2) assemble the information necessary to close out the WHC contract, and 3) apply lessons learned from the experience with WHC contract incentives to the RL fee administration process. This review is scheduled to be completed by February 28, 1997."

The Manager also stated that:

"Our comments regarding the report's recommendations have not changed since our previous response. However, we currently are not in full agreement with all of the findings and conclusions regarding the specific PBIs cited in the draft report and will be better able to respond to those findings and conclusions after the Contract Incentive Review is completed."

IV. BACKGROUND

Richland Mission and Work Scope

According to the DOE "Field Fact Book" dated February 1996, the mission of the Richland Operations Office is to manage waste products, including the researching, developing, applying, and commercializing technologies related to waste management, cleanup, and environmental restoration. Additionally, engineering, scientific, and research programs are conducted on environmental restoration, tank waste remediation, waste management, nuclear energy, and energy research. In February 1996, the Richland Operations Office monitored the activities of 13,186 contractor personnel with 531 DOE employees. The major contractors included the Westinghouse Hanford Company (WHC) with 6,351 employees who performed the function of the Hanford Site Management and Operating (M&O) Contractor, Battelle Memorial Institute with 3,169 employees who managed Pacific Northwest Laboratories, and Kaiser Engineering Hanford (KEH) with 1,896 employees who provided Hanford Site engineering services in support of WHC.

The FY 1996 environmental research and restoration activities managed by the Richland Operations Office were funded in the amount of \$1.487 billion (as of February 1996).

Fees Payable to the M&O Contractor

FIGURE 1

FY 1995 RICHLAND/WHC FEE STRUCTURE

BASE FEE	\$6,000,000
AWARD FEE	\$10,150,000
PBIs	\$14,320,000
OTHER FEES	\$10,530,000

A feature of the M&O contract with the Westinghouse Hanford Company has been the payment by the Department of Energy to WHC of base, award, and incentive fees. The FY 1995 allocation of the \$41 million in potential fees payable to WHC is shown in Figure 1. The Base Fee of \$6,000,000 for the entire year was established and payable to the contractor in evenly divided monthly installments for the first six months of FY 1995 to cover unallowable costs. An Award Fee pool of \$10,150,000 was established where the contractor could earn this fee amount for meeting Performance Evaluation Plan goals. PBI incentive fees of \$14,320,000 were established as part of the DOE Contract Reform Initiative where the contractor could earn this fee amount for meeting objective criteria. Other fees of \$10,530,000 were also established as part of the DOE Contract Reform Initiative where the contractor could earn this fee amount for meeting cost reduction goals such as those under the Challenge 170 program.

According to a document provided by the Richland Operations Office, base fees paid to the contractor for Fiscal Years 1992-1994 were as follows: \$4,200,000 in FY 1992; \$10,750,000 in FY 1993; and \$12,500,000 in FY 1994. It should be noted that the base fee paid to the contractor in FY 1995 was only \$6,000,000, a significant reduction compared to FY 1993 and FY 1994. Richland Operations Office officials told us the reduction in the FY 1995 base fee amount was made to implement the new performance based contract negotiated at Richland for FY 1995 as part of the DOE Contract Reform Initiative. These officials told us the dollars that were taken out of the base fee were allocated to the PBI incentive fees. This had the effect of reducing a fixed fee, which the contractor automatically received, and increasing the amount of fee "at risk."

Payment of Award Fees

Payments of award fees to the contractor were made through an award fee cycle which consists of two, six month award fee periods in a single fiscal year. The Manager of the Richland Operations Office was designated as the Government Fee Determining Official (FDO), and, as part of the DOE M&O contract with the Westinghouse Hanford

Company, the contractor agreed that the determination of the award fee earned would be made by the FDO, and that such determination was binding on both parties. The contract also stated that the evaluation of contractor performance would be in accordance with an Award Fee Performance Evaluation Plan that would be unilaterally established by the Government, and upon which the determination of the award fee earned would be based.

The Award Fee Evaluation Plan included the criteria to be considered under each performance area to be evaluated, and the percentage of award fee available for each area. As stated in the WHC Award Fee Evaluation Plan for the Award Fee Period of April 1, 1995, through September 30, 1995, performance areas included the following: Environment, Safety and Health (51 percent of award fee); Planning Productivity, Efficiency and Responsiveness (9 percent of award fee); and a "Program Section" (40 percent of award fee), which contained performance objectives for Tank Waste Remediation, Facilities Transition, Waste Management, Spent Fuel, and the Waste Encapsulation and Storage Facility.

In an interview with the Richland Operations Office Deputy Manager, the Deputy Manager said that the M&O Contractor was not being motivated by the previously used award fee structure, but that the contractor had performed well with the implementation of the PBI Program in FY 1995.

According to the Westinghouse Hanford Company Acting Manager for Contracts Administration, WHC assisted in establishing the PBI process at the Richland Operations Office due to dissatisfaction with flaws in the award fee process. Specifically, the WHC Acting Manager for Contracts Administration said, while expressing an opinion, that the past award fee process was very subjective, and had unfairly denied WHC award fees that they had earned, due, in part, to DOE Headquarters intervention in downgrading scores so that reduced award fees were earned by WHC. The WHC Acting Manager for Contracts Administration also said an award fee process needed to be implemented that would focus on deliverables, and that the PBI process was part of several such programs, where the question of whether you did or did not achieve your stated performance goals was readily apparent.

FIGURE 2

AWARD FEES PAYED BY RICHLAND TO WHC

FY 92 Award Fee Pool:\$15.9 Million	FY 92 Award Fee Paid:\$8.5 Million
FY 93 Award Fee Pool:\$21.5 Million	FY 93 Award Fee Paid:\$2.7 Million
FY 94 Award Fee Pool:\$25 Million	FY 94 Award Fee Paid:\$2.5 Million

As depicted in Figure 2, WHC had received a fractional amount of the allocated award fee pool during the three fiscal years prior to the establishment of the PBI Program at the Richland Operations Office in FY 1995.

Management Comments:

In comments to the Official Draft Report, the Assistant Secretary for Environmental Management stated that:

"DOE's position is that WHC was not unfairly denied award fee they had earned. Award fee earnings are determined by the Government based on a comprehensive evaluation of the contractor's accomplishments and deficiencies in specified performance areas. Fifty-one percent of the potential fee was historically allocated to environment, safety and health. Systemic safety problems leading to fatalities at the site in 1992 and 1993 significantly affected the award fee earned. All fee determinations were made in accordance with established procedures and contractual provisions."

FY 1995 Performance Based Contract Implementation

As part of the Contract Reform Initiative, the Department recognized that many of the unique contracting systems and practices that served the Department in the past were no longer suitable for the effective and efficient accomplishment of the Department's changing mission: managing the nation's remaining warheads, strengthening non-proliferation efforts, environmental restoration, and pursuing science and energy initiatives. In February 1994, the Department's Contract Reform Team (formed by the Secretary of Energy in June 1993 to evaluate the contracting practices of DOE) issued a report titled "Making Contracting Work Better and Cost Less" which outlined basic elements of contract reform. We were told that Performance Based Incentives evolved from three of the basic elements of contract reform: (1) Performance Criteria and Measures; (2) Performance Based Incentives (incentives that encourage and reward achievement of stated performance requirements); and, (3) Results-Oriented Statement of Work.

In a July 5, 1994, "DECISION MEMORANDUM" prepared by the Contract Reform Executive Committee and approved by the Secretary of Energy, the Richland Operations Office and the Westinghouse Hanford Company were required to incorporate into the existing Management and Operating contract at Richland the full range of applicable contract reform provisions by the beginning of October 1994. On January 25, 1995, the existing Management and Operating contract at Richland was modified to include provisions of

contract reform. The incorporation of contract reform provisions resulted in the establishment of the Richland Operations Office's Performance Based Incentive program.

DOE Wide Implementation

According to DOE Acquisition Letter 94-14, dated September 28, 1994, "performance-based management contracts" were to be used by the Department of Energy for the operation of DOE Government owned or controlled laboratories, and weapons production facilities, where the use of such contracts would reflect the Department's policy and intent to convert traditional Management and Operating contracts to the new form of contract called for in the Contract Reform Team Report. As stated in DOE Acquisition Letter 94-14:

"The Department of Energy's Contract Reform Team Report concluded that the Department's policies and practices regarding the extension of its management and operating contracts needed to be revamped. The Contract Reform Team found that existing policies favored indefinite extensions of incumbent contractors and that in practice, few competitions for management and operating contracts were undertaken. Such policies and practices effectively precluded the introduction of best management practices into the Department's laboratory and weapons production complex."

Section II. Contract Term and Options to Extend (b) of DOE Acquisition Letter 94-14 stated that:

"Contracts awarded prior to the effective date of this Acquisition Letter using competitive procedures may be modified to incorporate an option to extend the term of the contract for a period not to exceed 5 years where:

* * * * *

(3) the contractor has also agreed to a contract modification necessary to implement other performance-based management contract provisions."

Richland Implementation

In an interview with the Richland Operations Office Deputy Manager, the Deputy Manager said that the Richland Operations Office PBI Program was developed to support the Department of Energy's contract reform initiatives. He said that DOE Headquarters officials asked for input from Richland in the form of a proposal with measurable parameters for work accomplishment as part of the M&O contract. He said that the PBIs submitted to DOE Headquarters were reviewed by the Office of the Assistant

Secretary for Environmental Management.

The Deputy Manager said that beginning in the Summer of 1994, the Richland Operations Office established a team to implement the PBI Program at Richland, with a goal of having the PBI Program in place by October 1, 1994. However, the Deputy Manager said that it was recognized by September 1994 that the team had reached an impasse, and that DOE Headquarters had returned the first round of 13 draft PBIs from Richland as being insufficient for a contract incentive program effort. The Deputy Manager also said that DOE Headquarters officials indicated to Richland management that the PBI fee pool should be increased along with the number of PBIs, and required that the PBI Program be in place at Richland by December 1994. In response to the Official Draft Report, the Assistant Secretary for Environmental Management stated that the guidance to Richland was to allocate more of the available fee pool dollars to objectively measured performance based incentives, and to reduce the amount of the subjective award fee portion of the fee pool.

The Deputy Manager said that, after receiving DOE Headquarters input regarding modifying the existing M&O contract with the Westinghouse Hanford Company, WHC balked at the proposed contractual terms which included PBI provisions. The Post Negotiation Summary for the contract modification indicates that WHC was concerned about, among other things, the ratio of performance incentives to the award fee pool included in the proposed contract. In January 1995, following a meeting between DOE Headquarters officials, Richland officials, and Westinghouse Corporate officials, a DOE official gave a deadline of 5:00 P.M. on January 25, 1995, as the time and date that the contract modification would be signed or the process of competing for the site Management and Operating contract would begin.

Management Comments:

In response to the Official Draft Report, the Assistant Secretary for Environmental Management stated that:

"Given the Secretary's July 5, 1994, Decision Memorandum announcing an extension of the WHC contract conditioned on 'the full range of applicable contract reform provisions' being incorporated into the contract by October 1994, a negotiating deadline was necessary to determine whether an immediate competition would be required."

As stated in the "Postnegotiation Summary" for this contract, "WHC submitted numerous PBIs for RL's consideration, which were reviewed and revised up until the last minute prior to signature." The Postnegotiation Summary also stated that the PBI fee pool was raised from

\$11,000,000 to \$14,320,000, and that the PBIs were agreed to on January 25, 1995. Appendix A provides a summary of the PBIs established by Richland in FY 1995, showing the PBI descriptions, the dates the PBIs were established and completed, the FY 1995 cost of the PBI work, and the PBI fees available and earned. As stated in the previous section of this report, contracts awarded prior to the effective date of Acquisition Letter 94-14 could be modified to incorporate an option to extend the term of the contract for a period not to exceed 5 years where the contractor has also agreed to a contract modification necessary to implement other performance based management contract provisions. The DOE Richland contract with WHC was extended for a period of one year effective with Contract Modification M-111 which included performance based management provisions.

Clause H-15, "PERFORMANCE BASED INCENTIVES," of Contract Modification M-111 to Contract DE-AC06-87RL10930, signed January 25, 1995, established the PBI Program at the Richland Operations Office and stated that:

"The Government may, at its sole discretion, establish Performance Based Incentives which will be described and provided to the Contractor in writing annually or at other times as determined by the Government. The Contractor may present input, which the Government may consider and discuss with the Contractor, as part of the establishment of the Performance Based Incentives. The Contractor's input must be received by July 1 of each year. The Performance Based Incentives will provide for the Contractor to earn or forfeit fee as described therein from a Performance Based Incentive fee pool. While the Contractor may earn or forfeit fee as a result of performance on the individual incentives described, the net fee earned from the pool cannot be less than zero."

PBI Document Format

The PBI document is an extension of the DOE Richland M&O contract with the Westinghouse Hanford Company resulting from Clause H-15, of Contract Modification M-111. The format of the PBI document describes the task and the amount of the incentive. There are four different information sections to the FY 1995 PBI document that prescribe how the contractor may earn the PBI specific incentive fee.

Each PBI contains an identification section which states the PBI Number (e.g. 95-010), the PBI Owner organization at Richland, and the date that the PBI was established. Each PBI also contains a "Performance Objective" section which describes what the contractor is to accomplish to qualify for payment of the PBI award amount.

Additionally, each PBI contains a "Contract Performance Measures" section that specifies what level of performance will qualify the contractor for incentive fee payment at either an "Excellent," "Satisfactory," or "Unsatisfactory" level, and the potential fee associated with each level. As stated in Contract Clause H-15, the contractor may either earn or forfeit fee. An "Excellent" rating allows the contractor to earn a fee, a "Satisfactory" rating does not allow the contractor to earn a fee, while an "Unsatisfactory" rating requires the contractor to forfeit fee from the incentive fee pool. However, the net fee earned from the pool cannot be less than zero.

The last section on the PBI document is the "Basis for Measurement" section which describes conditions associated with the payment/forfeiture of incentive fee, such as the amount of fee available per day during the PBI performance period. The PBI performance period is the time frame described within each PBI, in which the contractor must accomplish the Performance Objective in order to receive an incentive fee payment.

A review of PBI documents that implemented the FY 1995 Richland PBI Program has revealed similarities between many of the PBIs regarding incentive fee calculations and periods of performance. Specifically, many PBIs specify a schedule date that will result in a "Satisfactory" quality level where no incentive fee is provided for meeting that date. These PBIs also state a period of time for PBI task performance which is usually 30 days in advance of the "Satisfactory" date. The 30 day performance "window" is the period of time in which the contractor may earn a prorated portion of the incentive fee for "Excellent" performance, or the maximum (entire) fee if the performance date is achieved 30 days or more in advance of the "Satisfactory" date. Conversely, the contractor would be penalized and forfeit fee if the PBI task completion was later than the "Satisfactory" date. The amount of incentive fee penalized would then be calculated based upon the number of days that the task was late, up to the maximum fee amount at the "Unsatisfactory" level.

The PBI total fee is usually prorated among the performance days in the "window," e.g., a total incentive fee of \$300,000 would be paid to the contractor for completing the PBI 30 days or more ahead of the "Satisfactory" date, or \$150,000 for completing the work 15 days ahead of schedule. If the contractor completed the work 15 days past the "Satisfactory" date, the contractor would be required to forfeit \$150,000 from PBI fee amounts otherwise earned under this incentive program. If the contractor completed the work 30 days or more past the "Satisfactory" date, the contractor would be required to forfeit the maximum of \$300,000.

Completion of PBI Performance Objectives and the PBI Payment Process

Following the completion of a PBI performance objective, a payment process is initiated by the contractor through a notice of completion package. During our inspection, we found that after a PBI performance objective was satisfied, the contractor manager responsible for completing that work would document this condition with a "Notice of Completion" letter that would be addressed to the DOE Richland Operations Officer. The "Notice of Completion" letter would describe the performance objective that was completed, the date the work was completed, and the amount of the incentive fee claimed. This letter is also used as an attachment to a "Notice of Completion" package which is originated by the respective contractor manager and forwarded to the appropriate DOE Richland Programmatic Assistant Manager and/or Director, the Richland Operations Officer, and the Richland Contracting Officer for concurrence. The process is completed with authorization from the DOE Contracting Officer for the contractor to draw down the appropriate amount of earned incentive fee from the contractor's letter of credit account.

PBI Fees Paid by Richland to WHC Compared to WHC's Award Fee Experience

At the time of our inspection, FY 1995 PBI fees had been paid by Richland to WHC that greatly exceeded the past award fees earned by WHC over the prior three fiscal years. Specifically, by the end of FY 1995, Richland had established 34 different PBIs with WHC that contained 86 different performance objectives. As of March 5, 1996, \$11,485,572 in PBI fees had been paid to the M&O Contractor for PBI work under the FY 1995 PBI Program, compared to a three year annual average (FY 1992 - FY 1994) of only \$4,577,916 in award fees paid to WHC. Figure 3 shows a comparison of base fees, award fees, and incentive fees earned by WHC in FY 1992 - FY 1995.

FIGURE 3

Base, Award and Incentive Fees Paid by Richland to WHC
(Millions of Dollars)

FY 95	PBIs	\$11.5 Million
FY 95	Award Fee	\$1.5 Million
FY 95	Base Fee	\$6 Million
FY 94	Award Fee	\$ 2.5 Million
FY 94	Base Fee	\$12.5 Million
FY 93	Award Fee	\$2.7 Million
FY 93	Base Fee	\$10.75 Million
FY 92	Award Fee	\$8.5 Million
FY 92	Base Fee	\$4.2 Million

Per a document titled "History of Westinghouse Hanford Company Award Fee," provided by the DOE Richland Operations Officer, "'Contract Reform' was implemented via a modification to WHC's contract which was effective October 1, 1994. The entire base fixed fee for FY 1995 was paid during the first six months of the fiscal year; the base fixed fee for the second six months was zero. The contract modification also established a revised fee structure which includes several fee incentive features for specific accomplishments. As a result, this award fee evaluation was not a comprehensive evaluation of WHC's performance, and it is not directly comparable to award fee performance for prior periods."

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, stated that:

"Changing old ways of doing business at Hanford has been a difficult process that required a continuous improvement approach. DOE recognized that a negotiated contract extension in 1995 with the Westinghouse Hanford Company was an interim step; full competition of the management contract and privatization of the Tank Waste Remediation System are examples of the steps we have taken to improve contractor accountability and performance.

"Performance-based incentives were an essential part of the negotiated contract extension with the Westinghouse Hanford Company. A fundamental change in contracting methodology was initiated to correct:

poor performance on environment, safety, and health (ES&H) activities;

unacceptable performance in meeting regulatory and project commitments;

pervasive business-as-usual thinking; and
lack of effectiveness in using an award fee to motivate improved contractor performance.

"Our basic approach for the performance-based incentives was to define specific, measurable objectives; place performance risk on the contractor and apply upward and downward adjustments to the fee based on actual performance. A new fee structure was established in the contract extension, reducing base fees by one-half, reducing available award fees, and placing all fees (except reduced base fee) at risk for unacceptable performance.

"Even though problems were experienced with some of

the FY 1995 Performance-based incentives, significant contractor performance improvements were realized during FY 1995, including:

improved performance on ES&H activities, demonstrated by the downward trend in accident severity rates, a key measure of improved safety;

improved performance and productivity in meeting regulatory and project commitments, evidenced by our ability to exceed original scope objectives during a period of major budget shortfalls;

re-engineered processes, with a cost reduction initiative resulting in more than \$300M of savings (validated by Arthur Anderson); and improved overall contractor performance."

The Manager provided additional information on contractor performance improvements in comments to the Official Draft Report. The Manager stated that these improvements included a 67 percent reduction in accident severity rates and completion of 94 percent of the enforceable regulatory milestones on or ahead of schedule.

In further comments to the Initial Draft Report, the Manager, Richland Operations Office, also stated that:

"The draft report's comparison of the prior years award fee payments with the FY 1995 PBI payments does not include an assessment of the contractor's overall performance during the period covered by the PBIs. During that period the contractor initiated numerous management changes and re-engineering initiatives and was able to improve both safety and efficiency as a result of RL [Richland] direction and the fee incentives. This improved performance would have substantially increased the contractor's award fees had we retained the prior years award fee structure."

In comments to the Official Draft Report, the Manager, Richland Operations Office, stated that: "the questioned FY 1995 PBI amounts are only half of the \$6.0 million reduction in base fee and only 7 percent of the total available fee." The Manager also stated that Richland feels that: "the reduction in base fee is an important issue when evaluating the inefficiencies and lessons learned from the initial year of the PBI Program, and that the contractor's total base plus earned PBI fees were probably comparable to what they would have earned under the previous base plus award fee arrangement."

Inspector Comments:

At this time, we have no analytical basis for assessing

how improved performance under the PBI Program, or through other Richland direction in FY 1995, would have substantially increased the contractor's award fees had Richland retained the prior years award fee structure. It is clear, based on our inspection, that PBI fee incentives in FY 1995 targeted activities relating to site management, safety, and projects that would have impacted the efficiency of operations at the site. However, these incentives did not cover the entire work scope of the contractor in FY 1995. As shown in Appendix A, these incentives involved projects and activities whose total cost in FY 1995 was only \$162 million compared with the total \$1.381 billion budgeted for the contract in FY 1995. As discussed in a February 1996 independent audit report prepared for Richland, the contractor claimed more than \$300 million in cost savings for FY 1995 under the Challenge 170 Program. However, the contractor received additional fee over and above that received for the PBI Program for achieving these savings.

Management Comments:

In comments to the Official Draft Report, the Manager, Richland Operations Office, stated that:

"The report's comparison of prior years' award fee payments with the FY 1995 PBI payments . . . appears to be a misleading comparison of the costs for the work covered by PBIs to the total contract cost. The \$162 million cost for the PBIs does not include any costs for six safety PBIs that are crosscutting across the entire contract scope, and the report does not acknowledge that RL continued to have an award fee program concurrent with the PBI Program. It should also be noted that the award fees were not evenly applied to the total contract in FY 1995 and prior years and a majority of the award fees were often applied to only a portion of the total contract scope. The use of PBIs did not significantly decrease the scope of work that would have to be performed in order for the contractor to earn fee."

Inspector Comments:

As stated in Appendix A, we determined that a total of \$162 million was the dollar value of the work scope that was incentivized for Performance Objectives as part of the FY 1995 PBI Program at Richland. As shown in Appendix A, we recognized that the FY 1995 project cost for the six safety PBIs (PBIs 95-003 through 95-008) was not available from Richland Operations Office personnel. However, we do not believe that the lack of specific cost information for these six PBIs results in a misleading comparison of the costs for the work covered by PBIs to the actual contract cost. It should be noted that the safety PBIs were crosscutting across the contract work scope in that they

sought to achieve lost workday incident and case rates below the DOE average, sought to reduce radiological contaminated areas, and sought to reduce the number of detectable personnel contamination events. However, these PBIs only incentivized the safety objectives, and did not incentivize contractor performance relating to projects and other activities included in the contract work scope.

As acknowledged in the "BACKGROUND" section of this report, Richland did have an Award Fee pool of \$10,150,000 in FY 1995 that the contractor could earn for meeting Performance Evaluation Plan goals.

V. RESULTS OF INSPECTION

The results section of this report is divided as follows:

- A. PBI FEE WAS EXCESSIVE
- B. PBI FEES PAID FOR WORK THAT WAS ACCOMPLISHED PRIOR TO THE PBI PROGRAM BEING ESTABLISHED AT RICHLAND
- C. PAYMENT MADE BY RICHLAND FOR INCOMPLETE PBI WORK
- D. PBI PERFORMANCE OBJECTIVES APPEAR TO BE EASILY ACHIEVED
- E. QUALITY AND SAFETY WERE COMPROMISED TO ACHIEVE A PBI FEE
- F. RICHLAND PBI PROGRAM ADMINISTRATIVE WEAKNESSES
- G. INSPECTION OBSERVATIONS ON OTHER RICHLAND PBI PROGRAM ISSUES

A. PBI FEE WAS EXCESSIVE

Our inspection found that a PBI fee paid to the Richland M&O Contractor for the installation of a ventilation fan was excessive. Specifically, we found that the Richland M&O Contractor earned a fee of \$225,000 to install a waste storage tank ventilation fan in a tank at the SY Tank Farm at the Hanford Site. However, the total Fiscal Year 1995 project cost for the ventilation fan replacement totaled only \$24,766.

Replacement of SY Tank Farm Ventilation Fan

As part of the Hanford Site tank farm maintenance operations, one activity identified under the FY 1995 Richland PBI Program was the replacement of a ventilation fan in the SY Tank Farm. This activity had been identified as a Secretarial Safety Initiative in 1993 when the Secretary of Energy directed that DOE officials at Richland develop a list of action items to improve safety

at the Hanford Site tank farms. The PBI 95-011(g) Performance Objective, designated as "Replace ventilation fan in SY farm to further reduce spark potential by August 31, 1995 (SI 2k)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule. According to the WHC TWRS Milestone Description Sheet dated September 22, 1994, tasks within this scope of work included the design, fabrication, and delivery of a spark resistant replacement fan; installation of the new fan; and acceptance testing.

WHC certified that the work required under PBI 95-011(g) was complete, and was paid a fee of \$225,000. In a Westinghouse Hanford Company letter from the WHC Director, Tank Farm Transition Projects, to the DOE Richland Director, Tank Safety Analysis Division, dated July 17, 1995, subject: "COMPLETION OF SAFETY INITIATIVE: REPLACE VENTILATION FAN IN SY FARM TO FURTHER REDUCE SPARK POTENTIAL BY AUGUST 31, 1995 (SI 2K)," the WHC Director stated that: "The milestone was completed on July 6, 1995 as evidenced by the signed off Work Order. . . ." As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$225,000 for completing the ventilation fan project at least 30 days ahead of schedule.

Statement by Richland Project Manager

The FY 1995 cost to complete the replacement of the ventilation fan in the SY tank farm was significantly less than the PBI fee that was received by WHC for completing the work. During an interview with the DOE TWRS Flammable Tanks Project Manager, the Project Manager said that he had reviewed a Budgeted Cost for Work Planned schedule chart associated with the SY Tank Farm ventilation fan PBI where he found that the total cost of labor and materials to complete this PBI work was in the order of \$40,000. When asked by the Office of Inspections about the relatively high incentive fee for a \$40,000 task, the Project Manager said that the incentive fee amount must either be a mistake or representative of the importance of completing the Secretarial Safety Initiative on time. Our review of the PBI contract file found no documentation to support the rationale used for the establishment of a \$225,000 fee for this PBI Performance Objective.

Cost Documentation Provided By WHC

Documentation provided by WHC verified that the FY 1995 cost to complete the replacement of the ventilation fan in the SY Tank Farm was significantly less than the PBI fee that was received by WHC for completing the work. Specifically, a WHC "Financial Data System" report dated February 29, 1996, shows that the Budgeted Cost of Work Scheduled for the replacement of the ventilation fan in

the SY Tank Farm was \$63,400. However, this report also shows that the Actual Cost of Work Performed was only \$14,800. A WHC "CAPITAL EQUIPMENT (CENRTC) CLOSURE REQUEST" dated October 2, 1995, shows that the "Authorized Total" for this project was \$65,000 and the "Actual Cost Total" was \$14,861.85.

Additional information provided by the Richland Operations Office showed that the total FY 1995 project cost for the ventilation fan project was \$24,766. Specifically, Richland provided three WHC "Financial Data System" reports dated October 27, 1995, and identified costs associated with the ventilation fan project of \$710.24, \$21,906.64, and \$2,149.54 on these three reports which total \$24,766.42.

Conclusions

We believe that incentive fees should be structured in such a way as to motivate the contractor while taking into consideration the cost of the work to be performed, the significance of the work, the impact that the work has on other operations, the level of difficulty in accomplishing the work, and the risk to the contractor. However, we found no documentation to show that these factors were considered when the PBI amount of \$225,000 was established for the replacement of the ventilation fan in the SY Tank Farm. As discussed later in this report, the work under this PBI objective appeared to be ahead of schedule and easily achieved. In addition, the PBI contract file contained no documentation to support the rationale used for the establishment of a \$225,000 fee for an objective that had been identified as a Secretarial Safety Initiative as early as 1993. Therefore, we believe that, in this instance, a fee of \$225,000 for the accomplishment of an objective that cost the contractor only \$24,766 to perform was excessive and represented an inefficient use of available PBI dollars.

Recommendation

We recommend that the Manager, Richland Operations Office:

1. Develop guidance for the determination of incentive fees paid to contractors at Richland that considers the cost of the work to be performed, the significance of the work, the impact that the work has on other operations, the level of difficulty in accomplishing the work, and the risk to the contractor.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendation 1, stating that:

"Recommendation 1: RL will develop

procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team."

The Manager offered additional comments, stating that PBI 95-011(g) was one of eight PBI 95-011 performance objectives selected to complete TWRS Secretarial Safety Initiatives. The Manager stated that it had been determined that when tank 101-SY, and to a lesser extent tank 103-SY, periodically vented flammable concentrations of gases, the exhauster presented a serious safety risk. The Manager stated that the carbon-steel fan, could, under a variety of failure modes (e.g., blade separation, bearing failure, etc.), strike the housing and create sparks. The Manager said that this sparking could serve as the initiator of a deflagration or explosion if it took place during a gas vent event. The Manager stated that the deflagration could propagate backwards into the tank with extremely serious consequences. The Manager stated that, as a result, the replacement of this fan with one which would control this potential spark source was identified as a key improvement to the Hanford safety posture.

The Manager also stated that the FY 1995 total cost to complete replacement of the ventilation fan was \$24,811 (later adjusted to \$24,766 during a discussion with the Office of Inspections). The Manager stated that the replacement of the ventilation fan was part of a three-year workscope which was originally estimated to cost \$654,000. The Manager stated that this initiative was selected for an incentive fee because of the overall importance of the entire work scope. The Manager stated that an objective cost basis methodology to determine the incentive fee was not available and the fee of \$225,000 was calculated by dividing the \$1,800,000 fee available for PBI 95-011 by the eight performance objectives.

Inspector Comments:

We agree that the identification of the ventilation fan project as a Secretarial Safety Initiative was an important improvement to the Hanford safety posture as stated by the Manager. However, the basic point we were addressing in our Initial Draft Report was that incentive fees should be structured in such a way as to motivate the contractor while taking into consideration the cost of the work to be performed, the significance of the work, the impact that the work has on other operations, the level of difficulty in accomplishing the work, and the risk to the

contractor. In the case of PBI 95-011(g), it is clear that the incentive fee was not structured in this manner, but was simply determined by dividing the total PBI dollars available by the number of performance objectives associated with the PBI.

During a return trip to Richland the week of December 2, 1996, we noted other cases where incentive fee amounts were paid for FY 1995 PBI activities that exceeded the FY 1995 cost of the work performed. For example, Appendix A shows that a PBI fee of \$400,000 was assigned and paid for PBI 95-024, "PUREX - Transfer of D5/E6 Solution." However, we were told that the majority of the cost of this activity was incurred in FY 1994, and we were provided documentation showing that the FY 1994 cost was \$303,500. Although the FY 1995 cost was not tracked in the contract forms Financial Data System, we were told that the FY 1995 cost was "relatively minor" and that the actual cost of this activity in FY 1995 was probably in the range of \$30,000.

We also noted several cases where the cost of the FY 1995 PBI work was nearly equal to or only slightly greater than the incentive fee paid. We believe that management needs to be aware of these situations and fully consider cost as one of the factors in determining fee in order to avoid any perception that incentive fees are excessive, and to assure that incentive fee dollars are used efficiently. We also believe that management needs to clearly document the rationale for establishing fees, and assure that any fees which greatly exceed the contractor's cost are supported by other considerations.

Management Comments:

In comments to the Official Draft Report, the Manager, Richland Operations Office, stated that:

"The comments . . . regarding the FY 1995 cost to complete PBI 95-024, 'PUREX - Transfer of D5/E6 Solution' are generally accurate. However, the report should also acknowledge the cost benefit of completing this activity and that the activity was a significant contributing factor to accelerating the overall project schedule. PUREX had been costing between \$100,000 and \$200,000 a day in surveillance and maintenance costs. We were able to accelerate the project by 10 months and save over \$37 million by incentivizing the critical path activities."

Inspector Comments:

We do not dispute Richland's position that the early shutdown of the PUREX facility resulted in significant savings to the Department. Nor do we dispute that the completion of PBI 95-024 was necessary to effect the shutdown. However, as previously discussed, the basic

point we were addressing is that incentive fees should be structured in such a way as to motivate the contractor while taking into consideration the cost of the work to be performed, the significance of the work, the impact that the work has on other operations, the level of difficulty in accomplishing the work, and the risk to the contractor. In this case, the payment of \$400,000 in incentive fees was made for a project that was substantially completed in a prior fiscal year. The work scope to complete the performance objective in FY 1995 was described as "relatively minor" by project personnel with an FY 1995 cost in the range of \$30,000.

B. PBI FEES PAID FOR WORK THAT WAS ACCOMPLISHED PRIOR TO THE PBI PROGRAM BEING ESTABLISHED AT RICHLAND

Our inspection found several instances where PBI fees were paid for work that was accomplished prior to the PBI Program being established at Richland. Specifically, the PBI Program at Richland was established under the M&O contract by a contract modification dated January 25, 1995. However, the M&O Contractor was paid \$821,870 for work that was either completed or substantially completed prior to the contract modification date.

Upgrade Alarm Panels in Seven Tank Farms

As part of Hanford Site tank farm operations, one activity identified under the FY 1995 Richland PBI Program was the upgrade of alarm panels in seven tank farms. The PBI 95-011(c) Performance Objective, designated as "Upgrade alarm panels in 7 tank farms by March 31, 1995 (SI 4a)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule. According to the WHC TWRS Milestone Description Sheet dated September 16, 1994, tasks within this scope of work included an engineering evaluation to identify obsolete alarm panel windows, and to identify alarms to be retained and upgraded. Other tasks in this scope of work included the consolidation of alarm panel windows in seven control rooms, the elimination of obsolete windows, and the upgrade of selected obsolete hardware.

However, documentation available to Richland prior to the establishment of this PBI showed that the upgrade requirements for six of the seven alarm panels were completed prior to the establishment of the PBI Program at Richland. Specifically, the WHC TWRS Milestone Description Sheet stated that: "All control room upgrades, except the 242-S Evaporator, were completed prior to or during FY 1994." In an interview with a DOE Richland TWRS Project Engineer, the Project Engineer confirmed that six of the seven alarm panel upgrades had been completed in prior years by WHC. As discussed in Section C of this report, "PAYMENT MADE BY RICHLAND FOR

INCOMPLETE PBI WORK," however, a TWRS review team issued a report dated September 24, 1996, that documented that only two alarm panel upgrades had actually been completed before the PBI completion date.

WHC certified that the work required under PBI 95-011(c) was complete. In a Westinghouse Hanford Company letter from the WHC Director TWRS Plant Tank Waste Remediation System to the DOE Director, Tank Operations Division, dated February 24, 1995, subject: "COMPLETION OF SAFETY INITIATIVE SI-4A," the WHC Director stated that:

"TWRS Plant has completed all authorized work for Safety Initiative SI-4a. Authorized alarm panel upgrades have been completed in tank farms A, AN, AW, BX, BY, CR, 242-S, and U. The 242-S alarm panel functional test was completed on February 23, 1995, and completes the work specified as Performance Based Incentive work."

Upon certification by WHC that the work was completed, WHC was paid a fee of \$225,000. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$225,000 for completing the alarm panel project at least 30 days ahead of schedule.

Replace Compressed Air Systems in 10 Tank Farms

As part of Hanford Site tank farm maintenance operations, one activity identified under the FY 1995 Richland PBI Program was the replacement of compressed air systems in 10 tank farms. The PBI 95-011(d) Performance Objective, designated as "Replace compressed air systems in 10 tank farms by March 31, 1995 (SI 4b)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule. According to the WHC TWRS Milestone Description Sheet dated September 16, 1994, tasks within this scope of work included the replacement of compressor systems within existing facilities, the upgrade of compressor cooling systems, providing a dryer system for the compressed air systems, acceptance and operational testing, and the return of the hardware to WHC Hanford Site Operations.

However, documentation available to Richland prior to the establishment of this PBI showed that seven of the 10 compressed air systems were already completed prior to the establishment of the PBI Program at Richland. Specifically, the WHC TWRS Milestone Description Sheet stated that seven of the 10 compressed air systems were already completed prior to FY 1995. In an interview with the DOE Richland TWRS Waste Storage Division Manager, the Manager said that he did not know why the PBI was written to include work that was completed prior to the PBI being established.

Other WHC documentation also showed that seven of the 10 compressed air systems were already completed prior to the establishment of the PBI Program at Richland. In a Westinghouse Hanford Company letter from the WHC Manager, TWRS Life Extension and Transition Tank Waste Remediation System, to the DOE Director, Tank Operations Division, dated March 5, 1995, subject: "COMPLETION OF SAFETY INITIATIVE SI-4B, MILESTONE NUMBER T2C-95-115, REPLACE COMPRESSED AIR SYSTEM IN TEN TANK FARMS, A PERFORMANCE BASED INCENTIVE ACTIVITY," the WHC Manager stated that seven compressor systems were completed in prior years, while three compressor systems were completed in FY 1995. This letter identified the air compressor completion dates as follows:

1. AW Farm upgrade was completed on 1/15/93.
2. SX Farm upgrade was completed on 5/26/93.
3. T Farm upgrade was completed on 3/26/93.
4. 241-CR upgrade was completed on 5/21/93.
5. 242-S Evaporator upgrade was completed on 9/30/92.
6. U Farm upgrade was completed on 5/25/94.
7. B/BX/BY Farm upgrade was completed on 8/24/94.
8. AP Farm upgrade was completed on 2/23/95.
9. 242-T Evaporator/TX Farm/TY Farm upgrade was completed on 2/23/95.
10. The 701-A upgrade was completed on 3/5/95.

WHC certified that the work required under PBI 95-011(d) was complete. In a Westinghouse Hanford Company letter from the WHC Director, TWRS Plant Tank Waste Remediation System, to the DOE Assistant Manager, Office of Tank Waste Remediation System, dated March 7, 1995, subject: "COMPLETION OF PERFORMANCE BASED INCENTIVE 95-011(d)," the WHC Director stated that:

"This letter provides notice that Performance Based Incentive 95-011(d), replacement of ten tank farm compressed air systems, was completed on March

5, 1995. Your concurrence on the attachment is required for Performance Based Incentive completion."

Upon certification by WHC that the work was completed, WHC was paid a fee of \$185,870. As shown on the "FY 1995 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$185,870 for completing the compressed air system project 19 days ahead of schedule.

Shutdown of Fast Flux Test Facility Group 1 Systems

The shutdown of the Fast Flux Test Facility (FFTF) Group 1 systems was a planned activity that was designated as a PBI. The PBI 95-026 Performance Objective, designated as "FAST FLUX TEST FACILITY - Complete the shutdown of Group 1 systems," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$300,000 for achieving the goals of: "Greater than 50 percent of the Group 1 systems are shut down prior to April 1, 1995, and all Group 1 systems are shut down prior to August 10, 1995." This had the effect of establishing two performance standards for the FFTF shutdown.

However, a review of WHC FFTF shutdown related documentation indicated that many of these actions had taken place prior to the establishment of the PBI Program at Richland. We found that seven of the 11 tasks required to be completed to qualify WHC for payment of the PBI fee by meeting the first performance standard were completed prior to the PBI being established. The other four tasks were completed by February 22, 1995, within 26 days of the PBI being established.

Specifically, WHC certified that the work required under PBI 95-026 was complete. In a Westinghouse Hanford Company letter from the WHC Director, FFTF Transition Projects, to the DOE Director, Transition Program Division, dated May 23, 1995, subject: "PERFORMANCE BASED INCENTIVE COMPLETION NOTICE," the WHC Director stated that:

"On May 19, 1995, the Fast Flux Test Facility Transition Project completed the shutdown of all twenty-one Group 1 systems per the applicable work documents. The completion of this activity constitutes Westinghouse Hanford Company's meeting of the 'excellent' performance quality level of the Performance Based Initiative titled, 'Fast Flux Test Facility - Complete the shutdown of Group 1 systems.'"

Attached to the May 23, 1995, WHC letter was a "validation statement" showing the 21 Group 1 systems and the dates when these systems were shut down. The systems and the

shutdown completion dates as of May 19, 1995, were identified as follows:

SYSTEM	COMPLETION DATE
1. PDS Computer	9/28/94
2. PDS Multiplexers	9/28/94
3. CIS	10/10/94
4. ZTO's	1/3/95
5. PPS	1/6/95
6. EDS/DAS	1/6/95
7. Failed Fuel Monit	1/12/95
8. DHX Controls	2/1/95
9. EDS/CALC	2/2/95
10. Rx Flux Control	2/13/95
11. Diesel Generators	2/22/95
12. NASA	3/13/95
13. RSB & AEB-W H&V	3/13/95
14. CTMT Margins	3/17/95
15. MOTA	4/4/95
16. CTMT H&V	4/10/95
17. HTS & DHX H&V	4/14/95
18. Control/AEB-E H&V	4/24/95
19. Cover Gas Sampl.	4/28/95
20. RAPS	5/10/95
21. DG Fuel Oil	suspended 5/19/95

This documentation shows that systems 1 through 7 were completed prior to the PBI being established, and systems 8 through 11 were completed within 26 days of the establishment of the PBI.

Upon certification by WHC that the work was completed, WHC was paid a fee of \$300,000. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$300,000 for completing the FFTF Group 1 systems shutdown more than 30 days ahead of schedule.

EPCRA 311 Material Safety Data Sheet List

As part of ongoing environmental reporting requirements, Richland approved a PBI for producing several environmental reports. The PBI 95-028 Performance Objective, designated as "Complete Annual Environmental Reporting Requirements," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to a total of \$120,000 for environmental reports in which the: "Reports are completed at least one week ahead of schedule and within budget." There were a total of 11 reports stipulated in the PBI "Basis for Measurement" where it was also stated that WHC would receive \$11,000 per report if the report was completed at least one week ahead of schedule and within budget.

Each of the 11 reports included under PBI 95-028 had separate completion dates established for the achievement of a PBI fee. One of these reports, the EPCRA 311 Material Safety Data Sheet List, was required by PBI 95-028 to be completed by January 25, 1995, in order to receive the maximum fee of \$11,000.

However, this report was completed prior to the establishment of the PBI Program at Richland. In a letter dated January 24, 1995, from the WHC Director of Environmental Services to the DOE Acting Program Manager, Office of Environmental Assurance, Permits, and Policy, subject: "MATERIAL SAFETY DATA SHEET REPORTING, EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT, SECTION 311," the WHC Director stated that:

"As required by the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA), Section 311, a revised Material Safety Data Sheet (MSDS) listing of hazardous chemicals for the Hanford Site has been prepared and is attached for your action. . . . The required revisions to the November 1994 listing were identified on January 23, 1995. Draft cover letters for the submittals are also attached for your use."

The completion of the EPCRA 311 MSDS PBI Performance Objective was also documented on a PBI work sheet. Specifically, a Westinghouse Hanford Company Fee/Penalty Calculations worksheet dated February 6, 1995, and subject: "EPCRA 311 MSDS list - 95/1 quarter update," stated that the event (completion) date for this PBI was on January 24, 1995.

WHC certified that this task was completed on January 24, 1995. This certification occurred one day prior to the establishment of the PBI Program at Richland, and three days prior to the establishment of this specific PBI. Upon certification by WHC that the work was completed, WHC was paid a fee of \$11,000. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$11,000 for completing the "EPCRA 311 MSDS list (2nd Qtr)" at least one week ahead of schedule.

The Richland Operations Officer, the Contracting Officer's Representative for WHC award fees and performance based incentives, was interviewed by the Office of Inspections concerning the payment of an incentive fee for the EPCRA 311 MSDS list. The Operations Officer said that the PBI fee was earned before the PBI establishment date because it took a long time to negotiate Contract Modification M-111 that established the PBI Program at Richland, and that the work described by this PBI was ongoing prior to the contract modification being signed. The Operations

Officer said that the contractor was completing the work in expectation of DOE honoring the PBI.

Certification of Laboratory Software

As a part of the Hanford Site Analytical Services Program, a PBI was established for implementing a new laboratory computer software program. The PBI 95-029 Performance Objective, designated as "Implement LABCORE LIMS Release 2.0," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive \$3,571 per day, up to \$100,000 for completing this action by February 28, 1995. Acknowledgment by Richland that all certifications for LABCORE LIMS Release 2.0 had been achieved before February 28, 1995, was required in order for WHC to receive the PBI fee.

As stated in PBI 95-029 "Basis for Measurement," there were four requirements that had to be completed by February 28, 1995, as part of the implementation of Release 2.0 of the LABCORE LIMS system. These four requirements were:

1. Complete and document user acceptance testing for the two (X bar and Y bar) moving average range charts.
2. Issue a letter report to the Manager, Information Systems of the 222-S LABCORE system performance evaluation.
3. Complete and document a user acceptance test for the transfer of data between the 222-S Organic instrument system and the 222-S LABCORE system.
4. Complete and document a user acceptance test for the transfer of data from the 222-S Applied Research Inductively Coupled Plasma (ICP) instrument system and the 222-S LABCORE test system.

WHC submitted a letter to Richland stating that the PBI objectives were met. As stated in a Westinghouse Hanford Company letter from the WHC Director, Analytical Services Projects and Site Services, to the DOE Richland Director, Waste Programs Division, dated January 31, 1995, subject: "COMPLETION OF LABCORE/LIMS RELEASE 2.0, AS MILESTONE AS-95-001," the WHC Director stated that: "This letter constitutes the completion of AS-95-001 due February 28, 1995." The WHC Director's letter detailed the actions taken by WHC to satisfy the requirements of PBI 95-029, but did not mention the completion dates for these four requirements.

However, WHC LABCORE LIMS Release 2.0 documentation indicated that the requirements of the PBI were satisfied prior to the PBI being established. This documentation, provided by a DOE Richland Project Engineer, indicated

that each of the four PBI "Basis for Measurement" requirements were completed before the PBI was established on January 27, 1995. Specifically, user acceptance testing for the two (X bar and Y bar) moving average range charts was completed on January 13, 1995; a letter report to the Manager, Information Systems of the 222-S LABCORE system performance report was released on November 21, 1994; a user acceptance test for the transfer of data between the 222-S Organic instrument system and the 222-S LABCORE system was completed on October 31, 1994; and, a user acceptance test for the transfer of data from the 222-S Applied Research Inductively Coupled Plasma (ICP) instrument system and the 222-S LABCORE system was completed on October 31, 1994.

Upon certification by WHC that the work was completed, WHC was paid \$100,000. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$100,000 for completing the implementation of LABCORE LIMS Release 2.0 ahead of schedule.

DOE Statements on Work Accomplished Prior to PBI Implementation

Several WHC and DOE officials that were knowledgeable of the specifics of PBI 95-026, PBI 95-028, and PBI 95-029 Performance Objectives were interviewed regarding the payment for work that was completed prior to the establishment of the PBI Program (on January 25, 1995, under Contract Modification M-111). Some officials said that the PBIs had been in a development status for a considerable period of time, and that the contractor began working on completing the PBI Performance Objectives in anticipation of the PBIs being incorporated into the M&O contract. However, other DOE officials said that, in some cases, it was their belief that PBIs were written to include work that was already accomplished because PBI Performance Objectives were simply copied from documents which included the Secretarial Safety Initiatives for the Hanford Site developed in 1993.

Statements by WHC and Richland Officials on PBIs that were to be Approved

We found that WHC management was uncertain which PBIs would in fact be approved by DOE Richland as late as January 23, 1995. In a letter from the WHC Executive Vice President to the DOE Richland Deputy Manager dated January 13, 1995, the WHC Executive Vice President stated in part that:

". . . This attachment represents 13 PBIs worth \$9.15 million spread over the remaining portion of the fiscal year. We recognize that any potential positive or negative first quarter fiscal year (FY) 1995 incentives associated with the attached 13 PBIs have been eliminated as a result of not having

a signed/approved contract in place."

* * * * *

"Represented in Attachment 3 are 21 additional PBIs worth \$9.12 million. Many of these have been previously discussed between the program staff at WHC and RL."

In a letter from the WHC Executive Vice President to the DOE Richland Deputy Manager dated January 23, 1995, the Executive Vice President stated that:

"We would appreciate your assistance in quickly obtaining copies of the complete set of Performance Based Incentives (PBIs). A complete set of PBIs was provided to the U.S. Department of Energy, Richland Operations Office (RL) on January 13, 1995, and we have not had an opportunity to review changes made subsequent to our submittal."

DOE Richland affirmed which PBIs were included in the contract modification one week after the modification was signed. In a letter from the Richland Operations Office Contracting Officer to the President of the Westinghouse Hanford Company, dated February 3, 1995, and subject: "CONTRACT DE-AC06-87RL190930, PERFORMANCE-BASED INCENTIVES," the Contracting Officer stated that:

"The recent modification number M111 to the subject contract, incorporated clause number H-15, titled: Performance Based Incentives. Pursuant to clause H-15, the twenty-nine (29) currently established Performance-Based Incentives (PBIs) are forwarded herewith. Additions, deletions, and/or changes to existing PBIs shall be provided in accordance with the terms of the subject contract."

Conclusions

We believe that PBI dollars were not effectively used in the instances described here because we found substantial portions of the work performed to achieve PBI fees totaling \$821,870 was actually performed prior to the establishment of the PBI Program at Richland on January 25, 1995. In the case of PBI 95-011(c), the PBI objective was written to imply that the alarm panels in seven tank farms were to be upgraded in order to achieve a PBI fee of \$225,000. However, documentation shows that the upgrades to the alarm panels in six of the seven tank farms had already been completed prior to or during FY 1994. In the case of PBI 95-011(d), the PBI objective was written to imply that the compressor air systems in 10 tank farms were to be replaced in order to achieve another PBI fee of \$225,000. However, the replacements of the compressor air systems in seven of the 10 tank farms were completed

between January 1993 and August 1994. In the case of PBI 95-026, the PBI objective was written to imply that the contractor would have to shut down more than 50 percent of the Group 1 systems for the Fast Flux Test Facility by April 1, 1995, and all of the Group 1 systems by August 10, 1995, in order to achieve a PBI fee of \$300,000. However, seven of the 11 tasks required to qualify the contractor for the April 1, 1995, performance measure were actually completed between September 28, 1994, and January 12, 1995.

We believe that PBIs should clearly reflect the work that is to be performed. In the case of PBI 95-011(c), the work to be performed should have been stated as "Upgrade an alarm panel in 1 tank farm," rather than "Upgrade alarm panels in 7 tank farms." In the case of PBI 95-011(d), the work to be performed should have been stated as "Replace Compressed Air System in Three Tank Farms," rather than "Replace Compressed Air System in Ten Tank Farms."

Similar conditions exist for PBIs 95-028 and 95-029 where PBI objectives were completed prior to the establishment of the PBI Program at Richland. In the case of PBI 95-028, a fee of \$11,000 was paid for completing the EPCRA 311 MSDS List. However, this PBI objective was met one day prior to the establishment of the PBI Program at Richland. In the case of PBI 95-029, a fee of \$100,000 was paid for completion of four activities associated with implementation of Release 2.0 of the LABCORE LIMS program. However, three of these four activities were completed in October and November of 1994, and the fourth activity was completed 12 days prior to the establishment of the PBI Program at Richland.

We believe that any work done prior to the signing of Contract Modification M-111 on January 25, 1995, was accomplished without an approved performance incentive in place, and was accomplished under the prior award fee system at Richland. This position is consistent with the WHC Executive Vice President's January 13, 1995, letter to the DOE Richland Deputy Manager where he stated that: "We recognize that any potential positive or negative first quarter fiscal year (FY) 1995 incentives associated with the attached 13 PBIs have been eliminated as a result of not having a signed/approved contract in place." Since Contract Modification M-111 does not address the payment of fees retroactive to the signature date, and since the PBIs themselves do not address the payment of retroactive fees, we believe that the \$111,000 in fees for PBIs 95-028 and 95-029 should be recovered since all of the work required was performed prior to the establishment of the PBI Program at Richland.

Recommendations

We recommend that the Manager, Richland Operations Office:

2. Direct the Contracting Officer to review PBI Numbers 95-011(c), 95-011(d), and 95-026 to determine if there is any contractual basis for recovering a prorated portion of the PBI fees that were paid for work that was accomplished prior to the establishment of the PBI Program at Richland.
3. Direct the Contracting Officer to take action to recover \$111,000 under PBIs 95-028 and 95-029 for fees paid where all of the work required was performed prior to the establishment of the PBI Program at Richland.
4. Develop policy that requires that the work defined in the PBI document reflects the work that is actually to be accomplished in order to achieve the PBI fee.
5. Develop policy that assures that PBI dollars are used to provide incentives to the contractor for future performance rather than reward the contractor for past accomplishments.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendations 2, 3, 4, and 5, stating that:

"Recommendation 2: The Contracting Officer has been directed to review PBIs 95-011(c), 95-026, and 95-027 to determine the extent to which fee recovery is warranted and the contractual basis to accomplish recovery. DOE has taken action, and the contractor has agreed, to the return of previously paid fees on PBI 95-011(d).

"Recommendation 3: The Contracting Officer has been directed to review PBIs 95-028 and 95-029 to determine the extent to which fee recovery is warranted and the contractual basis to accomplish recovery.

"Recommendations 4 and 5: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team."

The Manager offered additional comments. With regard to PBIs 95-011(c) and 95-011(d), the Manager stated that: "We concur that some of the actions in the PBI safety initiatives had already been completed when the PBI was

developed, however, the contractor did not receive any additional fees for the already completed work." The Manager stated that: "The PBIs were written to include completed work so that the PBI language would be consistent with the Secretarial Safety Initiatives."

With regard to PBI 95-026, the Manager stated that completing the shutdown of the Fast Flux Test Facility (FFTF) Group 1 systems was a planned activity in the Richland approved FY 1995 Advanced Reactors Transition Multi-Year Program Plan. The Manager stated that in October 1994, the planned activity for completing the shutdown of Group 1 systems was submitted to Richland by Westinghouse Hanford Company (WHC) as "a potential candidate for FY 1995 Performance-Based Initiatives (PBI)." The Manager stated that over the next three months, negotiations on the PBI took place at various levels in both WHC and Richland. Finally, on January 27, 1995, PBI 95-026 was formally approved.

The Manager also stated that the designation of systems as Groups was established early in calendar year 1994 when the FFTF Shutdown Project Plan was initially developed. The Manager stated that individual systems were grouped into 12 distinct Groups based upon their need to be operational as major shutdown activities were completed. The Manager stated that Richland staff knew that a few of the Group 1 systems had already been shut down prior to establishing the PBI; however, the Group 1 designation was used for convenience in developing the PBI. The Manager stated that the objective of the PBI was to deliver an integrated system. The Manager stated that, while three of 21 of the individual systems were known to be complete at the time the PBI was developed, delivery of the completed integrated system was the incentivized outcome. The Manager also stated that many of these system shutdown actions were completed between the time the PBI was introduced to Richland and the time it was formally approved.

With regard to PBI-029, the Manager said that the report states that contract negotiations were concluded and the PBI Program was officially approved on January 27, 1995, and that PBI 95-029 was declared complete on January 31, 1995. The Manager stated, however, that the importance of the LABCORE LIMS Release 2.0 to the success of the Analytical Services Program was recognized well before that date. The Manager stated that identification of the "LIMS" as an important milestone began in August 1994 with the early planning for the FY 1995 Multi-Year Program Plan (MYPP). The Manager stated that this activity was considered high priority and work began on October 1, 1994. The Manager stated that, without the FY 1995 LABCORE LIMS upgrades, the 222-S could not have doubled its production from FY 1994 to FY 1995 and again doubled production in FY 1996.

Inspector Comments:

There was a four month delay between the time that the PBI Program at Richland was intended to be placed into effect (October 1994), and the time when the PBI Program was actually established (January 25, 1995). During this period of time, DOE Richland Operations Office and WHC officials were aware that contractor efforts were focused on projects that had been proposed as FY 1995 PBI performance objectives. However, as detailed in this section of the report, it was uncertain which of the proposed PBIs would be included in the contract modification as late as January 23, 1995.

The basic point we were addressing in our Initial Draft Report was that all or substantial portions of the work performed to achieve the PBI fees under PBIs 95-026 and PBI 95-029 was actually performed prior to the establishment of the PBI Program at Richland on January 25, 1995. We believe that providing an incentive fee for work by the contractor that is accomplished prior to the establishment of the Incentive Fee Program constitutes work that was done outside of the incentive program, and is work that would not be eligible for incentive fee payment. Additionally, any negotiations on incentive fee arrangements between the contractor and Richland officials made prior to the establishment of the PBI Program would not be binding until formal agreement was reached. It should be noted that the Richland Operations Office eliminated some potential PBI performance objectives from the FY 1995 PBI Program because the work intended was completed during the period when the four month delay occurred.

C. PAYMENT MADE BY RICHLAND FOR INCOMPLETE PBI WORK

Our inspection found instances where Richland paid fees for PBI work that was not complete. Specifically, we found three instances where fees were paid to the M&O Contractor for work that was certified by the M&O Contractor as complete; however, Richland documentation shows that the PBI work was not completed in accordance with the provisions of the PBIs.

Upgrade Alarm Panels in Seven Tank Farms

As previously discussed, the PBI 95-011(c) Performance Objective, described as "Upgrade alarm panels in 7 tank farms by March 31, 1995 (SI 4a)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule. The Performance Objective also stated that the M&O Contractor would be penalized up to \$225,000 for completing this action 30 days or more behind schedule. According to the WHC TWRS Milestone Description Sheet (MDS) dated September 16, 1994, tasks within the

scope of work included an engineering evaluation to identify obsolete alarm windows, and to identify alarms to be retained and upgraded. Other tasks within the scope of work included the consolidation of alarm panel windows in seven control rooms, the elimination of obsolete alarm panel windows, and the upgrade of selected obsolete hardware. The WHC TWRS MDS stated that deliverables for these tasks included completion of the design package, installation of the required hardware, and returning the equipment to operation.

WHC certified that the work required under PBI 95-011(c) was complete. In a Westinghouse Hanford Company letter from the WHC Director, TWRS Plant Tank Waste Remediation System, to the DOE Richland Director, Tank Operations Division, dated February 24, 1995, subject: "COMPLETION OF SAFETY INITIATIVE SI-4A," the WHC Director stated that:

"TWRS Plant has completed all authorized work for Safety Initiative SI-4a. Authorized alarm panel upgrades have been completed in tank farms A, AN, AW, BX, BY, CR, 242-S, and U. The 242-S alarm panel functional test was completed on February 23, 1995, and completes the work specified as Performance Based Incentive work."

Upon certification by WHC that the work was completed, WHC was paid a fee of \$225,000. Specifically, as shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$225,000 for completing the "Upgrade alarm panels in 7 tank farms by March 31, 1995 (SI 4a)" project on March 1, 1995. This was the maximum fee award date, qualifying WHC for the maximum award fee for this PBI.

However, a review of the tasks under PBI 95-011(c) by a DOE Richland TWRS Project Engineer revealed that the required tasks were in fact not completed by February 23, 1995, as claimed by WHC. Specifically, the Office of Inspections had requested the man-hours, material costs, and dates associated with the work completed under this PBI. In responding to this request, the Project Engineer identified documentation which showed that the work required had not been completed. The Project Engineer summarized his findings, and provided a summary document to the OIG on August 20, 1996, Subject: "Review of TWRS Safety Initiative 4a, Upgrade Alarm Panels in 7 Tank Farms by March 1995." This summary document stated that:

"Based on the description below and the work documents in the archives for A Farm, C Farm, and the 242-S Evaporator, my conclusion is that this SI was not completed by 2/23/95.

"The problems noted with this SI are shown as bulletized items.

* * * * *

"Work package (2E-92-655) for the A Farm upgrade was not 'field work complete' or accepted by operations until 4/18/96, which is past the SI completion date of 2/23/95. Operations personnel stated that the upgrades at A Farm had many non-functional alarms following the KEH annunciator work.

"Work package (2E-92-1217) for the C Farm/CR Vault upgrade was not functionally tested or accepted by operations until 11/22/95, which is past the SI completion date of 2/23/95.

"Work package (2W-92-180) for the 242-S Evaporator upgrade was not 'field work complete' until 5/24/95 and was not accepted by operations until 2/7/96, which is past the SI completion date of 2/23/95."

This information was substantiated by a Richland review team. The Richland Operations Office established a review team after a June 1996 "near miss" incident for the purpose of examining six FY 1995 PBI awards. The review team was staffed with personnel primarily from the Management Systems Division of TWRS. The review team was established because the Richland Operations Office was concerned that the problems identified in a DOE Richland "Special Assessment Report" for PBI 95-011(d), "241-A-701 Air Compressor Upgrade," could be indicators of systematic and programmatic weaknesses. The review team issued a report on September 24, 1996, titled "REVIEW OF TANK WASTE REMEDIATION SYSTEM (TWRS) FISCAL YEAR 1995 PERFORMANCE BASED INCENTIVES." In this report, the review team addressed PBI 95-011(c) and found that "of the seven tank farms, alarm panel upgrades were completed on only AN and AW tank farms before the PBI completion date of March 31, 1995." The review team concluded that: "The PBI was inappropriately awarded and RL should request return of the full PBI amount, \$225,000."

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, suggested that the statement regarding work package 2E-92-1217, "upgrade was not functionally tested or accepted by operation until 11/22/95," be changed to "upgrade was not functionally tested or accepted by operation until 7/14/95, and continues to have functional problems."

Inspector Comments:

We did not change the statement referenced by the Manager because a review of work package 2E-92-1217 for the C

Farm/CR Vault upgrade by the Office of Inspections found that the "Operations Acceptance" date was 11/22/95 as indicated in the Initial Draft Report, and that the "Field Work Complete" date was 7/14/93. We were told that the 7/14/95 date included in the Management Comments was in error, and that the correct date was 7/14/93. Since our report was representing the "Operations Acceptance" date, and not the "Field Work Complete" date, we made no change to the report.

Replace Compressed Air Systems in 10 Tank Farms

As previously discussed, the PBI 95-011(d) Performance Objective, described as "Replace compressed air systems in 10 tank farms by March 31, 1995 (SI 4b)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule. The Performance Objective also stated that the M&O Contractor would be penalized up to \$225,000 for completing this action 30 days or more behind schedule. According to the WHC TWRS Milestone Description Sheet (MDS) dated September 16, 1994, tasks within this scope of work included replacement of compressor systems within existing facilities, upgrade of compressor cooling systems, providing a dryer system for the compressed air system, acceptance and operational testing, and the return of the compressed air systems to WHC Hanford Site Operations for continued use.

WHC certified that the work required under PBI 95-011(d) was complete. In a Westinghouse Hanford Company letter from the WHC Director, TWRS Plant Tank Waste Remediation System, to the DOE Richland Assistant Manager, Office of Tank Waste Remediation System, dated March 7, 1995, subject: "COMPLETION OF PERFORMANCE BASED INCENTIVE 95-011(D)," the WHC Director stated that:

"This letter provides notice that Performance Based Incentive 95-011(d), replacement of ten tank farm compressed air systems, was completed on March 5, 1995. Your concurrence on the attachment is required for Performance Based Incentive completion."

Upon certification by WHC that the work was completed, WHC was paid a PBI fee. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$185,870 for completing the project described as "Replace compressed air systems in 10 tank farms" 19 days ahead of schedule.

However, the work required under this PBI was not completed as certified by WHC. In an interview with the DOE Richland TWRS Waste Storage Division Manager, the Manager said that, in his opinion, the contractor was required to complete an Acceptance Test Procedure (ATP) to

comply with DOE Order 4700.1 requirements and to be in compliance with the PBI task. The Manager said that an Acceptance Test Report (ATR) was never issued by WHC to show compliance with these requirements for the 241-A-701 air compressor upgrade, yet WHC accepted the facility and the PBI as being complete. The Manager also said that the ATP is supposed to be followed by an Operational Test Procedure (OTP) which verifies whether the system works as specified, and that WHC never completed the OTP as required by DOE Order 4700.1.

This information was confirmed by a DOE Richland "Special Assessment Report," for the "241-A-701 Air Compressor Upgrade," dated August 5, 1996. This report stated, in part, that:

"Acceptance testing was fast tracked (10-hour days, seven days a week for six weeks) and accepted for the PBI fee associated with upgrading the tank farm compressors. A handwritten entry on the Acceptance Test Procedure (ATP) Acceptance of Test Results page states 'the PBI milestone portion of this test has been completed and the results, including red-line changes, have been reviewed. Any exceptions discovered during the PBI milestone of the test have been satisfactorily recorded and resolved. The results of the PBI milestone portion of the acceptance test of the 241-A-701 compressed air system accepted by the undersigned.' Additional construction and ATP activities continued until September 1995, six months after construction was 'complete' for the PBI. The result of acceptance testing, the ATR (Acceptance Test Report) was documented as complete but cannot be produced."

The "Special Assessment Report" stated that the test procedures prepared for the 241-A-701 Air Compressor Upgrade included the Acceptance Test Procedure (ATP) and the Operational Test Procedure (OTP). This report stated that the system Acceptance for Beneficial Use (ABU) was signed by East Tank Farm Operations in November 1995 with a punchlist, which included the need to complete the OTP and the "as-built field condition" of associated drawings. However, this report noted that the ABU contained errors and omissions such as reference to an Acceptance Test Report which would document the ATP that could not be produced by the M&O Contractor, and that the ABU was not performed in accordance with WHC procedures.

In addition, the "Special Assessment Report" stated that the system had not completed OTP and "is currently locked out" by WHC management. This report stated that the OTP was started in late August 1995 (approximately six months after the PBI was reported as complete) and suspended on September 30, 1995. This report stated that air supply for the 701-A complex "is currently provided by a

temporary mechanical compressor."

The "Special Assessment Report" stated that the ATP contains two different dates, "The first was on March 5, 1995, when WHC engineering personnel claimed completion of the 'Performance Based Incentive' (PBI) portion of the ATP, "and "The second completion date was on July 19-27 1995, which includes both WHC engineering and QA personnel." However, the "Special Assessment Report" noted that the test as written did not distinguish between those portions dedicated to the PBI and those sections not PBI related, and that test documentation contained several incomplete and unsigned ATP test steps. The assessment team concluded that, since the ATP and the OTP were not completed, the equipment was unacceptable and did not meet acceptance criteria.

The "Special Assessment Report" stated that WHC declared the ATP successful to the extent necessary to claim a PBI without completing all steps of the ATP. This report noted that no steps in the ATP denoted or indicated which acceptance criteria satisfied the accomplishment of the PBI. The report also stated that the signatures for "PBI Acceptance" were handwritten on the completion and acceptance page of the ATP, but were not part of the initial approved ATP, and that this significant revision to the ATP "was not reviewed and approved as required by WHC-CM-4-2 and DOE 5700.6C/10 CFR 830.120." The report noted that WHC management stated that: "WHC field personnel understood completion of the PBI to mean installation of the compressed air system." "However, the report concluded that: "Even though some mechanical equipment was set and some electrical hardware installed, this work does not represent a completed construction activity nor an acceptable system as represented in the ABU."

TWRS Corrective Maintenance Backlog Reduction

As part of ongoing tank farm maintenance operations, one activity identified under the FY 1995 Richland PBI Program was the reduction in the TWRS corrective maintenance backlog. The PBI 95-018 Performance Objective, described as "TWRS Corrective Maintenance Backlog Reduction," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$500,000 for completing this action. Specifically, the contractor, to receive an "Excellent" rating for this contract performance measure, was to "Reduce the overall Corrective Maintenance Backlog by more than 5% from the January 1, 1995, level, while maintaining preventative maintenance actions within acceptable performance parameters." The PBI "BASIS FOR MEASUREMENT" stated, in part, that "WHC shall neither receive nor be penalized fee for impacting the backlog by +5%. WHC shall receive a prorated amount of the incentive fee for reducing the CM backlog from 5% to 10% by September 30, 1995, with a maximum fee of \$500,000 for

achieving a 10% or greater reduction."

WHC certified that the work required under PBI 95-018 was complete. In a Westinghouse Hanford Company letter entitled "Completion of Tank Waste Remediation System Corrective Maintenance Backlog Reduction Performance Based Incentive," WHC claimed to have achieved the excellent performance objective by reducing the corrective maintenance backlog by 10 percent on March 1, 1995. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$500,000 for completing this PBI.

However, we found evidence that the work required under PBI 95-018 had not been completed. In an interview with a DOE Richland Project Engineer, the Project Engineer said that, in his opinion, many of the corrective actions which were claimed to be accomplished by the contractor as part of PBI 95-018 were in fact eliminated by paperwork because of downscoping of TWRS work tasks, which included the closure or mothballing of facilities and equipment. The Project Engineer also said that the corrective maintenance backlog files had not been purged for several years, and that the reduced operations had not been taken into account when the PBI was written. Additionally, a DOE Richland TWRS Maintenance Program Project Engineer said that DOE does not get involved with the decision making process for individual corrective actions, and that the way that the PBI was written, it is possible that the contractor could do the easy work first to get credit for complying with the terms of the PBI.

The September 24, 1996, Richland review team report, titled "REVIEW OF TANK WASTE REMEDIATION SYSTEM (TWRS) FISCAL YEAR 1995 PERFORMANCE BASED INCENTIVES," also raised concerns about the completion of the work required under this PBI. With regard to PBI-95-018, the review team found that the corrective maintenance backlog actually increased by 1,305 maintenance packages over the January 1995 level of 1,495 maintenance packages. The review team concluded that, rather than being reduced by 10 percent, the corrective maintenance backlog actually increased by 87 percent over the January 1995 corrective maintenance backlog level. The review team concluded that: "The PBI was inappropriately awarded and RL should request return of the \$500K paid to WHC previously for this PBI."

TWRS Recommendation for Recovery of PBI Fees

TWRS has requested that action be taken to recover PBI fees that were inappropriately paid to WHC and assess PBI penalties for incomplete work. Specifically, in a letter dated September 26, 1996, from the Richland Assistant Manager, Office of Tank Waste Remediation System, to the Richland Director, Procurement Services Division, the

Assistant Manager stated that TWRS found PBIs 95-011(c), 95-011(d), and PBI-018 to be incomplete. The Assistant Manager stated that: "TWRS is requesting reimbursement of the \$910,870.00 paid to WHC on the three PBIs." The Assistant Manager also stated that: "In addition, WHC should be assessed the negative fee of \$950,000.00 on these PBIs." The total reimbursement requested by TWRS is \$1,860,870.

Conclusions

We believe that it is clear, based on our review and the documentation obtained from the Richland Operations Office, that the work required under PBI 95-011(c), "Upgrade alarm panels in 7 tank farms by March 31, 1995," PBI 95-011(d), "Replace compressed air systems in 10 tank farms by March 31, 1995," and PBI 95-018, "TWRS Corrective Maintenance Backlog Reduction," was not completed in the time periods necessary to achieve the PBI fees of \$225,000, \$185,870, and \$500,000 respectively.

Contrary to WHC's statement on February 24, 1995, that all work was completed on PBI Number 95-011(c), documentation provided by the Richland Operations Office shows that work on two alarm panels was not completed until April 18, 1995, and May 24, 1995, respectively, and that a third alarm panel was not functionally tested or accepted for operations until November 22, 1995.

In addition, contrary to WHC's statements on March 7, 1995, that all work was completed on PBI 95-011(d), documentation provided by the Richland Operations Office shows that the acceptance testing required under the Acceptance Test Procedure and the Operational Test Procedure was never completed for the 241-A-701 air compressor upgrade. Richland documentation shows that the system is currently locked out and that a temporary compressor is being used to provide an air supply. The Richland documentation notes that: "Even though some mechanical equipment was set and some electrical hardware installed, this work does not represent a completed construction activity nor an acceptable system. . . ."

Also, contrary to WHC's statements that all work was completed on PBI 95-018, documentation provided by the Richland Operations Office shows that the corrective maintenance backlog was not reduced by 10 percent, but actually increased by 87 percent.

We believe that, based on the requirements of these three PBIs, the contractor would not have been entitled to any fee under the circumstances describe here. We believe that \$910,870 should be recovered from WHC. The Richland review team report titled "REVIEW OF TANK WASTE REMEDIATION SYSTEM (TWRS) FISCAL YEAR 1995 PERFORMANCE BASED INCENTIVES" supports this position for PBI 95-011(c) in the amount of \$225,000, and PBI 95-018 in the amount of

\$500,000. The Richland "Special Assessment Report" for the "241-A-701 Air Compressor Upgrade" supports this position for PBI 95-011(d) in the amount of \$185,870.

We also believe that it is clear, based on our review and the documentation obtained from the Richland Operations Office, that the work required under PBI 95-011(c), "Upgrade alarm panels in 7 tank farms by March 31, 1995," PBI 95-011(d), "Replace compressed air systems in 10 tank farms by March 31, 1995," and PBI 95-018, "TWRS Corrective Maintenance Backlog Reduction," was not complete on the dates when the contractor would have been penalized \$225,000, \$225,000, and \$500,000 for completing these actions 30 days or more behind schedule. We believe that the penalty provisions of these three PBIs should be implemented, and that \$950,000 in penalties be collected from WHC.

We concur in the position taken by TWRS in the September 26, 1996, letter to the Director, Procurement Services Division, requesting reimbursement of the PBI fees paid and reimbursement of penalties due. However, we believe that Richland should also evaluate the potential for collecting an appropriate figure for the interest on the PBI fees of \$910,870 that were paid for incomplete work, and evaluate the potential for collecting the interest income earned by WHC on the PBI fees of \$910,870.

Recommendations

We recommend that the Manager, Richland Operations Office:

6. Consistent with our findings and the TWRS letter of September 26, 1996, direct the Contracting Officer to take action to recover \$225,000, \$185,870, and \$500,000 from WHC for previous PBI fees that were paid under PBI 95-011(c), PBI 95-011(d), and PBI 95-018.
7. Consistent with our findings and the TWRS letter of September 26, 1996, direct the Contracting Officer to take action to assess the penalty provisions of PBI 95-011(c), PBI 95-011(d), and PBI-018, and collect a total penalty of \$950,000 for these three PBIs.
8. Direct the Richland Chief Financial Officer to evaluate the potential for collecting an appropriate figure for the interest on the PBI fees of \$910,870 that were paid to WHC for incomplete work, and evaluate the potential for collecting the interest income earned by WHC on the PBI fees of \$910,870.
9. Initiate the review of all PBIs issued in FY 1995 and FY 1996 to determine if other PBI payments have been made for incomplete work, and take action to recover any fees that were paid for work that did not meet the terms of the PBIs and any penalties that were not collected for incomplete work or work completed late.

10. Develop policy that requires Richland personnel to verify that incentive work was accomplished prior to payment of incentive fees.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendations 6, 7, 8, 9, and 10, stating that:

"Recommendation 6: The Contracting Officer has been directed to take actions to review and recover, if appropriate, the previously paid fees for PBIs 95-011(c), 95-011(d), and 95-018. DOE has taken action, and the contractor has agreed, to the return of previously paid fees on PBI 95-011(d).

"Recommendation 7: The Contracting Officer has been directed to take actions to review and assess, if appropriate, the penalty provisions of PBIs 95-011(c), 95-011(d), and 95-018. DOE has assessed, and the contractor has agreed, to the \$225,000 penalty associated with PBI 95-011(d).

"Recommendation 8: The RL Chief Financial Officer (CFO) will evaluate the options for collecting interest from the contractor on the PBI fees that were inappropriately paid for incomplete work.

"Recommendation 9: RL will initiate actions to review the FY 1995 and FY 1996 PBIs and perform a root cause analysis.

"Recommendation 10: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team."

D. PBI PERFORMANCE OBJECTIVES APPEAR TO BE EASILY ACHIEVED

Our inspection found several PBI Performance Objectives established by Richland which appear to have been easily achieved. Specifically, we found PBI Performance Objectives which included completion dates that

represented little challenge to the M&O Contractor. Richland documentation shows that, in these instances, the M&O Contractor was in the process of completing these objectives ahead of schedule without any PBI incentive. In addition, we found that \$250,000 in available fee was paid to the M&O Contractor for three PBIs that were completed within two days of their establishment. We also found a PBI where the performance objectives and the basis for measurement were significantly modified after the work was certified as complete by the M&O Contractor.

Replacement of SY Tank Farm Ventilation Fan

As previously discussed, the PBI 95-011(g) Performance Objective, described as "Replace ventilation fan in SY farm to further reduce spark potential by August 31, 1995 (SI 2k)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule, or \$9,783 for each day this initiative was completed more than seven days ahead of the scheduled date. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$225,000 for completing the ventilation fan project on July 6, 1995.

However, the establishment of the \$225,000 PBI Performance Objective for the replacement of the ventilation fan in the SY Tank Farm represented little challenge to the contractor. Specifically, before the PBI Performance Objective was established, WHC had established a completion date for this project of April 28, 1995, approximately four months ahead of the PBI performance date of August 31, 1995. A WHC TWRS Milestone Description Sheet (MDS) dated September 22, 1994, and signed by WHC and DOE Richland officials, showed that a completion date of April 28, 1995, was established for the ventilation fan Acceptance Test Procedure. The MDS also stated that the "Acceptance Criteria" includes the "Successful completion of the ATP" with a deliverable being a "Letter to RL documenting installation of spark-resistant fan in the 241-SY Tank Farm and successful completion of ATP" by August 31, 1995. In an interview with a DOE Richland Project Manager, the Project Manager said that he did not know why a four month delay was built into the schedule between the ATP completion date and the "deliverable" letter to DOE.

In addition, the replacement of the ventilation fan was significantly ahead of schedule at the time the PBI was established. Specifically, we found that a "TWRS Department of Energy Safety Initiatives" status chart was issued at approximately the same time that the ventilation fan PBI Performance Objective was being written. The chart indicated that, as of January 1, 1995, the ventilation fan performance objective was three months ahead of the August 31, 1995 schedule date.

High-Level Waste Melter Assessment

The selection of a high-level waste melter technology was a goal of the Richland Operations Office, with the completion of the assessment report for this project included under the Richland PBI Program. The PBI 95-015 Performance Objective, described as "Provide final high-level waste melter assessment report," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$200,000 for completing this action 37 days ahead of schedule, or \$6,666 for each day this initiative was completed between 8 to 37 days ahead of the scheduled date of March 24, 1995. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$200,000 for completing the Final High-Level Waste Melter Report ahead of schedule.

PBI 95-015 contained specific language for measuring the performance of the M&O Contractor. The Basis for Measurement for PBI 95-015 stated that:

"Report will document the melter assessment process.

"Report will provide recommendation and basis for recommendation.

"Report will define path forward for high-level melter development and testing, and provide cost, schedule, and technical requirements.

"Final report will include disposition/incorporation of comments from DOE review."

However, the PBI scheduled date of March 24, 1995, was actually established nearly one month after this project was planned to be completed without any incentive. Specifically, a WHC TWRS Division Milestone Description Sheet (MDS) dated September 23, 1994, and signed by WHC officials, provided information on the completion date for the report, the content of the report, and the deliverable required. The MDS stated that February 28, 1995, was established as the completion date for issuing a Melter Evaluation/Assessment Final Report.

In addition, the date of February 15, 1995, established for the M&O Contractor to achieve a PBI fee of \$200,000 was only 13 days ahead of the completion date for this project as established under the WHC TWRS Milestone Description Sheet, and 19 days after the PBI was established.

WHC certified that the work required under PBI 95-015 was complete 13 days after the PBI was established. In a Westinghouse Hanford Company letter dated February 9, 1995, subject: "COMPLETION OF PERFORMANCE BASED

INCENTIVE, 95-015," WHC stated that: "Attached is the final report, 'High-Level Waste Melter Alternative Assessment Report.' All DOE RL comments were dispositioned to the satisfaction of your staff."

In an interview with the DOE Richland Deputy Director for TWRS Waste Storage, the Deputy Director said that this PBI was established by Richland because it described tasks that were very important to Richland at that time. He said the PBI Performance Objective negotiation with the contractor began in September 1994, and he was aware that the contractor had begun working on the PBI task for several months in anticipation of the PBI being established. The Deputy Director also said he could not recall why it was important to receive this report more than two weeks in advance of the completion date stated in the Milestone Description Sheet.

Contractor Received \$250,000 in PBI Fees for Work that was Completed within Two Days

In August 1995, the Westinghouse Hanford Company submitted two letters to DOE Richland proposing the establishment of three new PBIs, which had been drafted by the Richland Operations Office and agreed to by WHC. Richland management stated that WHC agreed to these new PBIs in early August, even though the negotiations were not formally completed until August 28, 1995. The rationale for these WHC proposals were the cancellation of other PBI objectives which resulted in available incentive fees. These two WHC PBI proposals, which were approved by Richland, resulted in the establishment of three new PBIs valued at \$400,000. Of the \$400,000, the contractor received \$250,000 in PBI fees for work that was completed within two days under these three PBIs.

In the first letter, which was addressed to the DOE Richland Operations Officer, Site Operations Division, and dated August 24, 1995, the Westinghouse Hanford Company Acting Manager for Contracts Administration proposed the following:

"Westinghouse Hanford Company (WHC) requests approval of the attached Performance Based Incentive (PBI) in accordance with the subject contract clause. We are submitting for the Contracting Officer's approval PBI Number 95-032, Meet Tri-Party Agreement (TPA) Milestone M-41-17 by September 30, 1995; Remove the Supernatant from the Tank by December 31, 1995; and Begin Pumping Tank 241-T-107 and Remove the Supernatant so that No More than 1,000 Gallons of Supernatant Remains.

"PBI 95-032 is necessitated by the deletion of Tank 241-BY-105 from PBI 95-019-M2 in the amount of \$150,000. The total available WHC PBI fee remains the same, \$14,320,000. PBI 95-019-M2 will

be modified accordingly to delete Tank 241-BY-105 and transfer fee eligibility to PBI-032."

PBI 95-032-R2 was established on August 28, 1995, with an incentive fee of \$150,000 to pump tank 241-T-107. As stated in PBI 95-032-R2, the Performance Objective was to: "Begin pumping tank 241-T-107." The Contract Performance Measure stated that "Pumping of 241-T-107 begins by September 1, 1995, and at least 1,500 gallons is pumped within 30 days of pumping start" to achieve an "Excellent" performance quality level and the \$150,000 maximum award fee. The Basis for Measurement stated that: "WHC shall receive \$5,000 for each day pumping commences in single-shell tank (SST) 241-T-107 by September 30, 1995, provided that at least 1,500 gallons of liquid is pumped within 30 days of pumping start, not to exceed \$150,000."

The Contract Performance Measure for PBI 95-032-R2 required WHC to begin pumping tank 241-T-107 within four days of the PBI establishment date, and to pump at least 1,500 gallons within 30 days of pumping start to achieve an "Excellent" performance quality level and the \$150,000 maximum award fee. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$150,000 for completing PBI 95-032-R2 on August 30, 1995, two days after this PBI was established.

In the second letter, which was addressed to the DOE Richland Contracting Officer, Procurement Services Division, and dated August 29, 1995, the Westinghouse Hanford Company Acting Manager for Contracts Administration proposed the following:

"Westinghouse Hanford Company (WHC) requests approval of the attached Performance Based Incentive (PBI) in accordance with the subject contract clause. We are submitting for the Contracting Officer's approval PBI Number 95-033, Submission of the FY 1996 Multi-Year Program Plan (MYPP), and 95-034, Issue Double-Shell Tank Waste Consolidation Plan and Incorporate in the FY 96 MYPP.

"PBIs 95-033 and 95-034 are necessitated by the transfer of WHC fee eligibility from PBI 95-012 in the amount of \$200,000 and \$50,000 respectively. PBI 95-012, Projects W-211, W-236B, and W-378 will be modified accordingly."

PBI 95-033-R1 was established on August 29, 1995, with an incentive fee of \$200,000. As stated in PBI 95-033-R1, the Performance Objective was the "Submission of the FY 1996 Multi-Year Program Plan (MYPP)." The Contract Performance Measure stated that the contractor was to "Submit the FY 1996 MYPP by August 31, 1995, and the final MYPP by September 22, 1995. . . ." to achieve an

"Excellent" performance quality level and the \$200,000 maximum award fee. The PBI Basis for Measurement stated that: "WHC shall receive \$50,000 upon submittal of the final review draft MYPP by August 31, 1995, and receive \$150,000 upon submittal of the final MYPP for signature by September 22, 1995, for the maximum of \$200,000."

The Contract Performance Measure for PBI 95-033-R1 required WHC to submit the draft MYPP within two days of the PBI establishment date to achieve the \$50,000 award fee. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$50,000 for completing the Draft MYPP on August 31, 1995, two days after this PBI was established.

PBI 95-034-R1 was established on August 29, 1995, with an incentive fee of \$50,000. As stated in PBI 95-034-R1, the Performance Objective was to: "Issue Double-Shell Tank Waste Consolidation Plan and Incorporate in the FY 96 MYPP." The Contract Performance Measure stated that the contractor was to "Issue and Incorporate Waste Consolidation Plan in FY 96 MYPP by August 30, 1995" to achieve an "Excellent" performance quality level and the \$50,000 maximum award fee. The PBI Basis for Measurement stated that: "WHC shall receive \$1,667 for each day WHC issues and incorporates the Waste Consolidation Plan in the MYPP before September 29, 1995, up to a maximum of \$50,000."

The Contract Performance Measure for PBI 95-034-R1 required WHC to issue and incorporate the Waste Consolidation Plan in the FY 1996 MYPP within one day of the PBI establishment date to achieve the \$50,000 maximum award fee. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC earned \$50,000 for completing this PBI task on August 30, 1995, one day after this PBI was established.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, stated that: "It should be noted that the overall fee was also reduced from \$500,000 for the canceled PBIs to \$250,000 for the three new PBIs."

Inspector Comments:

The Managers comment was not incorporated into this report. A review of PBI documentation provided to the Office of Inspections by Richland indicated that the fee was reduced from \$500,000 for the canceled PBIs, to \$400,000 for the three new PBIs.

TWRS Tank Safety Screening Sample Analysis

As part of the Hanford Site TWRS Safety Screening Sample

Analysis Program, improvements to the safety screening sample turnaround time were included as a PBI. The PBI 95-027 Performance Objective, designated as "Complete TWRS Safety Screening Sample Turnaround within Specified Time Duration for Tank Waste Samples Analyzed in the 222-S Laboratory," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$250,000 if: "The average TWRS Tank Safety Screening Sample Analysis time is between 45 and 41 days for FY 1995."

However, WHC had achieved the safety screening sample analysis time of 45 days prior to the establishment of the Richland PBI Program. A review of a "SAFETY SCREENING (45-DAY REPORT) TURN-AROUND TIME PERFORMANCE FISCAL YEAR 1995" document provided by a DOE Richland Project Engineer indicates that WHC had already achieved a less than 45 day turnaround time on four different reports by December 1994.

WHC certified that the work required under PBI 95-027 was complete. In a Westinghouse Hanford Company letter from the WHC Manager of Analytical Services, TWRS Tank Waste Characterization Project, to the DOE Director, Waste Programs Division, dated September 29, 1995, subject: "PERFORMANCE BASED INCENTIVE 95-027/AMW-WPD - SAFETY SCREENING FOR TANK WASTE SAMPLES ANALYZED IN THE 222-S LABORATORY," the WHC Manager stated that:

". . . The Westinghouse Hanford Company (WHC) 222-S Laboratory successfully completed this PBI with an 'Excellent' performance quality level for the maximum fee (\$250,000).

"The 'Excellent' performance quality level was achieved by completing safety screening sample analysis and data (report) turnaround time (TAT) to the Tank Waste Remediation System (TWRS) Tank Waste Characterization Project (TCP) with the daily average analysis time being less than 41-days"

Upon certification by WHC that the work was completed, WHC was paid \$250,000. As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$250,000 for completing the "TWRS Safety Screening Sample Turnaround within Specified Time Duration for Tank Waste Samples Analyzed in the 222-S Laboratory."

PBI Modified After Work Was Completed

PBI 95-017 was established on January 27, 1995, with an incentive fee of \$1,000,000. As stated in PBI 95-017, the Performance Objective was to "Complete characterization of 30 tanks consistent with DNSFB 93-5 by providing 30 acceptable tank characterization reports for TWRS use and

submittal to WDOE [Washington Department of Ecology] /EPA." The Contract Performance Measure stated that "Up to 30 acceptable reports are delivered by 09/01/95" to achieve an 'Excellent' performance quality level and the \$1,000,000 maximum award fee. The PBI Basis for Measurement stated that:

"Each report will integrate historical and new samples information [Emphasis Added] for each tank. The waste analysis performed and reported will be dictated by the applicable and WDOE approved Tank Characterization Plan (TCP) for each tank. . . . WHC shall be awarded \$1,389 per report per day (with a ceiling of 24 days per report), for delivery of acceptable reports prior to 09/02/95, up to a maximum of \$1,000,000."

As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$843,333 for completing this PBI task on August 9, 1995.

However, PBI 95-017 was significantly modified by PBI 95-017-M1 on August 14, 1995, five days after the completion of the PBI objective, and was approved by the DOE Richland WHC Contracting Officer on October 3, 1995, nearly two months after the PBI work was completed. Specifically, the Performance Objective was changed to state that:

"Complete characterization of 30 tanks consistent with DNSFB 93-5 by providing 30 acceptable Tank Characterization Reports (TCRs) for TWRS use and submittal to Ecology/EPA, Acceptability will be rated according to timeliness, quality of sampling event, and usefulness of reported information." [Italics denote modified PBI language.]

The original Contract Performance Measure of "Up to 30 acceptable reports are delivered by 09/01/95" was replaced by three new Contract Performance Measures which stated that an 'Excellent' performance quality level and the \$1,000,000 maximum award fee could be earned by:

"(A) Timeliness: Up to 30 acceptable TCRs by 09/01/95. FEE: Up to \$300K (see basis A)

"(B) Quality: Up to 10 (of the total 30) acceptable TCRs based on samples taken May 1989 or later from Watchlist tanks. FEE: Up to \$300K (see basis B)

"(C) Usefulness: Up to 30 TCRs based on samples taken to meet Safety Screening DQO. FEE: Up to \$400K (see basis C)"

PBI 95-017-M1 differs significantly from the original, January 27, 1995, version in that (1) the Contract

Performance Measures are separated into three components with a separate fee structure for each, (2) up to 30 TCRs are based on samples taken to meet a Safety Screening Data Quality Objective, and, (3) up to 10 (of the total 30) total acceptable TCRs are based on tank waste samples collected on or after May 1989, from Watchlist Tanks, whereas the original version of this PBI stated that all reports must include "new samples information" [Emphasis Added].

In an interview with the DOE Richland Lab Interfaces/System Development Program Manager, the Program Manager said that the Basis for Measurement on the original, January 27, 1995, PBI was unclear, and would not have allowed the contractor to get an award for this PBI. The Program Manager said that after the PBI was written, a major change in DOE TWRS staff occurred, and that after a review of PBI 95-017 by newly assigned DOE TWRS officials, it was determined that the PBI needed to be modified. The Program Manager said that a significant problem with the original version of PBI 95-017 was what constituted an acceptable report was not well defined, and the sample acceptance criteria was not spelled out. He also said that DOE ended up with a number of reports that did not contain the data that DOE thought should be there. However, he said that because of the vague quality description in the PBI Basis for Measurement, it was felt DOE had to give WHC some of the fee, but that WHC had not earned all of the fee due to information missing from the reports. Additionally, the Program Manager said the reason the PBI modification was issued so late in the performance period was that DOE TWRS management realized the paperwork required for the modification did not match the guidance which was provided earlier to the contractor.

A letter from the DOE Richland Contracting Officer to the President of the Westinghouse Hanford Company, dated October 6, 1995, stated that it was the determination of DOE Richland that WHC had earned \$843,333 of the available \$1,000,000 PBI fee for PBI 95-017-M1, based upon the modified Contract Performance Measures.

Conclusions

We do not believe that PBI dollars were effectively used in the instances described here because the dates established for the accomplishment of the PBI Performance Objectives appear to have been easily achieved. In the case of PBI Number 95-011(g) for the replacement of a ventilation fan in SY Tank Farm, the date of August 31, 1995, established for the M&O Contractor to achieve a PBI fee of \$225,000 was four months after the planned date of April 28, 1995, for completion of this project as established under a WHC TWRS Milestone Description Sheet prepared in September 1994. In the case of PBI Number 95-015 for the provision of a final high-level waste melter assessment report, the date of February 15, 1995, established for the M&O Contractor to achieve a PBI fee of

\$200,000 was only 13 days ahead of the completion date for this project as established under a WHC TWRS Milestone Description Sheet prepared in September 1994, and 19 days after the PBI was established. In the case of PBI 95-032-R2 for the pumping of tank 241-T-107, WHC was paid a fee of \$150,000 for completing the performance objective just two days after the PBI was established. In the case of PBI Number 95-027, WHC had demonstrated in four out of four separate occasions between October and December 1994 that the PBI objective for the TWRS Tank Safety Screening Sample Analysis Time could be met between 45 and 41 days. And, in the case of PBI 95-017M1 for the completion of the characterization of 30 tanks and the provision of 30 acceptable tank characterization reports, WHC was paid \$843,333 for completing the PBI objective based on a PBI modification that made it easier to achieve the fee. In addition, this modification was issued five days after the work was completed, and was approved nearly two months after the work was completed.

We believe that performance based incentive objectives should represent activities that are significant to the operation of the Hanford Site and represent a challenge to the contractor in terms of utilizing its management and operational skills to achieve the substantial incentive fees described here. However, in these instances, we did not see evidence of any significant challenge to the management and operational skills of the contractor. We do not believe that the substantial performance based incentive fees paid in these cases can be justified by the PBI objectives.

The modification of PBI 95-017 for the completion of the characterization of 30 tanks and the provision of 30 acceptable tank characterization reports gives the appearance of a reduction in the scope of the PBI in order to support the payment of a PBI fee. We believe that the circumstances surrounding the PBI modification should be thoroughly reviewed by Richland to determine if the M&O Contractor was capable of meeting the original terms of the PBI, and that action be taken to recover the PBI fee if it is determined that this modification was made only after it became clear that the M&O Contractor could not meet the terms of the original PBI.

Recommendations

We recommend that the Manager, Richland Operations Office:

11. Develop policy which assures that future contract incentives represent activities that are significant to the operation of the Hanford Site and represent a challenge to the contractor in terms of utilizing its management and operational skills.
12. Direct the Contracting Officer to thoroughly review the circumstances surrounding the modification of

PBI 95-017 to determine if the incentive fee payment of \$843,333 was appropriate.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendations 11 and 12, stating that:

"Recommendation 11: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team.

"Recommendation 12: The Contracting Officer has been directed to thoroughly review the circumstances surrounding the modification to PBI 95-017-M1 to determine if the incentive fee payment of \$843,000 was appropriate."

The Manager offered additional comments regarding PBI 95-015, stating that the rationale to incentivize the High-Level Waste Melter Assessment was to ensure delivery of a critical report that would be used as the information basis to make critical, multi-billion dollar decisions for the tank waste disposal program. The Manager stated that this assessment report was an appropriate candidate for a PBI "because it was extremely important to the TWRS program to provide documentation on the melter assessment process; a recommendation and basis; definition of a path forward for high-level waste melter development and testing; and cost, schedule and technical requirements." The Manager stated that, due to the critical nature of the report, Richland determined that a delivery date of February 15, 1995, was desired, and an incentive fee of \$200,000 was appropriate. The Manager stated that the delivery date was in advance of the milestone description sheet completion date of February 28, 1995. The Manager stated that the difference between the desired February 15, 1995, delivery date and the satisfactory performance (no incentive fee) delivery date of March 24, 1995, was a result of standardizing the FY 1995 PBI format and establishing a midpoint date with incentives and disincentives based on a 38-day range around the midpoint. The Manager stated that the contractor submitted the product on February 9, 1995, and that Richland independently determined that the product fully met the acceptance criteria in the PBI, and met delivery requirements for the full incentive fee.

With regard to PBI 95-027, the Manager stated that the purpose of this PBI was to sustain the capability to meet/beat the 45-day turnaround times for safety screening analyses consistently over the entire FY 1995 period. The Manager stated that the 45-day turnaround was essential to establish the basis for safe storage of Hanford Tank Waste. The Manager stated that the contractor did achieve a turnaround time of less than 45 days for four separate safety screening analyses by December 1994, however, the PBI was not completed and the incentive fee was not approved until the end of FY 1995 to ensure that the turnaround time was maintained throughout the entire fiscal year. The Manager stated that the importance of this PBI was the need for the 222-S analytical laboratory to deal with an increasing TWRS analytical workload, while maintaining quick turnaround times on the data being utilized to determine the safety status of individual tanks.

With regard to PBI 95-017-M1, the Manager stated that the rationale to incentivize the characterization reports was to provide critical information to establish a basis for safe storage, retrieval, treatment, and disposal of Hanford Tank Waste. The Manager stated that the Contractor approached Richland for a more rigorous definition of what constituted an "acceptable" tank characterization report in the June 1995 time frame.

The Manager also stated that by mid-July 1995, the M&O Contractor and Richland had verbal agreement on the general form of the modified PBI. He stated that: "due to review cycle time, the PBI was submitted to the contractor on September 1, 1995, and was signed by September 15, 1995." The Manager stated that the modification did not reduce the requirements of the original PBI, it rigorously defined and quantified the original. He stated that the original PBI stated "each report will integrate historical and new samples information for each tank," and that to rigorously define "new samples information," Richland TWRS staff noted that the characterization cycle (from sampling to reporting) requires six to 12 months, depending on sample type; that samples are required after May of 1989 to meet Tri-Party Agreement requirements; and that most of the expected Tank Characterization Reports were based on at least one sample that was less than two years old. The Manager stated that: "it was therefore decided that any post 5/89 samples would meet the intent of the PBI." The Manager stated that the criterion did NOT allow inclusion of old samples, but incentivized the contractor to base at least 33 percent of the TCRs on Watch List Tanks. In comments to the Official Draft Report, the Manager stated that: "As a result of TWRS' effort, TPA milestone M-44-08, Issue 30 TCRs by September 30, 1995, was successfully completed."

In addition, the Manager stated that the original PBI required the contractor to "complete characterization of

30 tanks consistent with DNFSB 93-5 by providing 30 acceptable TCRs." He stated that to rigorously define lconsistent with DNFSB," Richland TWRS staff noted that DNFSB 93-5 placed emphasis on applying safety-related data quality objectives (DQO) to Watch List Tanks. He stated that it was therefore decided that at least one-third of the TCRs should be on Watch List Tanks. (At that time, 31 percent of the tanks were on watch lists. These tanks have been defined by Richland as hazardous waste storage tanks that have the potential for release of radioactivity due to increases in temperature or pressure). He stated that it was also decided that the safety screening DQO should be applied to each tank on which a TCR was based in order to collect the full fee.

The Manager stated that the modified PBI also increased in scope. He stated that the modified PBI clearly defines acceptable deliverables, whereas the original did not. He stated that the modified PBI also clearly defines how partial credit was assigned for TCRs that only partially met performance criteria. He stated that the original PBI only required the contractor to submit TCRs by August 9, 1995; the modified PBI also required that the safety screening DQO be applied to all TCRs, and required that at least one-third of the TCRs be based on Watch List Tanks.

With regard to Milestone Description Dates, the Manager stated that the contractor's agreement to the Milestone Description Dates were not met in all cases with successful product delivery by the milestone dates. The Manager stated that: "in fact, the contractor's ability to meet critical dates in the past had been less than satisfactory and their inability to deliver quality and timely products as agreed in the MYPP was one of the primary reasons for converting from a subjective to a performance-based contract." The Manager stated that, in addition, since the PBI fee pool amounts were offsets from the base and award fee pools, PBI payments were not in addition to award fees the contractor may have earned for successful completion of MYPP milestones.

Inspector Comments:

With regard to PBI 95-015, we believe that delivery of the High-Level Waste Melter Assessment Report to Richland officials was important to the TWRS program. However, the basic point we were addressing in our Initial Draft Report was that the PBI date established appeared to have been easily achieved by the contractor. Specifically, the PBI accelerated the contractor's scheduled performance by only 13 days. In addition, the contractor earned a fee of \$200,000 for this 13 day acceleration with no specific documentation of the benefit to DOE identified for this two week acceleration. We believe that incentive fees of this magnitude need to be clearly justified in situations where the contractor performance objectives appears to be easily achievable, and that the benefit to the Government

through the use of such significant incentive fees to motivate the contractor's behavior be clearly documented.

With regard to PBI 95-027, we concur with management's comments that the intent of this PBI was to sustain a level of performance already achieved prior to the PBI being established, specifically a turnaround time not to exceed 45 days. The basic point we are addressing here is that the incentive objectives should represent activities that are significant to the operation of the Hanford Site and that represent a challenge to the contractor in terms of utilizing its management and operational skills to achieve the substantial fees described here. However, in this instance, it is not clear that there was a significant challenge to the management and operational skills of the contractor associated with the \$250,000 fee. As stated in this report, the contractor had already shown on four occasions prior to the establishment of the PBI that the 45-41 day turnaround time was achievable.

With regard to PBI 95-017-M1, we agree with the management comment that the modified PBI "rigorously defined and quantified" the original PBI. However, we do not completely agree that the modification "did not" reduce the requirements of the original PBI. The basic point we were addressing in the Initial Draft Report was that one of the critical elements of the original PBI stated that: "each report will integrate historical and new samples information for each tank." In "rigorously" defining "new sample information," Richland eliminated the requirement for "new sample information" and replaced it with "post 5/89 samples." Richland has indicated that the characterization cycle (from sample to reporting) requires six to 12 months, but it should be noted that the term of the PBI was only seven months. We believe that this change was significant in helping the contractor to achieve the PBI fee of \$843,333.

In addition, the modified PBI defined how partial credit was assigned for Tank Characterization Reports that only partially met performance criteria, whereas the original PBI did not define an acceptable report in this manner. We were told during our inspection that the Basis for Measurement in the original PBI was unclear, and would not have allowed the contractor to get a fee for this PBI. We were also told that because of the vague quality description in the Basis for Measurement, it was felt that DOE had to give the contractor some of the fee. Our concern here is that the contractor may not have been able to completely meet the requirements of the original PBI, and that, by modifying the PBI to allow "5/89 samples" and partial credit for TCRs, it was easier for the contractor to earn a substantial portion of the \$1,000,000 maximum fee. It is clear that the modified PBI was approved on October 3, 1995, nearly two months after the work was certified as complete by the contractor on August 9, 1995. We continue to believe that the circumstances surrounding

the PBI modification should be thoroughly reviewed by Richland to determine if the contractor was capable of meeting the original terms of the PBI, and that action be taken to recover the PBI fee if it is determined that this modification was made only after it became clear that the contractor could not meet the terms of the original PBI.

E. QUALITY AND SAFETY WERE COMPROMISED TO ACHIEVE A PBI FEE

Our inspection found that quality and safety were compromised by the M&O Contractor in order to achieve a PBI fee. Specifically, in a report prepared by the Richland Waste Storage Division, Tank Farms Operations, the Tank Farms Operations Manager identified a condition where the M&O Contractor had compromised quality and safety in the installation of a tank farm air compressor system. The Manager reported that quality and safety had been compromised to meet the project schedule and to achieve the PBI fee, which had been established at \$225,000.

PBI Scope of Work and Schedule

As previously discussed, the PBI 95-011(d) Performance Objective, described as "Replace compressed air systems in 10 tank farms by March 31, 1995 (SI 4b)," was established on January 27, 1995. This PBI stated that the M&O Contractor would receive up to \$225,000 for completing this action 30 days ahead of schedule. According to the WHC TWRS Milestone Description Sheet (MDS) dated September 16, 1994, tasks within this scope of work included replacement of compressor systems within existing facilities, upgrade of compressor cooling systems, providing a dryer system for the compressed air system, acceptance and operational testing, and the return of the compressed air systems to WHC Hanford Site Operations for continued use.

As shown on the "FY 95 Performance Based Incentives Westinghouse Hanford Company (WHC)" data sheet provided by the Richland Operations Officer, WHC was paid \$185,870 for completing the project described as "Replace compressed air systems in 10 tank farms" 19 days ahead of schedule.

Richland Special Assessment Report

A Richland "Special Assessment Report" found that quality and safety had been compromised. On June 10, 1996, WHC personnel attempted a preventive maintenance activity on the 241-A-701 glycol cooling system fans at Building 701-A. Problems encountered during that activity prompted the identification of a "near miss" incident. Specifically, during the maintenance activity, four fans started, including two fans the electricians believed had been locked out. This incident resulted in an investigation by

WHC and the initiation of a special assessment by the DOE Richland Operations Office Tank Waste Remediation System (TWRS) Waste Storage Division (WSD) Tank Farm Operations management. A DOE Richland "Special Assessment Report" for the "241-A-701 Air Compressor Upgrade" was issued on August 5, 1996, and stated that:

"The results of this assessment indicate that quality and safety were compromised for schedule and to achieve the Performance Based Incentive (PBI) for the 241-A-701 Air Compressor Upgrade. For example, construction was started before the engineering and design efforts were satisfactorily completed. Acceptance testing was fast tracked (10-hour days, seven days a week for six weeks) and accepted for the PBI fee associated with upgrading Tank Farm compressors."

This report specifically related deficiencies in the management of the 241-A-701 Air Compressor Upgrade with the "near miss" incident and stated that:

"The assessment team determined that DOE requirements were not properly implemented during startup and acceptance of the system. Several significant deficiencies were identified that led to the near miss event at 701-A, including improper acceptance and turnover of systems, improper configuration management control, incorrect labeling of equipment, improper lockout/tagout practices, and inadequate safety and quality oversight. . . . Based on the fact that this assessment identified several weaknesses with worker safety impact, WHC should take immediate corrective actions to ensure safe and reliable performance and preclude recurrence of this event."

Specific quality and safety items that were reported to have been compromised include:

- Acceptance testing of the 241-A-701 Air Compressor Upgrade Project did not ensure that the system would meet established requirements and perform as specified as required by Title 10, Code of Federal Regulations (CFR), Part 830.120, "Quality Assurance Requirements," and DOE Order 5700.6C, "Quality Assurance."
- The 241-A-701 Air Compressor Upgrade project was not verified as meeting specifications, with the Operational Test Procedure complete and exceptions corrected prior to acceptance as required by DOE Order 4700.1, "Project Management System," and 10 CFR 830.120/DOE Order 5700.6C.
- The labeling requirements of DOE Order 5480.19, "Conduct of Operations," and 29 CFR 1910.303 (f),

"Identification of Disconnecting Means and Circuits, have not been successfully implemented at the East Tank Farm Facility.

- The assessment team found an absence of as-built drawings and specific written procedures, routine walkdowns, or specific work package instructions to identify all energy isolation points for equipment, machinery, and systems for the 241-A-701 Air Compressor Upgrade Project. This resulted in the inability of the East Tank Farm's management to adequately afford protection of affected workers and to ensure complete compliance with the requirements of 29 CFR 1910.147, "The Control of Hazardous Energy (lockout/tagout)," 29 CFR 1910.333, "Selection and Use of Work Practices," and DOE Order 5480.19.

Conclusions

We believe the evidence developed by the assessment team clearly shows WHC deviated from established procedures to achieve the PBI fee of \$185,870. We believe that, based on the DOE Richland "Special Assessment Report," the 241-A-701 Air Compressor Upgrade project performed under PBI Number 95-011(d) compromised quality and safety through the failure of WHC to follow required procedures for the testing and acceptance of the system. Violations of DOE, CFR, and WHC procedures contributed to the "near miss" incident through incomplete acceptance and operational testing, improper Acceptance for Beneficial Use, and the lack of as-built drawings. Even though WHC declared the Acceptance Test Procedure successful to the extent necessary to claim a PBI, all of the steps of the Acceptance Test Procedure had not been completed. As discussed earlier in this report, the Acceptance Test Procedure did not distinguish between those steps dedicated to the PBI and those steps not PBI related. The use of the completion and acceptance page of the Acceptance Test Procedure to indicate "PBI Acceptance" was determined by the assessment team to be a significant revision to the Acceptance Test Procedure which would have required review and approval under WHC and DOE procedures. However, no such review and approval was obtained.

Recommendations

We recommend that the Manager, Richland Operations Office:

13. Initiate a review of the other compressor upgrades performed under PBI Number 95-011(d) to determine if quality and safety problems exist which are similar to those identified for the 241-A-701 Air Compressor Upgrade.
14. Establish a procedure to verify that incentive work performed under future contracts at Richland complies with DOE and contractor acceptance testing procedures

prior to the authorization of the payment of incentive fees.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendations 13 and 14, stating that:

"Recommendation 13: RL will complete a safety review of other compressor upgrades performed under PBI 95-011(d) to determine if quality and safety problems exist which are similar to those identified for the 241-A-701 Air Compressor Upgrade.

"Recommendation 14: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team."

F. RICHLAND PBI PROGRAM ADMINISTRATIVE WEAKNESSES

Our inspection found that there were many PBI Program administrative weaknesses in the implementation of the FY 1995 Performance Based Incentive Program at the Richland Operations Office. The \$14.22 million dollar PBI Program was established by Richland without any specific written policies or procedures for the management and administration of an incentive fee program. Additionally, (1) an audit trail did not exist for the Richland PBI process; (2) the rationale for the selection of performance objectives was unclear; (3) the justification for specific PBI fee amounts could not be determined; (4) the scope of the PBI work and the criteria for acceptance was not always clearly defined; and, (5) the expected financial and operational benefits from individual projects selected under the PBI Program were undefined in most cases.

Richland Directed to Implement PBI Program

The Richland Operations Office was formally given three months to incorporate the provisions of Contract Reform into the existing Management and Operating contract. A July 5, 1994, "DECISION MEMORANDUM," prepared by the Contract Reform Executive Committee and approved by the Secretary of Energy, shows that Richland was allowed three months (July 1994 to October 1994) to include Contract

Reform Initiatives in the existing WHC contract. Specifically, this document states under a header titled "Hanford Reservation/Westinghouse Hanford Co." that: "The full range of applicable contract provisions, including cost reduction, should be incorporated into the contract by the beginning of October 1994." The former Principle Deputy Assistant Secretary for Environmental Management (EM-2) told us that this short lead time was due to an agreement between the Secretary and Contract Reform Executive Committee members who were willing to extend the WHC contract with the proviso that Contract Reform Initiatives be included. The Richland Contracting Officer told us that there were two reasons for this short lead time: (1) EM wanted to have a site "up and going" with the provisions of Contract Reform included in the contract; and, (2) WHC was going through contract negotiations for the extension of their existing Management and Operating contract, and EM wanted to improve the contract under negotiations.

Lack of Written Procedures to Implement Richland PBI Program

We found that there was a lack of written procedures for the implementation of the Richland PBI Program. As part of our inspection, we interviewed a number of DOE Richland officials who established the FY 1995 PBI Program at the Richland Operations Office. During these interviews, the Office of Inspections requested information regarding the guidance that the Richland officials received from DOE Headquarters with regard to how the PBI Program should be established, the guidance that was provided by Richland to Richland PBI implementation officials, and copies of any policies or procedures that implemented the PBI Program at Richland. However, these requests failed to produce any written procedures.

Specifically, in an interview with the Richland Operations Office Deputy Manager, the Deputy Manager said that the Richland PBIs were developed to support the Contract Reform Initiative, and that most of the guidance he received from DOE Headquarters was in the form of verbal philosophy. In an interview with the former Richland Operations Officer, the former Operations Officer said that DOE Richland had never received any written guidance with regard to how the PBI Program should be administered. He also said the Richland PBI Program began in the Summer of 1994 as part of the Contract Reform Initiative, and that the motivation to establish the PBI Program at Richland was initiated at DOE Headquarters to implement the Contract Reform Initiative. He said he was not aware of any Department of Energy Acquisition Regulation (DEAR), DOE Order, Acquisition Letter, or other written instruction provided by DOE Headquarters that served as guidance for establishing the PBI Program at Richland.

We also interviewed a Management Analyst from the Office

of Field Services and Liaison, Office of the Associate Deputy Secretary for Field Management, regarding any guidance for the PBI Program promulgated by DOE Headquarters. The Management Analyst said that he was unaware of any specific guidance from "Field Management" that had been provided to the Richland Operations Office regarding their PBI Program.

We also found that there was a lack of written procedures for the implementation and administration of the Richland PBI Program issued by the Richland Operations Office. Specifically, in an interview with the former Richland Operations Officer, the former Operations Officer said that, to his knowledge, there were no written policies or procedures that existed for the DOE Richland PBI Program. We also interviewed the current DOE Richland Operations Officer who is responsible for administering the Richland PBI Program, and he said that there were no established written procedures at Richland on how to administer the PBI Program. He did provide the Office of Inspections with a document titled: "PERFORMANCE-BASED INCENTIVES, ADMINISTRATION OF." The stated purpose of this document was: "To implement administration and execution of Performance-Based Incentives (PBIs) established for contracts managed by U.S. Department of Energy (DOE), Richland Operations Office (RL)." However, he stated that this document "was drafted, but never formalized." In addition, he stated that this document was never put into use by the Richland Operations Office.

Lack of an Audit Trail

We found that there was a lack of an audit trail associated with the Richland PBI process. After a review of the FY 1995 PBI documents, we could not determine who the author of a given PBI was, what level of DOE management review or concurrence had been established, or when such reviews had occurred, if at all. Specifically, this situation developed because of the lack of a signature or routing feature associated with the PBI document. During interviews with several DOE Richland officials, we were often told that they did not know who authored a given PBI, who reviewed specific PBIs prior to issuance, or who authorized specific incentive fee amounts.

The DOE Richland Operations Officer said there is no record, that he knows of, regarding who authored or reviewed the PBI documents. He said he believed that the initial PBIs were developed by DOE Richland division level managers and their contractor counterparts. He said his understanding was that Richland was in a hurry to establish the PBI Program, and that WHC probably proposed the majority of the FY 1995 PBIs. He said there was probably no audit trail for the FY 1995 PBIs. After consultation with the former DOE Richland Operations Officer and the DOE Richland Budget Officer who were

members of the FY 1995 PBI team at Richland, he said that there was nothing in the PBI contract files which would identify the author, reviewer, or approval persons for FY 1995 PBIs. He said there were several iterations of draft PBIs which went between Richland and WHC, but that these draft documents no longer exist. He concluded by saying that the final PBIs were approved by the Deputy Manager. However, he said that since there was no requirement in FY 1995 to maintain a record of the substantive reviews and approvals that took place during negotiations with WHC, no record of these reviews and approvals exist.

Rationale for the Selection of Performance Objectives is Unclear

We found that the rationale for the selection of performance based objectives was unclear. As part of our inspection, we interviewed many DOE Richland officials regarding the basis for selecting specific performance objectives for inclusion in the PBI Program. However, we could not identify a process which was used to justify or select these performance objectives for a PBI incentive. Specifically, the former DOE Richland Operations Officer said that, after DOE Headquarters returned the originally submitted group of 13 PBIs as being insufficient, DOE Richland was given a short period of time to resubmit the PBI package. He said that, as a result, DOE Richland Program Managers were under a lot of pressure to nominate new projects as PBIs. The former DOE Richland Operations Officer also said that no supporting documentation was provided by the Project Managers and that some business as usual projects were nominated as PBIs. During an interview with the current DOE Richland Operations Officer, the Operations Officer said that documentation which would support the selection of the specific projects which were originally included in the DOE Richland PBI Program was not available.

Lack of Justification for Specific PBI Fee Amounts

We found that there was a lack of justification for specific PBI fee amounts. Specifically, during our review of the contract files for the 34 PBIs established in FY 1995, we found no documentation that justified the PBI fees established for the PBI performance objectives. As part of our inspection, we interviewed many DOE Richland officials regarding the justification for the established PBI fee amounts, and we were told that no specific justifications were prepared for individual PBIs. During an interview with the Richland Operations Officer who was responsible for administering the PBI Program at Richland, the Operations Officer said that there was no documentation to justify specific PBI fee award amounts, and that he was unaware of any cost benefit or similar analysis that was used to justify specific PBI fees.

An example of the lack of a justification for specific PBI

fee amounts is PBI 95-011, "Completion of FY 95 Tank Waste Remediation System (TWRS) safety initiatives." This PBI included eight separate performance objectives, such as the replacement of a ventilation fan, installation of gas monitoring equipment, completion of an engineering study, and replacement of compressed air systems in various tank farms. The incentive fee amount of \$1,800,000 assigned to this PBI was divided evenly among the eight separate objectives, resulting in an available fee of \$225,000 for each objective. We found no evidence that this distribution was based on any consideration for the complexity of the tasks, the risks to the contractor, or the difficulties in achieving the PBI performance dates. The Manager of the Richland Operations Office stated that an objective cost basis methodology to determine the incentive fee was not available and that the fee of \$225,000 for each performance objective was calculated by dividing the \$1,800,000 fee available for PBI 95-011 by the eight selected performance objectives.

During a return trip to Richland the week of December 2, 1996, we found other similar examples. For instance, PBI 95-001, "FAST FLUX TEST FACILITY-Complete reactor vessel defueling," and PBI 95-026, "FAST FLUX TEST FACILITY-Complete the shutdown of Group 1 systems," were assigned fee amounts of \$500,000 and \$300,000 respectively. During our return trip, we found no detailed consideration or analysis that these fee amounts were based on any consideration for the complexity of the tasks, the risks to the contractor, or the difficulties in achieving the PBI performance dates. In fact, we were told that a total of \$800,000 had been allocated to the Fast Flux Test Facility (FFTF) for PBIs in FY 1995, and since the FFTF only had two PBI candidates, the \$800,000 was divided between the two. We were told that PBI 95-001 was assigned an available fee of \$500,000 because it was the more significant of the two FFTF PBIs, and that PBI 95-026 was assigned \$300,000 in available fee because that was the amount left over. We were told that, in distributing the \$800,000, an attempt was made to proportion the amount of fee based on the size of the two PBI tasks. However, we were also told that a cost/benefit or similar analysis was not used to justify the PBI award amounts.

Scope of the PBI Work and the Criteria for Acceptance
was not Always Clearly Defined

We found that the scope of PBI work and the criteria for acceptance was not always clearly defined. For example, many PBIs did not identify the specific scope of work, citing only the title of the project. This was the case for each of the eight PBI objectives identified under PBI 95-011, with \$225,000 in incentive fee available for each objective. For example, the only reference to the scope of work under PBI 95-011 was the statement of the specific milestones to be accomplished under the Performance Objective of "Timely completion of TWRS Safety Initiatives

scheduled for FY-95." For PBI 95-011(c), the specific milestone stated: "Upgrade alarm panels in 7 tank farms by March 31, 1995. (SI 4a)." In this case, the specific tasks to be performed were not identified on the PBI document. In order to determine the scope of work, one would need to go to the WHC TWRS Milestone Description Sheet for this project, a document that was not even referenced on the PBI, or the Safety Initiative Description Sheet, a document referenced only by inference as SI-4a.

In addition, many PBIs did not identify the specific acceptance criteria. This was also the case for each of the eight PBI objectives identified under PBI 95-011. In the case of PBI 95-011(d), the PBI document was silent on the specific acceptance criteria, even though the work was subject to the completion of acceptance and operational testing under the provisions of 10 CFR 830 and DOE Order 5700.6C. The "BASIS FOR MEASUREMENT" on the PBI document only addressed the PBI fees and the time frames associated with payments of fees or the assessment of penalties.

The Expected Financial and Operational Benefits from PBI Program Implementation were Undefined in Most Cases

During our inspection, we reviewed the available PBI documentation and interviewed several DOE Richland officials regarding the expected financial or operational benefits from the establishment of specific PBIs. We found there was no requirement to ascertain if a financial or operational benefit would be derived from the establishment of a PBI. Specifically, in an interview with the former DOE Richland Operations Officer, he said there was no review or analysis of expected financial or operational benefits that would be derived from the completion of PBI projects, and that he could not identify a reduction in personnel, operating budgets, or cost savings that would directly result from projects being included in the FY 1995 PBI Program at the time that the PBIs were established.

We also interviewed the DOE Richland Budget Officer who said the contractor was not required to demonstrate a cost savings to receive a PBI award; and, regarding what the proper incentive fee amounts should be, he said no cost analysis other than a rough order of magnitude of what would motivate the contractor was ever performed. He also said there is no specific process in place to deobligate funding based upon accelerated program completion that may result from PBI efforts, nor could he identify any reduction in Full Time Employees (FTE), operating budgets, or other cost savings that could directly result from projects included in the FY 1995 PBI Program.

However, at the request of the Office of Inspections, Richland was able to provide information on the benefits of various PBIs after the PBI work had been completed.

Specifically, the Office of Inspections requested that the DOE Richland Operations Officer provide an estimate of benefits derived from the FY 1995 PBI Program. In response to this request, on July 15, 1996, the following information regarding the benefits of PBIs was provided to the Office of Inspections by the DOE Richland Operations Officer:

PBI Number	Performance Objective	PBI Benefit Stated by Richland
95-001	Defuel FFTF	Defuel FFTF 5 months early, \$450,000 savings
95-004	Lost workday incidence rates improved	46 percent improvement in lost work day rate
95-007	Reduce radiological contaminated areas	Reduction exceeded goal by 20 percent
95-010	TEDF Pipeline tie-in	Completed 1 month early, \$2.2 million under budget
95-023	Shipment of nitric acid	PUREX transition schedule decreased by 10 months, \$37 million saved
95-025	Return of Cesium Capsules	\$800,000 cost avoidance, funding reprogrammed

Additionally, there were many other examples of benefits achieved that were provided by the Richland Operations Officer, which included the following:

- Alarm Panel Installations: Achieved consistency throughout the tank farms for improved maintenance efficiency.
- Continuous Temperature Monitoring: Installation of new thermocouple trees more efficient than replacing as failures occurred.
- Sparkless Fan Installation: Eliminated potential ignition source.
- Waste Characterization: Vital to mission objectives.
- Corrective Maintenance Backlog Reduction: Eliminated work scope, combined work scope, and reduced backlog often used to substantiate the need for additional staff.

Richland Internal Assessment of the FY 1995 PBI Program

At the time of our inspection, the Richland Operations Office did not have an internal assessment program or similar process in place to monitor the effectiveness of the FY 1995 PBI Program. Specifically, we interviewed

the DOE Richland Operations Officer on September 26, 1995, who said that at that time there had been no internal assessments of the DOE Richland PBI Program. We also interviewed the DOE Richland Budget Officer on October 25, 1995, who told us that he was not aware of any internal assessments conducted by DOE Richland of the PBI Program.

However, as previously stated, a DOE Richland Review Team was established that conducted a limited review of FY 1995 Tank Waste Remediation System PBI activity, and issued a report in September 1996 which documented the Review Team's findings. The Review Team consisted primarily of DOE Richland employees from the Management Systems Division of TWRS, who were tasked to determine if certain FY 1995 performance based incentives were awarded appropriately. The Review Team selected six fee awarded PBIs for FY 1995, and evaluated them for completeness expectations and timeliness; and included field assessments to verify performance. As previously discussed, the results of the Review Team's efforts were stated in the Review of Tank Waste Remediation System (TWRS) Fiscal Year 1995 Performance Based Incentives report, dated September 24, 1996. In addition to discussing the work actually performed under the PBIs reviewed, the report also provided LESSONS LEARNED and stated that: "The review team identified a number of deficiencies in the PBI description and performance objectives which would provide value-added in developing future PBIs." The deficiencies discussed in the report included the following:

- PBIs typically identify neither performance standard(s) for the deliverable nor acceptance criteria for evaluation of the award fee. A PBI normally does not, at least directly, indicate the required scope of the study or an associated reference.
- Major components of many PBIs are substantially developed at the time when the PBI comes into existence (e.g., the PBI is not based on substantially new work). Clarification needs to be made how the PBI should interface with work in progress.
- Potential fees may be quite large. However, there may be no indication that the organization derives any operational or technical benefit from an acceleration to complete the work. In general, it would assist in the evaluation of PBIs if the intended benefit to be derived by DOE is clearly identified.
- Every PBI should have the period of performance clearly stated so there is no question how long the contractor has to complete the work (e.g. - period of performance was not

defined on the corrective maintenance backlog PBI).

- Upon review of the PBIs, the level of performance requested was too easily attained by the contractor. In the case of the T-107 pumping, this effort was accomplished in 48 hours. Was there significant value in pumping 1,500 gallons since there was 10,000 gallons of pumpable solution?
- PBIs need to be reviewed by a team prior to any payment to verify that the Government received the work requested. Records and documentation should be collected at that time in the event of additional questions. Without proper documentation, it is difficult to avoid future litigation in the event of questions. Also, PBIs should be reviewed prior to agreement with the contractor to verify the incentive, risk, etc.

Department of Energy Headquarters Review of Richland
FY 1995 PBIs

As indicated in the "BACKGROUND" section of this report, DOE Headquarters directed the Richland Operations Office to incorporate performance based incentives into the WHC contract extension, and we were told that DOE Headquarters sent drafts of 13 FY 1995 PBIs prior to the establishment of the PBI Program at Richland. DOE Headquarters directed changes to the Richland PBI Program, requiring that the dollar size of the Richland PBI Program be raised and that the number of individual PBIs be increased. However, the DOE Headquarters review of individual FY 1995 PBIs was of a general nature. The information received by DOE Headquarters on individual FY 1995 PBIs did not include data that would have allowed DOE Headquarters to identify the types of weaknesses discussed in this report, such as documentation on the cost of PBI projects compared with proposed incentive fees or documentation showing that proposed PBI work was already complete.

Management Comments:

In comments to the Official Draft Report, the Assistant Secretary for Environmental Management stated that the guidance to Richland was to allocate more of the available fee pool dollars to objectively measured performance based incentives, and to reduce the amount of the subjective award fee portion of the fee pool. The Assistant Secretary stated that the direction was to redistribute the fee pool, not to increase the total dollar amount available. The Assistant Secretary stated that this guidance is consistent with performance based management contracting principles which dictate "pay-for-performance"

and transfer of performance risk to the contractor through allocation of a higher proportion of the fee pool to objective, results oriented performance incentives.

Environmental Management Fee and Incentives Analysis Team

The Office of the Deputy Assistant Secretary for Site Operations, Office of the Assistant Secretary for Environmental Management, established a Fee and Incentives Analysis Team (FIAT). The "CHARTER" of this team as approved by the "EM Corporate Forum" on March 6, 1996, is stated as follows:

"Identify and document best fee and incentive practices to promote significantly improved contractor performance. Recommend guidelines for EM that may be adapted for local needs. Provide input to the development and implementation of Department-wide contract policy."

The FIAT developed draft guidelines dated June 19, 1996, titled "DRAFT GUIDELINES FOR EM FEE AND INCENTIVES DEVELOPMENT (PHASE I)." In a July 10, 1996, briefing document titled "FEE GUIDELINES PROJECT PROGRESS REPORT," the team reported that "EM Guidelines will be written primarily for field line operating managers/procurement officers who establish performance expectations and are engaged in fee and incentive determinations." The team also reported that "EM Guidelines and recommendations will be specific, but are not intended to be prescriptive." The team reported that the guidelines being developed incorporate "FEE STRUCTURE," "MULTI-YEAR PERFORMANCE OBJECTIVES," "ROLES AND RESPONSIBILITIES," and "FEE STRATEGIES." The team reported that they anticipate distributing "Final Draft Guidelines" for coordination and review by November 1996. In comments to the Initial Draft Report, the Assistant Secretary for Environmental Management stated that prompt action will be taken by the Office of Environmental Management to finalize the Guidelines of its Fee Analysis and Incentive Team.

FY 1997 Richland Performance Based Management Contract Performance Agreements

Incentive contracting has continued at the Hanford Site during FY 1997. Effective October 1, 1996, a new contract (DE-AC06-96RL13200) was entered into with Fluor Daniel Hanford, Incorporated, performing the function of the "Project Hanford Management Contractor." As stated in Part III, Section J, Appendix D, "PERFORMANCE OBJECTIVES, MEASURES, EXPECTATIONS, AND INCENTIVES" of this contract, Section 1 states in part that:

"The fee earned is linked to the achievement of performance objectives and expectations to ensure

that the Contractor is properly motivated consistent with DOE values, the achievement of strategic objectives, and the completion of milestone activities."

Section 1 of this contract also states that:

"It is important that the Contractor also completes (in accordance with contract quality requirements) all contractually identified critical and non-critical milestones on schedule and within estimated costs. The fee provisions in this contract are intended to motivate the contractor to deliver outcomes exceeding DOE and contract scope of work expectations but are done within approved schedules or budgets. The fee pool system is also intended to reward the Contractor for successfully implementing technologies or processes which achieve results better, faster, and/or cheaper."

Conclusions

The Richland PBI Program was implemented in a three month period and operated without any specific written policy or procedural guidance for the management and administration of an incentive fee program. As a result, there was no audit trail identifying the level of management review or the authorization of incentive fee amounts. In addition, (1) the rationale for the selection of performance objectives was unclear; (2) the justification for specific PBI fee amounts could not be determined; (3) the scope of the PBI work and the criteria for acceptance was not always clearly defined; and, (4) the expected financial and operational benefits from individual projects selected under the PBI Program were undefined in most cases.

We believe that the lack of written policy or procedural guidance issued by the Department's Headquarters or the Richland Operations Office contributed to a Performance Based Incentive Program at Richland that did not always make the best use of incentive dollars paid to the Management and Operating Contractor. We believe that the lack of specific written policy or procedural guidance caused or contributed to the particular problems identified in this report. These problems include: (1) an instance where the fee paid was excessive when compared with the cost of labor and material to perform the PBI work; (2) instances where PBI fees were paid for work that was accomplished prior to the establishment of the PBI Program at Richland; (3) instances where PBI fees were paid for work that was not completed; (4) instances where PBI fees were paid for work that was easily achieved by the Management and Operating Contractor; and, (5) an instance where quality and safety were compromised by the Management and Operating Contractor in order to achieve a PBI fee.

The September 24, 1996, Richland Review Teamms report titled "Review of Tank Waste Remediation System (TWRS) Fiscal Year 1995 Performance Based Incentives" identified similar weaknesses in the Richland PBI Program, citing a lack of performance standards for the deliverables and acceptance criteria for evaluation of the award fee, PBIs that were not based on substantially new work, unclear identification of the intended operational or technical benefit to the Department, and levels of performance too easily achieved by the contractor.

We believe that written policy and procedural guidance needs to be developed in order to: (1) provide for better control over the incentive contracting program at Richland; (2) increase the effectiveness of this program; and (3) increase the dollars available for real incentive opportunities that may need to be accomplished at the Richland Site in the future.

Recommendations

We recommend that the Manager, Richland Operations Office:

15. Develop written policies and procedural guidance for contract incentives programs at the Richland Site which focus on the rationale for the selection of performance objectives, the determination and justification for specific PBI fee amounts, the scoping of incentive work and the criteria for acceptance, and the expected financial and operational benefits from contract incentives.
16. Ensure that future incentive fee contract documents contain an audit trail which details the level of management review and the authorization of incentive fee amounts.
17. Ensure that future incentive fee contract documents contain the specific scope of the incentive work to be performed and the specific criteria to be used for acceptance of the incentive work.

We recommend that the Assistant Secretary for Environmental Management:

18. Assure that the fee and incentive policy and procedural guidance currently under development by the FIAT Team addresses: (1) the selection of tasks for inclusion under a contract incentive; (2) the relationship between incentive fees and the difficulty and cost of the work to be included under an incentive; (3) the impact of the work to be included under an incentive on the operations of the site involved; (4) the risk to the contractor; (5) the scoping of work and the identification of acceptance criteria; and (6) verification of the work prior to payment of the incentive fee.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendations 15, 16, and 17, stating that:

"Recommendation 15: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team.

"Recommendation 16: RL will take actions during its review of the FY 1995 and FY 1996 PBIs to ensure that future incentive fee documentation contains an audit trail detailing the level of management review and the authorization of incentive fee amounts.

"Recommendation 17: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team."

The Manager offered additional comments, stating that prior to receipt of the Initial Draft Report, Richland was aware of deficiencies in their FY 1995 PBI Program. The Manager stated that Richland's efforts at establishing and administering PBIs were "hampered by limited guidance and lessons-learned." The Manager also stated that Richland applied lessons-learned in the development of current incentive fee programs, and plans to review FY 1995 and FY 1996 performance based incentives, identify problems, perform root cause analysis, develop procedures, and provide necessary training for future incentive fee programs.

In comments to the Initial Draft Report, the Assistant Secretary for Environmental Management concurred with Recommendation 18, stating that: "With respect to Recommendation # 18, I commit to prompt implementation." The Assistant Secretary stated that the Department recognized early in the performance based incentive

program that there were some significant process and implementation issues to resolve. The Assistant Secretary stated that: "As such, we have been working on these issues for some time."

The Assistant Secretary offered additional comments, stating that the very nature of contract reform is one that is evolutionary and by necessity incorporates a process of continuous improvement. The Assistant Secretary stated that: "Lessons learned during our initial contract reform effort have been factored in as DOE fine tuned its policy and procedures." The Assistant Secretary stated that action items of the Contract Reform Team Report, as well as the Guidelines of the FIAT, represent some of DOE's efforts to improve its contract reform and performance based incentive program over a period of years. The Assistant Secretary stated that: "Nevertheless, we realize that in an undertaking like this, there are going to be some weaknesses, a need for continual self-assessment, and some need for improvement. Therefore, we initiated our own assessment of what contract reform has done to date in order to improve where needed." The Assistant Secretary stated that: "We have already identified performance based incentives as one of the areas requiring further focus."

The Assistant Secretary stated that concerns about the implementation of performance based incentives have continued to be a focus of EM and Field senior management since 1995. The Assistant Secretary stated that these concerns spurred the formation of the FIAT team by senior management in March 1996. The Assistant Secretary stated that the charge to the team was to identify and document best fee and incentive practices to promote significantly improved contractor performance; recommend guidelines that may be adopted for local needs; and support development and implementation of Department-wide contracting policies. The Assistant Secretary stated that the philosophy of the FIAT "Draft Guidelines For EM Fee and Incentives Development (Phase I), of June 19, 1996," is very consistent with Recommendation 18 of the Initial Draft Report.

The Assistant Secretary stated that the Initial Draft Report underscores the need for continued aggressive action. He stated that he has discussed these matters with the Department's senior management, and that ". . . we are committed to taking the following high priority steps to improve our performance based contracting." The Assistant Secretary stated that these steps will include prompt action:

- (1) by the Office of Environmental Management to finalize the Guidelines of its Fee and Incentives Analysis Team, including incorporation of the recommendations from the Office of Inspector General's Initial Draft Report;

(2) by the Contract Reform Project Office to publish its Contract Reform Self-Assessment, including lessons learned in performance based contracting;

(3) by the Deputy Assistant Secretary for Procurement and Assistance Management to undertake an assessment of the impact of Contract Reform on Contract Administration which he initiated on November 25, 1996; and,

(4) by the Department to convene a focused workshop on performance based contracting, to supplement previous training efforts.

Inspector Comments:

In comments to the Initial Draft Report, the Assistant Secretary for Environmental Management stated that the authors of the "Draft Guidelines For EM Fee and Incentives Development (Phase I), of June 19, 1996," ("Guidelines") as a result of their broad based DOE-wide experience, "satisfies most of the suggestions contained in IG Recommendation 18."

Specifically, with regard to item 1 under Recommendation 18, the Assistant Secretary stated that the "Guidelines" addressed this suggestion in Chapter III, FEE STRUCTURE, paragraph B. 3., "Objective Performance Incentives," in the following manner:

- "Incentives should have traceability through the successive levels of strategic planning (i.e., DOE, EM, Government Performance and Results Act (GPRA), and [be] site specific.
- "Ideally, they should focus on a manageable number of high priority, results-oriented items that allow us to assess the contractor's accomplishments in key program goals and objectives."

The Assistant Secretary also stated that the "Guidelines" addressed this suggestion in Chapter III, paragraph C., "Possible Emphasis Areas," in the following manner:

- "distribution of fee dollars should reflect site priorities. . . ."

We believe that these portions of the "Guidelines" are partially responsive to item 1 of our recommendation. However, in addition to these portions of the lGuidelines,n we believe that the "Guidelines" should specifically address and require the documentation of the rationale for the selection of individual projects or tasks under an incentive program, including any expected financial or operational benefits associated with the incentivized activities. We believe that this will assist

management in the review of proposed incentive candidates and reduce the possibility of incentivizing business-as-usual projects.

With regard to items 2 and 4 under Recommendation 18, the Assistant Secretary stated that the "Guidelines" addressed this suggestion in Chapter I, OVERVIEW, paragraph C. 3., "Recognition of the Variation of Management and Technical Risk Assumed by the Contractor," in the following manner:

- "Fee structure and amounts should be developed after considering the level of difficulty of contract work and the risks assumed by the contractor. Following are major risk factors that should be considered:
 - Contractor acceptance of liability for environmental fines, penalties, and damage.
 - Utilization of contractor resources.
 - Level of contractor indemnification.
 - Complexity of technical scope.
 - Acceptance of zero or reduced base fixed fee.
 - Potential for damage to human health.
 - Potential for damage to the environment, workers and the public."

We believe that these portions of the "Guidelines" are partially responsive to items 2 and 4 of our recommendation. However, in addition to these portions of the "Guidelines," we believe that the "Guidelines" should specifically address the relationship between incentive fees and the cost of the work to be performed so that fees cannot be perceived as being excessive when compared with the cost of the incentivized activity. The "Guidelines" clearly state that "EM should provide a consistent standard for contractor performance which neither over or under rewards contractors," but the "Guidelines" are silent on what such a standard would consist of with regard to the relationship between incentive fee and the cost of the incentivized work. We did note that Chapter I of the "Guidelines," OVERVIEW, under "Philosophy," states that one of the general concepts of performance incentives is that: "Cost parameters must be considered when incentivizing scope and schedule." However, this concept, as discussed in Chapter III, FEE STRUCTURE, only addresses cost in relation to "a cost incentive" or "a cost constraint provision," and does not address cost in relation to fee. We also noted that Chapter I states that: "Firmly establishing a cost, schedule and technical baseline is a necessary step in successful negotiation, implementation, and administration of incentives," and that: "The confidence level in the baseline precision (cost and schedule) should be considered in determining performance objectives." However, these principles are not developed in the body of the "Guidelines" in terms of the relationship between cost and fee.

We also believe that the "Guidelines" need to further address the relationship between incentive fees, the difficulty of the work, and the risk to the contractor in terms of the contractor's ability to meet "Stretch Goals." Richland's \$14.22 million FY 1995 PBI Program that is discussed in this report consisted primarily of incentives that appear to incorporate the concept of "Stretch Goals" (i.e. goals where the contractor was incentivized to meet completion dates that were accelerated ahead of the previously established schedule). The "Guidelines" as currently written discuss "Stretch Goals" in Chapter IV in terms of setting expectations, and state that: "Stretch Goals should reflect performance expectations which are difficult to achieve given the expected resources and schedule. . . ." However, the term "difficult to achieve" is not defined, the relationship between fee and the concept of "difficult to achieve" is not discussed, and the risk to the contractor in terms of any performance penalty for not achieving the "Stretch Goals" is not addressed. Our inspection found that, in many cases, what appeared to be "Stretch Goals" at Richland were easy to achieve, that there was little likelihood that the contractor would be assessed a penalty, and that Richland did not require the contractor to provide information on the "expected resources" needed to meet the "Stretch Goal."

We also believe that the "Guidelines" as currently written send a conflicting message with regard to "Stretch Goals" and the contractor's ability to meet such goals. Specifically, Chapter IV under "Characteristics of Good Incentives" discusses "Stretch Goals" and states that one characteristic of a good incentive is one that "Incorporates stretch goals that are achievable." However, as discussed above, Chapter IV also states that: "Stretch Goals should reflect performance expectations which are difficult to achieve. . . ." We believe that the "Guidelines" need to make it clear what the Department's expectations are with regard to the use of "Stretch Goals" and the relationship between fee and the ability of the contractor to meet such goals. Clearly, the more difficult a "Stretch Goal" is to achieve and the more risk assumed by the contractor in terms of a penalty for failing to meet a "Stretch Goal," the greater the expectation would be for a higher fee. We believe that the Guidelines need to address the relationship between fee and "Stretch Goals" to reduce the potential for assigning incentive fees which are not commensurate with the level of difficulty and risk involved.

With regard to item 3 under Recommendation 18, the Assistant Secretary stated that the "Guidelines" addressed this suggestion in Chapter IV, SUBJECTIVELY EVALUATED AWARD FEE AND OBJECTIVE INCENTIVE FEE PLANNING AND EVALUATION STRATEGIES, paragraph B. 1., "Characteristics of Good Incentives," in the following manner:

- "Reflects the highest priority items for the site suitable for specific incentives.

- "Ensures the value of the individual performance-based incentive amount is reasonable for the objective and relative to the proportional share of the budget performance-based incentive pool, adjusted for risk or priority."

We believe that these portions of the "Guidelines" are partially responsive to item 3 of our recommendation. However, in addition to these portions of the "Guidelines," we believe that the "Guidelines" should specifically address the impact of the work to be included under an incentive on the operations of the site involved in terms of any adverse impact on other site projects or activities which are not included under an incentive fee arrangement; such as deferment of other work, the reallocation of resources from other projects or activities, or the use of overtime. Our inspection found that, under Richlandms FY 1995 PBI Program, WHC was not required to identify any deferment of other work, reallocation of resources, or the use of overtime in their plans to accomplish incentive work.

With regard to item 5 under Recommendation 18, the Assistant Secretary stated that the "Guidelines" addressed this suggestion in Chapter IV, SUBJECTIVELY EVALUATED AWARD FEE AND OBJECTIVE INCENTIVE FEE PLANNING AND EVALUATION STRATEGIES, paragraph B. 1., "Characteristics of Good Incentives," in the following manner:

- "Contains a mutually understood baseline.

- "Ensures clear identification of dates and deadlines.

- "Contains incentives fee criteria that are objective, with the degrees of success easily measured and verifiable.

- "Contains a clear definition of successful completion standards and DOE requirements of performance including specific acceptance criteria, and with established fee commensurate with performance."

We believe that these portions of the "Guidelines" are partially responsive to item 5 of our recommendation. However, in addition to these portions of the "Guidelines," we believe that the "Guidelines" should specifically address the scope of work in terms of requiring a clear and accurate description of the work to be accomplished in order to avoid confusion with work that was actually completed prior to the incentive, or work that is not required to be completed in order to achieve the incentive fee.

With regard to item 6 under Recommendation 18, the Assistant Secretary stated that: "A specific statement assigning responsibility for verification of work completed before award payment is made will be included in the next iteration of the Guidelines."

Management Comments:

In response to the Official Draft Report, the Assistant Secretary for Environmental Management stated that:

"The guidance on performance-based contracting cannot accurately be described as "verbal philosophy." In addition to oral discussions and verbal guidance, many written documents were developed and made readily available, including the following:

"A government-wide policy letter on performance-based service contracting (Office of Federal Procurement Policy Letter 91-2) had been on the books since 1991.

"The Contract Reform Team Report, published in February 1994, outlined the Department's change from the traditional management and operating contract construct to performance-based management contracting. Appendices I, J, K all contained performance criteria that were relevant to development of performance incentives at Richland.

"In addition, the Office of Environmental Management on May 26, May 27, and June 22, 1994, circulated documents including examples of performance measures and criteria and 'General Guidelines for Developing Contract Performance Criteria.'"

Inspector Comments:

As stated in our report, the EM guidelines for fee and incentives were not initiated until March 6, 1996, when the "EM Corporate Forum" approved the "CHARTER" for the Fee and Incentives Analysis Team. The above listed documents referenced by the Assistant Secretary, however, were available to Richland in 1994. These documents did provide general guidelines for developing contract performance measures and criteria, and appear to have kept field elements informed about the evolution of the concept of establishing performance measures and criteria within EM program areas. However, these documents did not provide specific written policy or procedural guidance on the management and administration of an incentive fee program, or provide specific guidance on how performance measures and criteria would be incentivized under a PBI Program such as the one used by Richland in FY 1995.

Specifically, the Office of Federal Procurement Policy Letter 91-2, dated April 9, 1991, established policy for

the acquisition of services by contract. The intent of this letter was to address problems involved with contracting for services, including vague statements of work, insufficient use of firmer pricing arrangements, the lack of performance standards, and the inadequacy of quality assurance surveillance. This letter did address contract incentives under a discussion on contract types, stating that "contracts shall include incentive provisions to ensure that contractors are rewarded for good performance and quality assurance deduction schedules to discourage unsatisfactory performance." However, we do not believe that this would constitute policies or procedures for the management and administration of a contract incentive program.

The Report of the Contract Reform Team, titled "Making Contracting Work Better and Cost Less," issued by the DOE Headquarters Contract Reform Team in February 1994, identified a number of contracting improvements needed within the Department and recommended numerous actions that would reform contracting and contract management techniques, and assigned responsibilities and deadlines for accomplishment. Appendices I, J, and K all contained performance measures and criteria. These appendices did provide information on specific performance goals, criteria, and measures, some of which were uniquely relevant to Richland. Appendix I provided some discussion on incentive payments for specific goals, addressing points such as: "Contract payment incentives will be based upon required completion of milestones;" "Contract incentive payments will be based on: Reductions in lost-time injury rates and lost work day statistics;" and, "Contract incentive payments will be based upon contract-stated levels of improvement over preestablished cleanup, cost, and milestone accomplishments." However, these appendices did not provide policy and procedural guidance on the management and administration of a PBI Program which would ensure that a field office successfully implemented Headquarters' intent under contract reform.

The May 26, 1994, EM document referred to by the Assistant Secretary for Environmental Management was titled "ENVIRONMENTAL MANAGEMENT PROGRAM - ILLUSTRATIONS OF CONTRACT PERFORMANCE CRITERIA, MEASURES, AND INCENTIVES." This document included: (1) a diagram of the "TOP-DOWN APPROACH TO PERFORMANCE MEASUREMENT;" (2) EM strategic goals and commitments for 1994, 1995, and beyond; (3) EM examples of contract performance criteria and measures linked to incentives; (4) "General Guidelines for Developing EM Contract Performance Criteria;" and, (5) "General Guidelines for Developing EM Contract Performance Measures." The guidelines on performance measures and criteria stated that: "The criteria must be clearly articulated, results oriented, and linked to program/site goals and objectives;" and, "Performance measures should be directly tied to incentives to encourage our

contractors to work effectively to meet program goals and objectives, to control costs, and to improve timeliness and quality of performance." The EM examples showed performance measures linked to incentives as a percent of fee. However, none of these documents addressed policies or procedures for tying performance measures to incentives, or policies and procedures for the management and administration of an incentive fee program.

The May 27, 1994, EM document referred to by the Assistant Secretary for Environmental Management was a letter sent by the Assistant Secretary to field locations discussing implementation plans for contract reform. This letter provided a matrix of contractor suggestions for contract reform with related contract incentives. The field organizations were told that the "summary of general reform information including related contract incentives should be useful in your development of the specific changes that are appropriate for your contracts," and field organizations were asked to establish a schedule "that will require during the next few months the modification of those contracts where you determine that reforms can have an immediate benefit." The Assistant Secretary requested that: "As soon as you complete plans to implement reforms for Environmental Management program work I would like to receive a summary of the anticipated contract changes and a timetable for completion of negotiations." However, even though the May 27, 1994, letter included a format for submitting field summaries and a description of "related award fee implementation" prepared for the West Valley Project contract, it did not include any Department policies or procedures for the implementation of contractor suggestions for contract reform or for the management and administration of an incentive fee program.

The June 22, 1994, EM document referred to by the Assistant Secretary for Environmental Management was a letter sent by the Acting Deputy Assistant Secretary for Management and Finance, Office of Environmental Management, to field locations discussing contract performance criteria and measures. This letter requested that field organizations submit "a representative cross-section of high-priority contract level performance criteria and measures that may be used to evaluate EM's programmatic performance of our existing M&O . . . contracts," and stated that: "The measures should also be suitable for use with incentives to motivate our contractors to attain a high level of performance and to achieve programmatic objectives." Attached to this letter were the "General Guidelines for Developing Contract Performance Criteria," and the "General Guidelines for Developing Contract Performance Measures" previously discussed. Also attached to this letter was a document titled "Contract Performance Criteria and Measures Format Instructions" which provided the format for field elements to submit their contract level performance criteria and

measures to DOE Headquarters. This format instruction clearly laid out expectations for "CRITERIA DESCRIPTION" and "CONTRACT PERFORMANCE MEASURES," but the guidance on "INCENTIVES (FEES)" was limited to the statements that: "The percentage of fee earned depending upon the performance quality level is listed as TBD;" and, "The percentage of fee will be determined when the Performance Evaluation Plan is updated or the contract is renegotiated."

As stated above, the development of guidelines for fee and incentive development was not initiated by the Department until March 6, 1996. The "Draft Guidelines for EM Fee and Incentives Development" were distributed to field operations on August 26, 1996. The memorandum distributing these guidelines stated that: "The Guidelines are being developed primarily for field line operating managers and procurement officers who establish performance expectations and are engaged in fee and incentive determinations;" and, "The intent is to provide the user practical advice and examples of effective ways to implement performance-based contracting."

G. INSPECTION OBSERVATIONS ON OTHER RICHLAND PBI PROGRAM ISSUES

During our inspection, we observed other potential Richland PBI Program management weaknesses. Specifically, we noted a condition where the Management and Operating Contractor was not required to advise DOE of the means by which the PBI objectives would be achieved or the program impacts resulting from PBI implementation, such as the deferment of other contractor required work that was not included under a performance based incentive. In addition, we noted that the M&O Contractor was not restrained from committing resources to achieve PBI fees such as the procurement of capital equipment or the use of overtime in order to achieve the PBI objectives.

PBI Program Impacts and Contractor Resource Allocation

The Management and Operating Contractor was not required to advise DOE of the means by which the PBI objectives would be achieved, including program impacts and resource allocations. Specifically, during an interview with the DOE Richland Operations Officer, the Operations Officer said that the contractor was not required to identify to DOE the means by which the PBI objectives would be achieved, and that the contractor was allowed to defer work from non-PBI projects to get the PBI work completed. When asked by the Office of Inspections if it is possible that the contractor could shift resources to a PBI project at the detriment of another project that could become the subject of an out-year PBI, the DOE Richland Operations Officer said that this could happen.

In addition, the former DOE Richland Operations Officer said that the M&O Contractor had not been receiving a significant percentage of the available award fees, so it was expected that they would shift personnel from non-PBI projects to PBI projects. He said that there was an awareness that DOE Richland may be mortgaging the future for today's PBI Performance Objectives. The former DOE Richland Operations Officer also said that there was an apprehension among Richland managers that there would be "dysfunctional behavior" on the part of the M&O Contractor because of the incentive to focus on PBI driven tasks.

During an interview with a DOE Richland Project Director, the Project Director said that the contractor was not required to identify the means by which the PBI objectives would be achieved prior to implementation. He said it was clear that the contractor was giving a high priority to the PBI work. However, he said he could not prove that the contractor was neglecting other work and that this was, in part, because there was generally a lack of good work definition at the Hanford Site. He said that it was DOE Richland's job to monitor the contractor's performance, not manage them. A Division Director for the Waste Characterization Programs said that WHC could direct resources "to get PBI fee which is all profit to them," and that because of this motivation, he said that other non-PBI milestones would not be met.

During an interview with a WHC Waste Sampling Analysis Manager, the WHC Manager said that in his experience, DOE has a hard time determining whether a task being considered for a PBI was significant or not, and that the DOE level of involvement in the PBI process was very low. The WHC Manager also said that the DOE personnel interacted with upper level WHC management, and that the level of detail was not available to do an effective job of contractor oversight. Additionally, the WHC Manager said that WHC was not required to identify the means by which the PBI would be accomplished prior to task implementation, and that there was no consideration given to the possibility that the contractor may defer work on some projects to receive incentive fees on others. It should be noted that PBI incentives did not cover the entire work scope of the contractor in FY 1995. As shown in Appendix A, these incentives involved activities whose total cost in FY 1995 was only \$162 million compared with the total \$1.381 billion budgeted for the site in FY 1995.

Contractor Capital Equipment Procurement

We could not identify a process that would allow DOE to be aware of the capital equipment procured by the contractor in order to complete a PBI objective. During our review of the contract files for the 34 PBIs established in FY 1995, we found no documentation which identified the equipment purchases necessary for the contractor to

perform the PBI work. We found that the contractor was not required to inform DOE of the nature of any such purchases. For example, during an interview with a WHC Principal Scientist, the Principal Scientist told the Office of Inspections that in order to meet the requirements of a PBI, additional chemical analysis instruments had to be procured. He said it was a policy that DOE did not become involved in the procurement authorization for equipment if the cost was less than \$1 million. He also said that as long as WHC stayed within the annual budget for equipment procurement, DOE would be unaware of equipment procured for a specific task.

Contractor Use of Premium Pay or Overtime to Achieve a PBI Fee

During our inspection, we found that the Management and Operating Contractor was not restrained from using premium pay or overtime to achieve a PBI fee. Specifically, the PBI document did not contain any provisions or restrictions on the use of premium pay or overtime. In addition, the M&O Contractor was not required to inform DOE of the intended use of premium pay or overtime. A review of the FY 1995 PBIs by the Office of Inspections found that many of the PBI "Basis for Measurement" requirements stated that the contractor was required to complete the task within a specified period of performance, usually 30 days ahead of the scheduled completion date. Additionally, PBI documents usually contained terms in the "Basis for Measurement" section which provide that the contractor would be paid/penalized a portion of the incentive fee for each day that the contractor completed the PBI task prior to or after the scheduled completion date. The payment of incentive fees under these conditions could encourage an inefficient and unnecessary expenditure of DOE funds by the contractor in premium pay for shift differentials or overtime to earn the incentive fees. Although we did not analyze overtime records associated with work performed to accomplish PBI objectives, we did note instances during our inspection where overtime was used by the contractor in performing PBI work.

Conclusions

We believe that, based on our discussions with the Richland Operations Office and WHC personnel, there was no system in place to identify the means by which the PBI objectives would be achieved by the contractor or the impact on other non-PBI activities resulting from PBI implementation. We also believe that the PBI Program at Richland did not include a process under which DOE Richland would be aware of capital equipment purchases or the use of premium pay or overtime by the contractor to achieve a PBI fee. We believe that future contract incentive programs at Richland need to require the contractor to clearly describe the work to be performed;

the impact that the work will have on other non-PBI activities which are not included under an incentive fee arrangement; and, any significant purchases of capital equipment or significant use of premium pay and overtime.

Recommendations

We recommend that the Manager, Richland Operations Office:

19. Require the contractor to clearly describe the work to be performed, the impact that the work will have on other activities which are not included under an incentive fee arrangement, and any significant purchases of capital equipment or significant use of premium pay and overtime prior to initiating and paying a fee under a contract incentive.

Management Comments:

In comments to the Initial Draft Report, the Manager, Richland Operations Office, concurred with Recommendation 19, stating that:

"Recommendation 19: RL will develop procedures, guidelines, and additional training for the initiation, administration, and payment of new and current performance incentives. The procedures, guidelines, and training will incorporate the views and recommendations expressed in this report and incorporate lessons-learned from the previous incentive fee programs, other RL reviews, and the upcoming recommendations of the Fee Incentives and Analysis Team."

FISCAL YEAR 1995 RICHLAND
OPERATIONS OFFICE
PERFORMANCE BASED
INCENTIVES

PBI NUMBER	DESCRIPTION	PBI	PBI	PROJECT	INCENTIVE	INCENTIVE
		ESTAB.	COMP.	COST FY95	AVAILABLE	EARNED
95-001	Defuel FFTF Reactor Vessel 1/27/95 4/19/95			\$2,465,000	\$500,000	\$500,000
95-002	Stabilize PFP Pu Sludge Items 1/27/95 6/13/95			\$1,732,000	\$400,000	\$400,000
95-003	Reduce Lost Work Cases-WHC/BCSR 1/27/95 *9/30/95			**	\$650,000	\$399,411
95-004	Reduce Lost Work Days-WHC/BCSR 1/27/95 *9/30/95			**	\$650,000	\$628,654

95-017-M1	Characterize 30 Tanks	8/14/95	8/9/95	\$81,544,000	\$1,000,000	\$843,333
95-018	TWRS Corrective Maintenance Backlog	1/27/95	8/23/95	\$5,822,000	\$500,000	\$500,000
95-019-M2	Commence Pumping Tanks	4/6/95	*8/5/95	\$1,723,000	\$450,000	\$428,333
95-020	Complete Waste Vol. Campaign 95-1	1/27/95	7/25/95	\$2,696,000	\$250,000	\$250,000
95-021-M1	Fabrication of Inter-Farm Piping	4/27/95	9/28/95	\$842,000	\$200,000	\$200,000
95-022	242-S Evaporator Project	1/27/95	5/16/95	\$811,000	\$200,000	\$200,000
95-023-M1	PUREX Nitric Acid to BNFL England	5/24/95	8/21/95	\$2,984,000	\$400,000	\$400,000
95-024	PUREX - Transfer of D5/E6 Solution	1/27/95	4/12/95	\$30,000	\$400,000	\$400,000
95-025	BUSS Cask Shipments - Baseline	1/27/95	3/22/95	\$1,596,000	\$125,000	\$125,000
95-025	Complete BUSS Cask Shipments	1/27/95	6/2/95 incl/in/baselne		\$125,000	\$125,000
95-026	Shutdown FFTF Group 1 Systems	1/27/95	5/19/95	\$392,000	\$300,000	\$300,000
95-027	TWRS Screening Sample Turnaround	1/27/95	9/29/95	\$8,691,000	\$250,000	\$250,000
95-028	Complete Environmental Reports	1/27/95	*9/18/95	\$893,000	\$120,000	\$114,500
95-029	LABCORE LIMS Release 2.0	1/27/95	1/31/95	\$1,815,500	\$100,000	\$100,000
95-030	Project W-058	6/13/95	7/25/95	\$130,328	\$83,333	\$83,333
95-031-R2	Collect K-Basin Sludge Samples	8/28/95	9/14/95	\$1,302,000	\$67,000	\$67,000
95-032-R2	Pump Tank 241-T-107	8/28/95	8/30/95	\$127,000	\$150,000	\$150,000
95-033-R1	Submit Draft FY 1996 MYPP	8/29/95	8/31/95	\$3,000,000	\$50,000	\$50,000
95-033-R1	Submit Final FY 1996 MYPP	8/29/95	9/18/95 incl/in/draft		\$150,000	\$150,000

95-034-R1 Issue DST Waste Consolidation Plan	8/29/95	8/30/95	\$60,000	\$50,000	\$50,000
TOTALS:			\$162,365,994	\$14,220,333	\$11,485,572

Notes: * This PBI consists of several Performance Objectives, the last of which was completed on this date.

** PBI performance objective (project) cost data not available for these safety programs.

*** PBI performance objective (project) cost data not available. Richland indicated that cost was probably charged to a general maintenance account.

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1. What additional background information about the selection, scheduling, scope, or procedures of the audit or inspection would have been helpful to the reader in understanding this report?
2. What additional information related to findings and recommendations could have been included in this report to assist management in implementing corrective actions?
3. What format, stylistic, or organizational changes might have made this report's overall message more clear to the reader?
4. What additional actions could the Office of Inspector General have taken on the issues discussed in this report which would have been helpful?

Please include your name and telephone number so that we may contact you should we have any questions about your comments.

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